

27 TOP TIPS

to boost

Vour home's

Value

Making your dream home happen

SELF BUILD + RENOVATION + EXTENSION + CONVERSION

WWW.SELF-BUILD.CO.UK



REAL LIFE PROJECTS +

- How to source key **building materials**
- Buyer's guide to roof coverings
- Trends: distinctive floor tiles



cut your bills with renewable heating

Iransformed with natural light

From small bungalow to spacious retreat



QUALITY BESPOKE BI-FOLD DOORS DIRECT FROM THE UK'S ONLY SPECIALIST MANUFACTURER

Thermally efficient, triple glazed, unique architectural designed bi-fold door incorporates open in or open out, glazed in or glazed out configurations, with maximum security and integrity with no compromises.

Complimenting our existing range of Aluminium, Timber, Ali Clad & PVC folding sliding door systems. A further indication of our market leading status, and commitment to ongoing design and innovation.



















Welcome

The devil is in the detail, especially when you are trying to build a unique home that's attractive, practical and suits the location. If you want to create something really special, you must ensure that you've gone through every single element of the design and planning stages with a fine-tooth comb. It's equally as important to work on the visual aspects of your project as the structural details, or you'll be left with a dwelling that's lacking aesthetic appeal. This month we've focussed on helping you to give your home a quality finish. Check out our feature on roof coverings (page 89) to ensure you pick a product that suits your property's style and the local vernacular, and see our article on kerb appeal on page 68 to aid you in making the most of your home's external appearance and maximising value.

Get some inspiration from your peers who have successfully completed this month's exceptional projects, all of which are filled with characterful and unique features. Our cover home belongs to Audrey Goodchild and Dale Pearson (page 24) who have renovated their small bungalow and transformed it into a spacious and light filled house with a stunning glazed gable as its defining feature. The highlight of Patrick Barrett's contemporary dwelling (page 33) is the mixture of materials used externally, coupled with the structure's unusual curves and angles. Meet the Dougans on page 51, who have created a sleek-looking modern home that's energy efficient and boasts a range of eco technologies, including solar electric panels.

If you are considering using renewables on your own scheme, our buyer's guides to ground and air source heat pumps (pages 74 & 77) will reveal all you need to know about these tried and tested systems. They could be the ideal technology for your home if you are looking for something low maintenance, low energy and super-efficient. Match this with a natural building system and you'll create an ultrasustainable dwelling, which could prove to be a winning formula with your local planners – find out some of the best options on page 79.

FAVOURITE **FEATURES**

24



ANNA-MARIE DESOUZA, EDITOR





CHRIS BATES is Build It's deputy editor. He's turned his hand to plumbing, tiling and furniture making, and has completed a site carpentry qualification. Go online to

catch up on his latest industry news and blog www.self-build.co.uk/blog/Chris-Bates

IFEOLUWA ADEDEJI

is Build It's assistant editor. With a keen interest in architecture, she's got an eye for the latest interior styles and emerging design trends. Don't miss



her guide to floor tiles (page 93) and her pick of October's best products (page 15).



MIKE HARDWICK

is a consultant and project management specialist. He has recently been elected as the self build representative on NaCSBA's executive

committee. Turn to page 103 for his top tips on the best ways to buy materials for your build.

TIM DOHERTY

was the founding MD of the NSBRC. He is a specialist on a range of issues including finance and budgeting, and has helped to develop Build It's in-depth cost calculator.



Work out a basic budget for your build at self-build.co.uk/build-cost-calculator

......



MIKE DADE

is a planning specialist, and Build It's plot guru. He's the author of several must-read books on plots and planning. In this issue he explains the pros and

cons of purchasing a plot or property at auction and explains how to spot a bargain (page 115).

JULIAN OWEN

is Build It's design doctor and architecture expert. He is a self build architect and the chairman of the Association of Self Build Architects. Don't miss the



final instalment of his vernacular design series (page 98) looking at key architectural details.

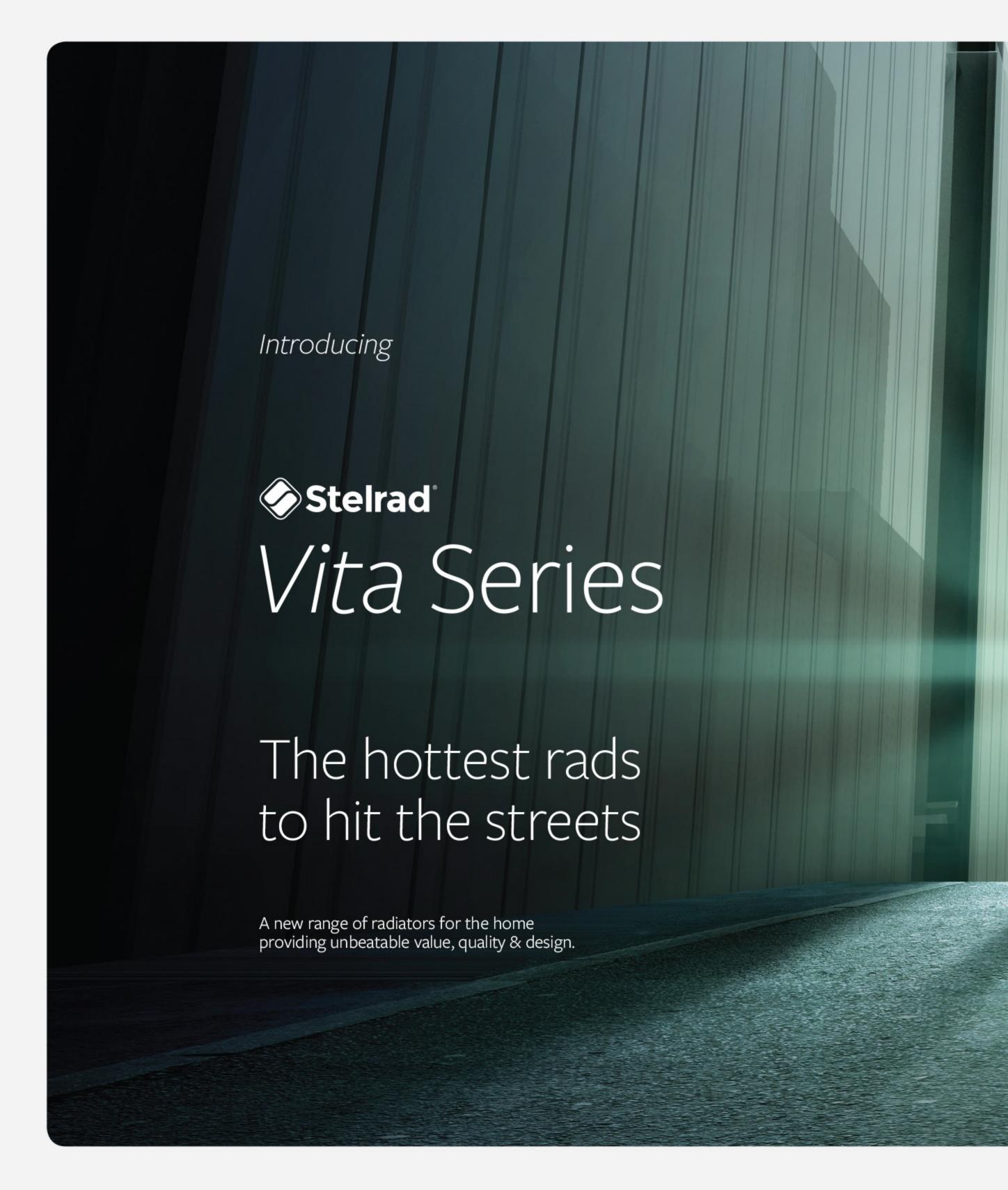


OPINDER LIDDAR

is a Build It award-winning architect and is director of lapd architects. He specialises in self build and renovation and is a regular expert at the National Self

Build & Renovation Centre. Check out his mustread feature on how to design your dream home: self-build.co.uk/house-design-step-step-guide







Leading the way



Market leading prices from your market leader



the underfloor heating store



Did you know the government is offering Renewable Heat Incentives to all UK households that use renewable energy to heat their buildings? So if you're planning a new build call us today to see how beneficial our renewable energy systems are for your new dream home.

✓ underfloor heating systems

easy to install kits

✓ air source heat pumps

✓ UK's lowest prices

ideal for new builds

✓ free delivery



freephone for all sales

technical advice line

see us at...

0800 077 8374 01268 567016 www.theunderfloorheatingstore.com



October 2014 issue











READERS' HOMES

Tough at the top

Audrey Goodchild and Dale Pearson overcame a series of planning objections and supplier nightmares in their bid to transform a tired bungalow into a modern home

Site specific

Find out how architect and serial self builder Patrick Barrett knocked down a dated cottage to make way for a stylish wedge-shaped new dwelling on a tight plot

Joined up thinking

When Angus Mackinnon bought some land in the Hebrides, he was picturing a series of vernacular buildings. With his second house now complete, the dream is well underway

Nothing left to chance

Recently-retired couple, Helen and Gordon Dougan, have created a feature-packed home to last them into old age

Move with the times 59

Steven Chidgey first converted his Cornish barn in 1988. Nearly a quarter of a century on, the time came to renovate again and bring the property up to date

RENOVATION & BUILDING

A welcoming approach

24

33

51

68

Upgrade your home's appearance and boost its value with Ifeoluwa Adedeji's top tips on how to boost kerb appeal

Ground source heat pumps 74

Will this eco heating option suit your project...

STORY Air source heat pumps 77

... or would its retrofit-friendly cousin be your best bet?

Naturally built homes 79

Jane Crittenden looks at some of the most eco-friendly building materials available, from straw bale to hemp

How to self build: contracts 84

Make sure your project runs smoothly with our in-depth advice on getting the proper paperwork in place

Crown your home 89

Find the right roof covering in our buyer's guide

Floor tiles uncovered 93

Check out our pick of the best floor tiles





EXPERT HELP

Vernacular design details

Architect Julian Owen explores the finishing touches that lend credibility to a heritage project, from windows and doors to staircases and fireplaces

98

115

How to source & buy materials 103

Mike Hardwick gives the inside track on how you can save money on your building materials, from choosing suppliers to securing big-ticket discounts

Your questions answered 107

From using permitted development rights to enable barn conversions to dealing with cracks in render, *Build It's* expert team is on hand to overcome your project woes

Village life 111

The Chapmans want to build a low-energy home on family-owned land in a small hamlet. Will the council's designation of the site as countryside scupper their dream?

Auction etiquette

Is that bargain plot too good to be true? Planning guru Mike Dade reveals how to successfully buy land at auction

REGULARS

News 11

Build It's favourite finds this month

Explore our pick of the UK's most inspiring coastal homes

Letters 21

One reader shares his Renewable Heat Incentive application troubles

Subscribe today 96

Save 45% off the cover price

Land for sale 118

Find the right plot for your project

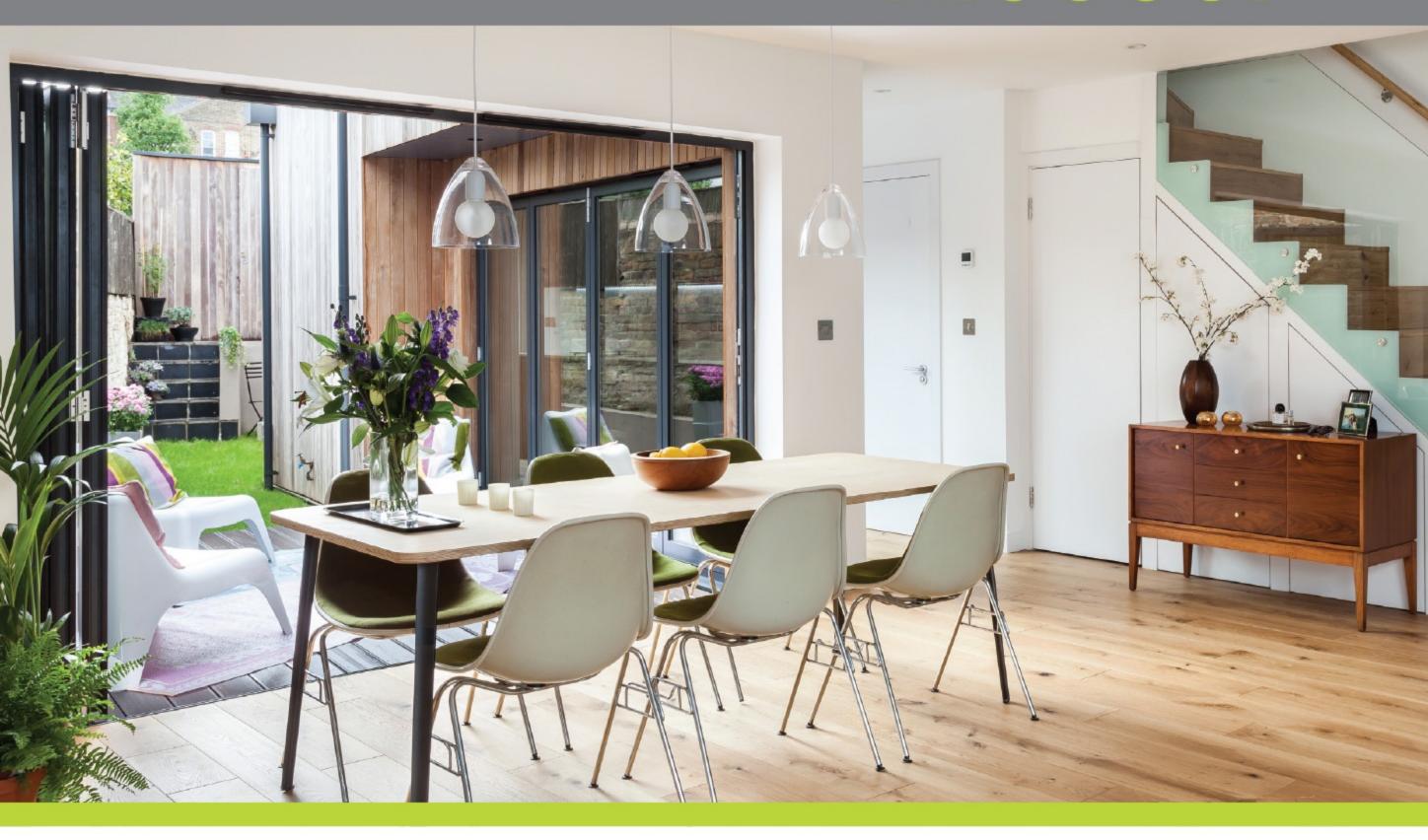
Next month 129

What to expect in the next issue

Focus on 130

We talk to Stoke-on-Trent council about its custom build plans

klöeber



Bespoke glazing solutions in timber aluminium & composite

Kloeber's advanced glazing solutions are available in bespoke or set sizes, with exceptional insulating values, multi-point locking and low maintenance finishes. View our website for further details of our extensive product range.

- folding sliding doors
- sliding doors
- french doors
- single doors

- windows
- shaped glazed screens
- entrance doors
- roof lights



Kloeber's timber bifold doors and FunkyFront entrance doors are Secured by Design.

New showroom near Oxford opening November, see website for details of all our showrooms.

telephone

01487 740044

info@kloeber.co.uk www.kloeber.co.uk







9 - 12 OCTOBER 2014 · NEC · BIRMINGHAM

CLAIM YOUR FREE TICKET*

0844 854 1348
QUOTE BUILDIT14

www.granddesignslive.com

Sponsors











Headline sponsor







Crafty measures

This innovative multi-storey three-bedroom house in Ho Chi Minh City was conceived by Nha Dan Architects. The distinctive design met the client's requirements for a spacious and bright home to fit on a small rectangular plot, which is overlooked by other dwellings.

By placing the flights of stairs and corridors to one side of the house, the team has been able to build the walls at an angle. This allows natural light to stream through the

For more details visit www.nhadan.com.vn

roof windows and diffuse right down to the lower storeys. The position of the walls also means that the circulation zones are naturally narrower, which has increased the area available for the living spaces.

To prevent overlooking, aluminium framed glazed doors and windows have been recessed into the structure. This clever design encourages sunlight to enter the property and reflect off the neutral surfaces and glass balustrades. PROJECT OF THE MONTH

Frameless views

by IQ Glass

This semi-detached Victorian house in Wandsworth, south London, has been expanded to include an artist's studio and au pair's living quarters.

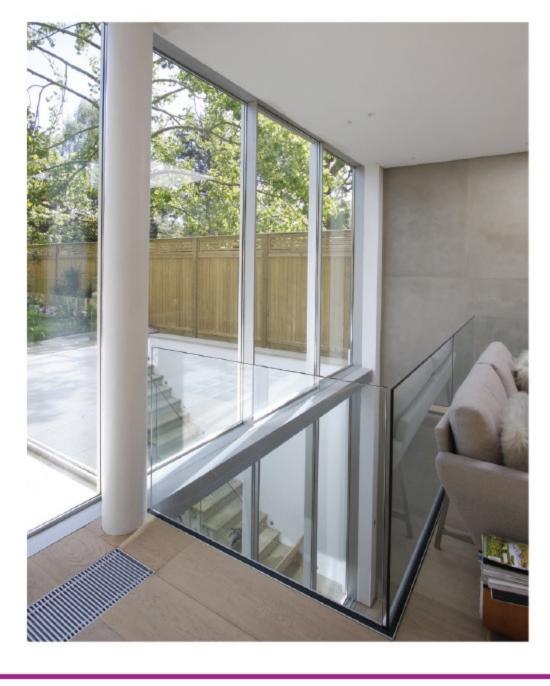
The works carried out include a complete internal renovation, a single storey extension and a spacious new 2,000ft² basement.

IQ Glass has creatively employed large swathes of glazing to allow natural light to penetrate into the key spaces within this family home. In particular, square lightwells help direct sunlight straight through to the new basement area, which would otherwise receive little illumination.

Frameless glass balustrades have been used around the stairs, including a flight that runs seamlessly from the garden into the open plan living/dining zone. These work effectively with the extension's double height glazed facade to connect the garden and interiors.

Inside, polished concrete walls and natural timber floors help establish a minimalist yet welcoming modern setting. The neutral interior scheme is illuminated by a rooflight that has been strategically placed above a stairwell that leads to the new lower ground area. For more information call 01494 722880 or visit www.iqglassuk.com







What's on?

PLUMBING TASTER COURSE

30TH SEPT
FREE
WALSALL,
WEST MIDLANDS
walsalltraining.com

A PLACEIN THE SUN 3RD - 5TH OCT

£10
NEC, BIRMINGHAM
aplaceinthesun.com

BUILDING WITH STRAW BALES

SELF BUILD
NETWORKING

11TH OCT FREE CAMBRIDGE selfbuildacademy.co.uk

BRICKLAYING 13th OCT

£325
BUILDER TRAINING
CENTRE, SURREY
thebtc.co.uk

OAK FRAMING 13th - 17th OCT

£520 WEALD & DOWN, WEST SUSSEX wealddown.co.uk

MOTORHOME SHOW 14th - 19th OCT

NEC, BIRMINGHAM motorhomeandcaravan show.co.uk

THEUK PASSIVHAUS CONFERENCE 16TH OCT

£198 STEVENAGE bre.co.uk

HOW TO START YOUR BUILD 17TH OCT

£75 NSBRC.

NSBRC, SWINDON selfbuildacademy.co.uk

BASEMENT CONSTRUCTION 17th - 18th OCT

FREE SURREY basementexpert.co.uk

RHSLONDON'S SHADES OF AUTUMN

£8 RHS, LONDON rhs.org.uk

21st - 22ND OCT

THE BIG GREEN HOME SHOW 24TH - 26TH OCT

FREE
NSBRC, SWINDON
nsbrc.co.uk





Self build can help tackle rising prices

According to Steve O'Connell, planning spokesman for the London Assembly Conservatives, the best way to slow down the rise in house prices is by building more homes.

He has commissioned a report called Gap in the Market, which identifies the need to deliver 10,000 new homes in the capital in the next 10 years. "Self build is a sector that the government has been keen to see expand," says Mr O'Connell. The report highlights there are 4,500 infill sites in 13 London boroughs that would be ideal for small developers and self builders, and is calling for the land to be specifically marketed at them.

If given the go-ahead, it's hoped a pilot project for 100 self build plots will be supported by the Mayor of London.

200,000

new homes could potentially be delivered on brownfield sites according to housing minister, Brandon Lewis. Councils who identify previously developed land for building could benefit from a share of £5million to get the works started.

Contractor search service launched

The Federation of Master Builders (FMB) and the National Custom and Self Build Association (NaCSBA) have joined forces to offer self builders a free online service to find suitable local contractors. "Interest in self build solutions is growing and the government is now putting policies in place that should help more people create their own home. Self builders will need a pool of capable and experienced trades and a trusted means of finding the right one. That's why we've created the service to be delivered through the Self Build Portal," says Brian Berry, Chief Executive of the FMB. For more information visit fmb.org.uk

SPIRIT OF CHRISTMAS

4TH - 9TH NOV £21 OLYMPIA spiritofchristmas.co.uk

RENEWABLEUK 2014 13TH NOV

FREE MANCHESTER CENTRAL renewableuk.com

FLINTWALLING 18тн - 19тн NOV £270

WEALD & DOWN, WEST SUSSEX wealddown.co.uk

LUX LIVE 19TH - 20TH NOV FREE EXCEL,

LONDON

luxlive.co.uk

PLAN YOUR BUILD 21st NOV £75 **NSBRC, SWINDON** selfbuildacademy.co.uk

IDEAL HOME

£12

co.uk

19TH - 23RD NOV

EARLS COURT,

idealhomeshowchristmas.

LONDON

industry news

Encourage your council to identify plots

I wasn't surprised to find out that the overall number of self build projects completed (based on VAT claims through HMRC) has dropped from around 12,000 to 10,000 per annum. Of course, the financial crash and its impact on the construction industry since 2008 has played a big part in this downward trend, but it can't have been helped by the inexorable rise in additional costs imposed on would-be self builders and the lack of available development land. I'm particularly concerned about Section 106 agreements for affordable housing and the Community Infrastructure Levy (CIL). Fortunately the government has finally started to realise that self and custom building is a viable way to give people the houses they want and in suitable locations.

While the large-scale projects make for great TV, the reality is that most prospective self builders have a household income of around \$40,000 - \$50,000 per year. Their plans are usually for a modest but well-designed family home that will probably account for all of their savings and a hefty mortgage to boot. Take a tight budget and add on Section 106 payments and it could be the difference between beginning a project or giving up before it starts because the finances just don't stack up. The removal of these hurdles cannot come soon enough and the good news is that we are already halfway there, as a CIL exemption came into force in February.

Another obstacle is finding suitable plots. Millions of

people are interested in building their own home, but volume

developers have such a monopoly on land allocation that it can make finding even a modest site difficult. However, a ray of light is on the horizon; in the March 2014 Budget, the chancellor unveiled the Right to Build initiative. The idea is that potential self and custom builders can register their interest in building with their local authority (LA) who would then be obliged to identify suitable serviced plots to be sold at market rates. The government has allocated £150m to create 10,000 serviced plots via loans of up to £15,000 per plot to custom build developers. It is now seeking 'Vanguard Councils' who are willing to trial the concept, which can then be refined and rolled out to other LAs as a viable concept. Now our job is to get our voices heard at a local level by getting involved in Neighbourhood Planning (NP) meetings, I shall be attending meetings in my area to promote self build opportunities that I've identified locally. If you get the chance, please do the same where you live, as the more LAs realise there is a demand, the harder it will

MIKE HARDWICK

build opportunities.

is a self build consultant and project management specialist. He is the self build representative at NaCSBA and helps to deliver a three day self build course at the NSBRC in Swindon. Follow Mike's blog online at self-build.co.uk/blog/mike-hardwick



OFF-GAS-GRID COSTINGTHE

If you have high heating bills, it might be worth switching to renewable heat sources like heat pumps, biomass boilers or solar thermal. The Renewable Heat Incentive entitles you to payments for 7 years, which could be worth up to £2250* per year – and you could cut your heating bills too. Eliminate the need for oil, LPG or electrical heating while helping the environment. **See how you can benefit**.







The Renewable Heat Incentive call 0300 123 1234 or visit gov.uk/rhi

spend1/save

£1,045 per 1,000

These distinctive handmade bricks have been produced by master craftsmen using traditional methods. They have been fired in a kiln and are available in three sizes; 65mm, 68mm and 73mm, Brickfield orange, from £950 per 1,000, northcotbrick.co.uk



If you want to create a character-filled home, then these machine-made stock bricks in a subtle red hue will help you achieve the right effect. The units are light in texture and are suitable for contemporary or traditional projects. Chailey Rustic Stock, £450 per 1,000, ibstock.co.uk

product news

Great shopping ideas for your custom home project



OPENING UP

Let illumination flood through your internal spaces and benefit from U-values as low as 1.5 W/m²K with the Aurora centre pivot roof window.



EASY FIX -

These new easy-fit tiles will help take the upheaval out of updating your bathroom space. The 5mm-thick waterproof self-adhesive panels are made from durable PVCu and can be laid directly over existing tiles. £39 per m2, marbrexpanels.co.uk



NATURAL FUSION

This stunning kitchen strikes a balance between functionality and luxury. Designed to stand the test of time, the elegant Cult range employs a mixture of durable solid oak cabinetry with stylish porcelain sliding doors and worktops. From £12.000. rational.de



TIGHTLY SEALED

Mightonite composite beads have been designed to effectively stop heat from escaping through the gaps around your sash windows. They have U-values of 0.491 W/m²K and will help you achieve a clean knot-free appearance. £0.50 per metre, mightonproducts.com



of the best RANGE COOKERS



1 Smeg Victoria range cooker from £1,999, smeguk.com



2 Rayburn 700 range cooker, from £5,195, rayburn-web.co.uk



3 Candy CCV9M52PX range cooker £950, hoover.co.uk



charnwood Exceptional British made wood stoves

Exceptional British made wood stoves 01983 537780 www.charnwood.com



interiors notebook

It's never too early to start looking for the finishing touches for your self build



Shopping list

- 1 Be bold with this unique paint, perfect for both traditional and modern homes. The chalky effect offers a fresh take on a classic blue shade

 Azurite, £38 per 2.5L,
 potsofpaint.com
- 2 Inject some 1960s
 glamour to your interior
 scheme using this retro
 armchair with tapered
 beech legs. It's available
 in a range of fabrics and
 10 hues Sloop Armchair,
 £900, couchdesign.co.uk
- 3 Illuminate your favourite spaces using this stunning marine-style wall light. Choose between the weathered brass or chrome finish Marine Wells, from £269, davey-lighting.co.uk
- 4 Set a calm ambience in your bedroom with this luxurious laneve wool floor covering. The fossil pattern will help to create a relaxing mood Flock

 Portland, £108 per m², flock-living.com
- 5 If you want to add a
 touch of contemporary
 class to your living space,
 this black gloss lacquered
 table with two moveable
 layers will do the trick
 Quattro coffee table,
 £349, dwell.co.uk

of the best coastal homes

Our readers' stunning seafront projects will help inspire your build

WATERFRONT HOME -

Set on the Scottish west coast, the Ferriers' third self build project is so well suited to the Argyll vernacular you'd never guess that it was a replacement dwelling. The couple worked on a design that would include natural stone, cedar cladding and harling render. With the help of architect Heinz Voigt



the resulting four bedroom, single storey retreat makes the most of its waterfront location. The project cost £330,000





MATURAL BREEZE

This compact and cosy three bedroom property was designed by architect couple the Munros. The pair worked on a tight plot and to a modest

budget to establish a house the entire family could enjoy. Located in a Scottish conservation village, the nautical-themed Driftwood Cottage was created to blend in with the surrounding seafront homes. It has been finished off using a white acrylic lime render with bright splashes of blue coating the cladding and fencing.

The project cost £149,800

OCEAN VIEW &

This charming timber frame, two bedroom cottage sits at the edge of a very scenic spot on the Isle of Mull. Liz and Richard Hallam built the holiday retreat with a view to retiring there once the time came. Managing the build from Derbyshire was out of the question, so they enlisted the help of reputed local builder, Norman McDonald. The resulting structure employs all the endearing qualities of a traditional croft house to stunning effect. The project cost £94,696





SKYE VIEW 1

Jimmy Lawson and Hanne Stemann have proved that you can build a property while living in another country. The busy couple enlisted local firm

Hebridean Homes to provide them with a stunning Viking Longhouse-inspired kit house on the Isle of Skye. They now own a striking three-bedroom property that conforms to the landscape and capitalises on sea views. Cleverly-designed cladding conceals rainwater goods in order to maintain the property's clean lines. The project cost £307,837



ISLAND LIFE 1

When Celina and Scott Bradley discovered a dilapidated bungalow with uninterrupted coastal views on the Isle of Man, they initially thought that they'd renovate it. But when their plans were rejected by the local council they decided to embark on their very first self build. The couple bought their super-insulated timber frame kit home and have installed large swaths of glazing to maximise the amazing vistas.

The project cost £314,000



LIVING THE DREAM 🎓

Keith Young had always dreamt of self building but it wasn't until he discovered a stunning plot on a steep site in Pembrokeshire with coastal views that he was able to convince his partner, Chad. Now they have a two storey, four bedroom contemporary hilltop home. The modern design immediately received full planning permission even though the site borders a national park. The project cost £320,000



MAKING TRACKS T

Set in a two-acre ravine, this Cornish cottage enjoys arresting views of the sea. Retired couple John and Sue White project managed and undertook some restoration work on the barn conversion themselves. But with only a small track as their main access, the scheme took three years to complete. Once finished, the Whites decided to extend the property. A garden room now complements the main building and opens up the home to wonderful vistas. The project cost £70,000



The Twitchetts designed an environmentally friendly home with a stunning coastal backdrop. They have constructed an inobstrusive self build that's sensitive to the location. Although not certified, the house does meet Passivhaus standards with heat provided by a stove and underfloor heating. Triple glazed windows offer



pleasant views of the stunning Scottish landscape and protect the home from the harsh coastal weather.

The project cost £505,000



STUNNING SITE ->

Derrick and Anita Orman's dream to build their home in Sussex initially proved to be a nightmare. There were many planning problems and material mix ups to overcome, which delayed the construction process. However, by using a Legobuilt model to illustrate his scheme, Derrick managed to clearly convey his family's requirements for a five-bedroom property to their architect. The family has achieved a breathtakingly beautiful property with full height ceilings leading up to the rooms with sea views.

The project cost £450,000





LOCH RETREAT

A chance meeting with an old friend led the Moorheads to find the perfect plot on which to build their dream home on in Argyll. Work included levelling out the sloping site in preparation for the Scotframe timber structure, which is highly energy efficient. It features 90mm Kingspan insulation on the ground floor and 140mm Knauf Frametherm in the roof and walls. The couple pulled the entire project together with the help of an interior designer who helped them complete the loch-view property. The project cost £484,000









handmade, wire-cut, and reclaim facing bricks - with an extensive range of matching 'specials' -Northcot produces bricks of outstanding character.

Renowned for their subtle colours and texture, our bricks are coalfired to achieve an instant maturity that will enhance both new build and restoration projects.

For bricks of individual quality and natural beauty contact us on:

T: 0800 0389575 F: 01386 700852 www.northcotbrick.co.uk sales@northcotbrick.co.uk





CHOSEN FOR CHARACTER

ESTABLISHED 1925



your views:

SPONSORED BY:



Got a funny story, a gripe or some superb self build advice? Write to us at buildit@castlemedia.co.uk or the address below for your chance to win a prize

star letter

RHI application frustrations

The star letter writer wins an Einhell cordless drill & vacuum, worth £149.99

I thought other Build It readers might be interested in some of the headaches I've encountered attempting to register for the Renewable Heat Incentive (RHI). I'm nearing the end of a self build and have moved into the house to do the finishing touches before applying for a completion certificate. Now seemed like the perfect time to apply for RHI payments for my newly installed heat pump - but it's not been an easy process. First off, I've been struggling with the information-age problem that my address is not yet on the Royal Mail database, so my RHI application gets rejected. This is quite a common issue - I've also found that many insurance companies simply cannot provide a quote unless you're on the database - and it's compounded by the fact that some firms aren't up to date with the latest version.

The second problem is specific to self builders looking to take advantage of the RHI. The application form includes a question regarding the number of days the property has been occupied during the last 12 months. If it's less than 183 days, there's an assumption that it's a holiday house or similar - and you're required to fit a meter to measure the heat pump's output. These meters cost another £1,000 to install - with the only other alternative being to wait until the 183 days have elapsed and re-apply. Ofgem seems aware of the way this impacts on self builders, but can't do anything about it as it's restricted by the legislation.

Steve Glenn, by email

Editor's reply: The post code issue plagues all manner of new properties, from self build homes to flats and other developments. Back in 2010, Royal Mail conducted a survey of 168,000 new properties and found that 74% of residents faced difficulties ordering goods and services, including in sectors such as insurance and other financial services. Online transactions can be particularly susceptible – which is especially galling in situations such as the one you describe, where the application form has to be completed online. One option is to call Royal Mail and request they add your post code to their database. This usually happens pretty quickly, but as you've noticed you may still face delays with companies adopting the update.

Regarding the RHI, it's fair to say that new initiatives often suffer from teething issues. One thing we do know is that the government is keen to support self builders - as evidenced by policies such as the Community Infrastructure Levy exemption and the hotly-anticipated 'Right to Build' your own home. We've got in touch with Ofgem and DECC regarding the 183 day occupation rule but are still awaiting a response – watch out for the November edition when we'll be sure to print the organisation's reply for you!

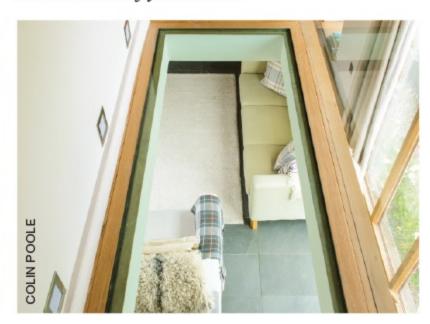
We've also put your observations forward to Mike Hardwick, who was recently elected Self Build Representative at the National Custom & Self Build Association (NaCSBA). He's collating the views of people who want to build their own home with the aim of putting ideas and concerns forward to NaCSBA and ultimately the government. You can share your thoughts with him via buildit@castlemedia.co.uk

Fab glass floors

I've been reading Build It magazine since 1998, working towards my own self build. I've now started a project - the garage is done and the basement foundations dug - and I'm researching some of the other products that will go into my new home. One key feature will be a glass floor above the basement, so I was interested to note the panel Simon Forrester and Andrew Craven incorporated into the mezzanine of their converted barn, as seen in the September issue. I'd love to hear more about how they achieved this as I'm struggling to find someone who is used to working with glass in this kind of structural application.

Adam Stapledon, by email

Editor's reply: We've put you in touch with some of the individuals involved in creating the glass floor panels in Simon and Andrew's home, but you might also be interested in talking to a few structural glazing specialists, such as IQ Glass (www.iqglassuk.com) and Cantifix (www.cantifix.co.uk). Best of luck with the rest of your build!



From the website...

I've been looking hard, but there do not seem to be any mortgage providers willing to take on self builds in Scotland - are there any?

Asked by Moteoeons

Our community of experts and self builders has helped out Moteoeons via our website. Find out which companies will lend on Scottish home building projects at www.self-build.co.uk/ scottish-self-build-mortgages and take the chance to ask your own questions!

AN EINHELL CORDLESS DRILL ND VACUUM WORTH £149.99

Next month's star letter writer will win a cordless drill and vacuum cleaner from Einhell, worth £149.99. The innovative wet-dry vacuum cleaner effectively sucks up both debris and excess water and features a smart-looking 30L stainless steel vessel The lithium ion cordless drill is a handy two-gear power tool with a practical LED light, and it takes just one hour to recharge.

For details about Einhell call 0151 649 1500 or visit www.einhell-uk.co.uk

HAVE YOUR SAY

Build It wants to hear from you. Whether you have advice, a self build story or simply want to make us laugh, write with your name and address, to Letters, Build It, Castle Media, Suite 434, Earls Court Centre, Warwick Road, SW5 9TA or email us on buildit@castlemedia.co.uk. We reserve the right to edit and publish all correspondence.

TOOLSTATION

A LOT MORE THAN TOOLS







SCREWS & FIXINGS

LIGHTING & ELECTRICAL

10 Way Dual RCD + 10 MCB



WORKWEAR















Call FREE 0808 100 7211

Mobile Friendly: 0330 333 3303

Drop in

Find your nearest @ toolstation.com

Visit

160 + Branches toolstation.com

Follow toolstation UK on: 🗾 📑











11,000+ STOCK PRODUCTS LOW TRADE PRICES FREE DELIVERY ON ORDERS OVER £10 OPEN TO ALL, 7 DAYS A WEEK



Readers' homes

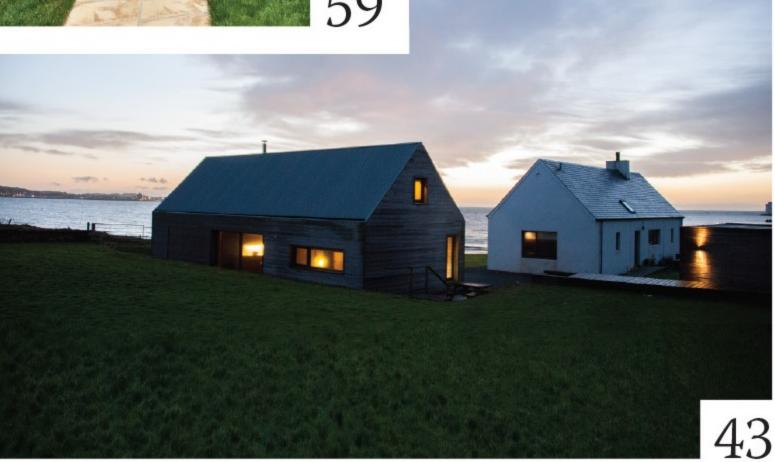
SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT











24 TOUGH AT THE TOP

Audrey Goodchild and Dale Pearson's project was fraught with obstacles, but they took everything in their stride to fashion a striking two-storey home out of a 1960s bungalow

33 SITE SPECIFIC

Architect Patrick Barrett's ambitious project has seen him carve out a new contemporary house on a wedge-shaped plot

43 JOINED UP THINKING

Angus MacKinnon bought a secluded site on the Hebrides for just £27,000, and has since developed it with two smart holiday lets inspired by vernacular design

51 NOTHING LEFT TO CHANCE

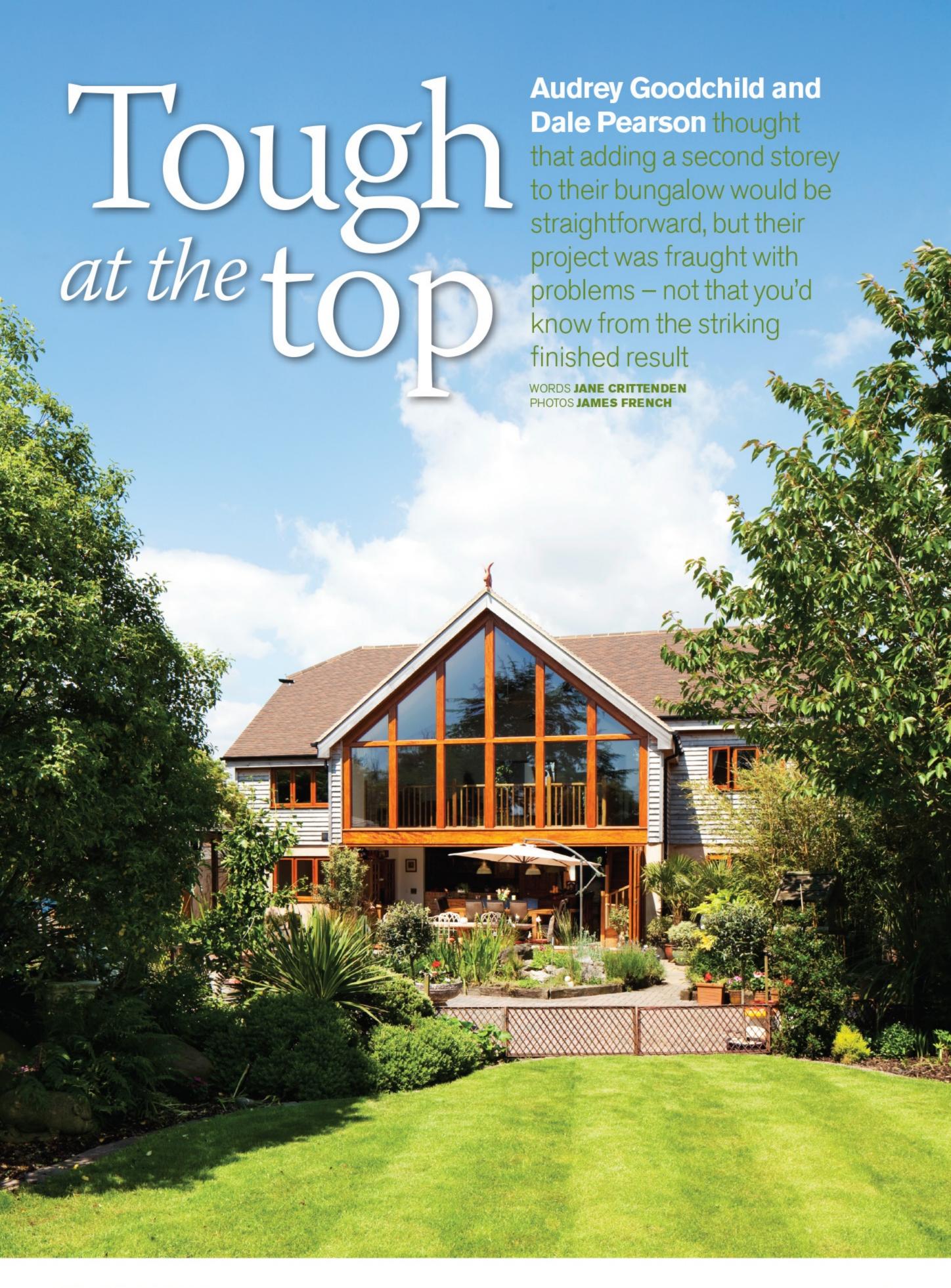
The Dougans are experienced renovators, but when they couldn't find a suitable property for their next project, they turned to self build to give them a low-energy, low-maintenance home for now and the future

59 **MOVE WITH THE TIMES**

More than two decades after he first converted a Cornish barn, Stephen Chidgey embarked on another renovation to futureproof it for 21st century living

MORE ONLINE >>

FOR MORE INSPIRATIONAL READERS' HOMES VISIT WWW.SELF-BUILD.CO.UK/READERS-HOMES



ost self builders experience highs and lows during their project, but Audrey Goodchild and Dale Pearson had more than their fair share of lows after deciding to build a second storey onto their 1960s bungalow. "If something could go wrong during the build then it did," says Dale - although you'd never guess it from the finished property, a beautiful cedar-clad barn-style home with vaulted ceilings and a glazed gable. "We used structural insulated panels (SIPs) but when the materials arrived on site we began to suspect that the manufacturer had little quality control in place. The steels, timbers and SIPs arrived in the wrong sizes - even the bolts didn't fit."

The decision to extend upwards came about after Audrey moved in with Dale and his son Kyle in 2009 - along with her own three adult children and their partners. The three-bedroom bungalow was bursting at the seams with them all. The couple briefly considered converting the loft but soon realised that the shallow pitch would make the job too complicated, so they thought about demolishing the lot and starting again. However, the bungalow is a 1960s build

Below: A large galleried living room makes the most of the glazed gable wall. The space retains heat well thanks to the SIPs construction

THE GOODCHILD & **PEARSON FILE**

NAMES Audrey Goodchild & Dale Pearson

OCCUPATIONS Audrey has her own accountancy firm and Dale imports marble statues for the funeral trade

LOCATION West Sussex

TYPE OF PROJECT Second-storey bungalow extension

STYLE Barn

CONSTRUCTION METHOD SIPS

HOUSE SIZE 450m² (4,844 ft²)

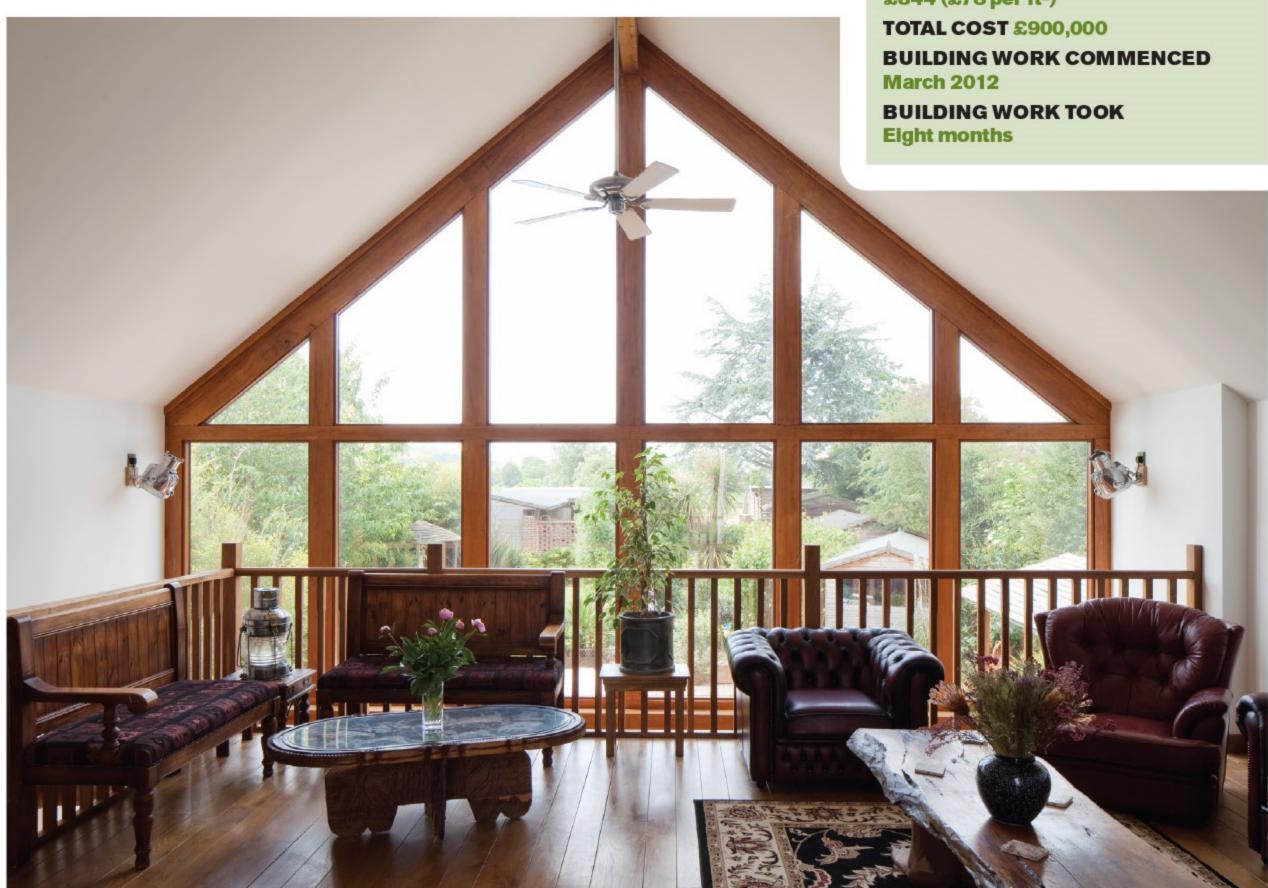
HOUSE COST £520,000

BOUGHT 2009

PROJECT COST £380,000

PROJECT COST PER M²

£844 (£78 per ft²)



and had been extended over the years on all sides - including the garage, which Dale had converted to create a utility room with a bedroom and ensuite for his disabled daughter, Emma.

"We were concerned that the planning authority would demand the replacement house be the same size as the original 1960s footprint without the extensions," Dale explains. "It was a difficult decision because we had to pay a lot of VAT by choosing to renovate instead of doing a self build."

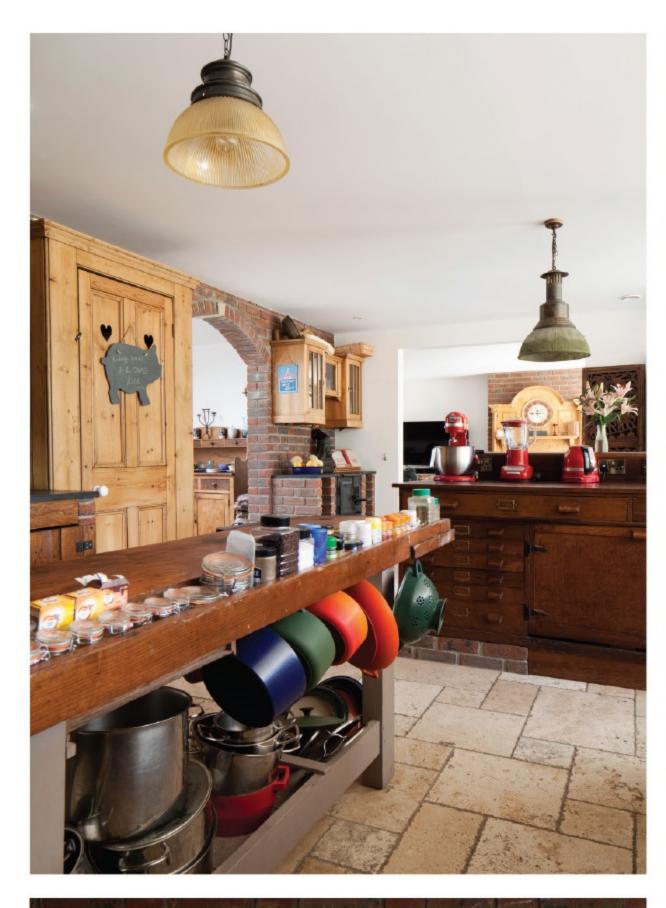
Making room for everyone

It was Phil Grant, a client at Audrey's accounting firm who had recently started a design and project management business, who suggested they take the roof off and build a second storey. Audrey and Dale thought this was a great idea and started thinking about the style of their reconfigured home. After viewing houses in the local area, they decided they liked the look of Sussex barns.

Inside, they needed a large downstairs entertaining space, five bedrooms (as well as keeping the downstairs bedroom and ensuite) and a separate annex. "The annex was important in case any of our kids need to move back home in the future," says Audrey. "We also wanted to create a house for life, so when Dale and I get old we can live downstairs if we need to or have a live-in carer."

Phil worked up a design with architect Rob Beer, who was able to do the detailed drawings for planning and building control. "We

26 readers' homes







gave Phil and Rob ideas and they brought them to life in the drawings and the plans," says Audrey. "They were an excellent team and handled the whole process very well, so it's thanks to them we have such a wonderful home."

The couple wanted their house to be as green as possible, so visited the National Self Build & Renovation Centre in Swindon one weekend to research their options. To their surprise, the exhibitors discouraged them from having a renewable heating system such as a ground or air source heat pump, explaining that as the bungalow was already connected to mains gas, this would be an expensive route to go down. "We appreciated their honesty and decided just to have solar photovoltaics," says Dale. "We use a lot of electricity because we're on a five-acre smallholding with outbuildings for our utility



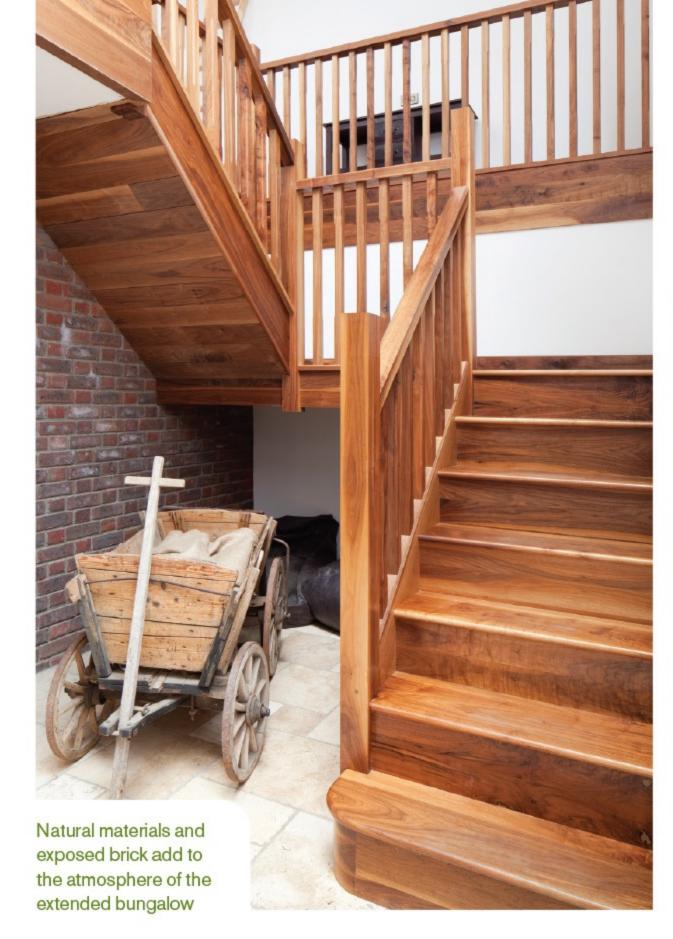
room and my office. Luckily we managed to secure a good feed-in tariff rate before the government made cuts."

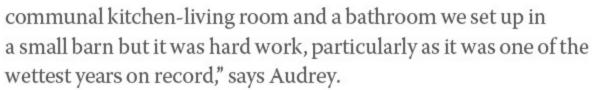
Another positive outcome of the trip was the knowledge Audrey and Dale acquired about SIPs. "We like that they're 'green' and we could easily create vaulted ceilings with them," says Audrey. "We also thought it was worth investing in a building system that's quick to erect on site."

The planning committee

Audrey and Dale submitted their plans in December 2011 and the planning officer came to assess the site soon after. Almost immediately she decided their design was too big and recommended their application for refusal – but the couple weren't deterred and decided to go to the planning committee. In preparation, Audrey read the relevant legislation in great detail. She sent out 150 letters to local residents and councillors pointing out how their design met the criteria as a sustainable dwelling and for disability living, as well as explaining why they needed more space. "The other point was, if we had moved, it would have taken four local businesses away from the area," says Audrey. "Dale and I run firms in the locale, my son Aaron has his own catering company, and my daughter Charlie was working in printing."

All the research and preparation paid off: in January 2012 consent was granted without question. A couple of months later everyone moved out of the bungalow and into four caravans pitched on their back field, along with their respective partners. "We shared a





Raising the roof

By now, Audrey and Dale had their SIPs contract in place and Dale had decided to prepare the ground floor of the new house to wall-plate level with the help of family and friends. But the bungalow roof had to come off first, so Audrey rallied the troops. "I emailed all our friends and said we're having a roof-removal party," says Audrey. "We had a dozen lads here working each day and the others brought cakes and made tea!"

However, when the building inspector came on site to check the original foundations (which a structural engineer had confirmed could be used), it quickly became clear there was a problem. Although they were solid in the extended parts of the bungalow, the original structure had been built on to timber beams and would have to be redone. Once the new footings were in place, Dale and Kyle demolished the internal walls. They spent six days digging out the extension's concrete floor slab so it could be lowered to allow space for 150mm of insulation and underfloor heating. A liquid Easyscreed was applied in an impressive four hours and work carried on.

The most nail-biting moment for everyone was when subcontractor Max Abbott, from SIPs Installations, came to check the wall levels. "We were paranoid because we'd been told we had to get the levels exactly right," says Dale. "My daughter's father-in-law, Tony, was incredible; measuring every wall plate with a spirit level so that we were only out by 1mm from corner to corner! Max assessed the site and was confident the SIPs part of the project would be finished in 10 days because it was so straightforward. But the incompetencies that followed, which were no fault of Max and his team, instead dragged the work out for 11 weeks."

First of all the steel arrived manufactured incorrectly, which the couple later found out had been because the drawing had been

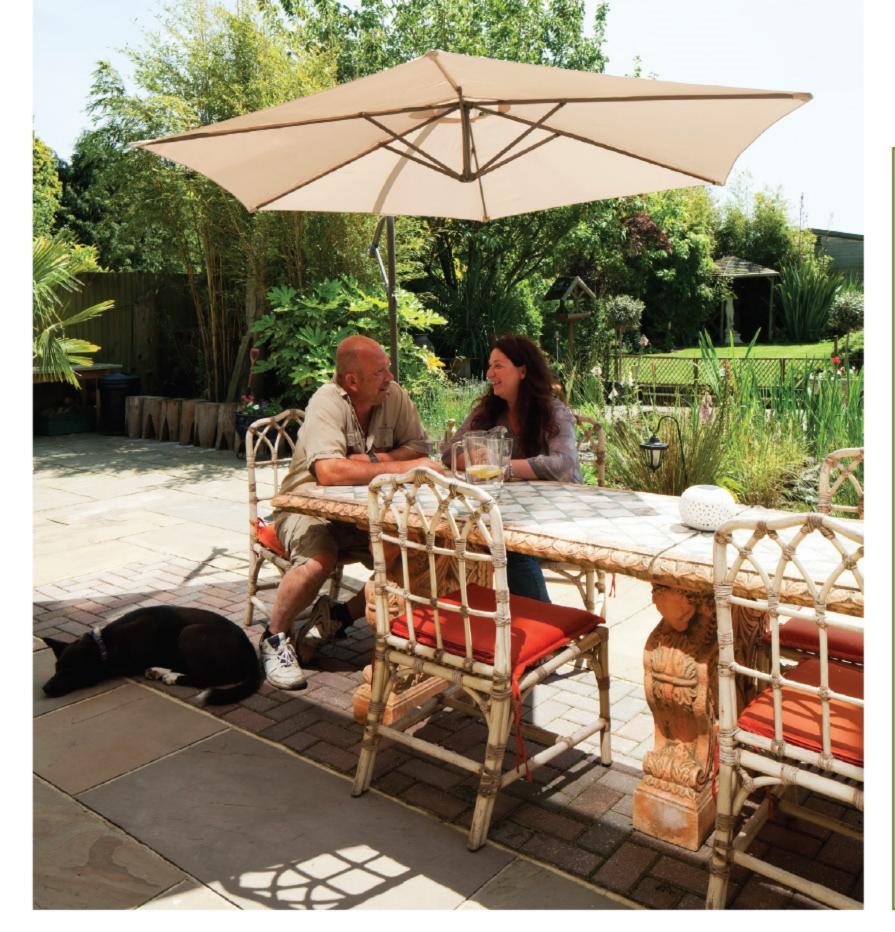


wrongly transposed. The timbers for the SIPs were the wrong size, the SIPs themselves were 10mm too long and the bolt holes were too small for the bolts. As problem after problem arose, Audrey and Dale were in despair. Each call to the SIPs manufacturer went nowhere so in the end the couple took matters into their own hands.

"I had a friend welding steel on site so we enlisted him to remedy some of the problems, while on another day I borrowed a truck to drive the timber to a local sawmill," says Dale. "None of it was our responsibility but we wanted to keep things moving." The plant hire was a problem, too, with Audrey and Dale organising most of it as the panel producer couldn't secure the machinery they needed at the right time. The couple were particularly concerned when they saw the subcontractors working at heights of 9.5m with a telehandler that wasn't quite tall enough. "We told the SIPs manufacturer we had to have a crane because they couldn't fix the panels safely," says Dale.







WE LEARNED...

WE'RE NOT builders, so we learnt as we went along. If you're practical, you do your research and you aren't afraid to ask, a project like this isn't as hard as people think.

REFERRING to *Build It* was useful as it's an incredible source of information for ideas and methods of doing things, which really helped and saved us money!

CHECK the credibility of your suppliers by talking to past customers to find out if they had a good experience all the way through their scheme.

A GOOD architect or designer is essential to get the space you want.

WE SAVED money by doing some work ourselves - for example, we were quoted £3,500 by the water company to upgrade the mains, and in the end we bought plastic pipes for £280 and did the labouring ourselves. We also saved on a kitchen by buying pieces from salvage yards and having them restored and modified. We also found our Aga on eBay, which really brought the cost down.

Despite the catalogue of struggles, Audrey and Dale are keen to stress that Max and the other subcontractors were not to blame, and furthermore did an excellent job at resolving the problems, too. Nor are they sorry to have used SIPs in the first place. "We honestly don't believe all SIPs suppliers are like this, and Charles Stewart at the UK SIPs Association (now part of the Structural Timber Association) was really very helpful in our time of trouble, giving us pointers to help us solve some of our issues," says Dale. "The sad thing is we'd done our research and chosen a manufacturer that was very attentive at the start, but was incapable of taking responsibility when things went wrong."

Hiring trades

With the SIPs phase finally finished in July 2012, Dale and Kyle got on with interior works, doing the chasing for the electrics, plumbing and decorating, and hiring trades as and when they were needed. The SIPs carpenters, Dan Hyett and Mike Baxter, stayed on to do all the woodwork and moved into a caravan on site. Meanwhile, Dave's son Kyle worked on the remainder of the project, turning his hand to whatever was needed but mainly taking responsibility for the plastering and rendering.

"Without Kyle's help we could not have achieved such a high standard of finish," adds Audrey, "and the experience has been such a positive one for him that he's gone on to start his own business, which we're really pleased about."

Despite the setbacks, the team managed to claw back six weeks on the schedule so that the house was finished in eight months. It was an exhausting and frustrating time for everyone, but the result is a house that's double the size of the original, creating a superb living space for Audrey and Dale and their family.

"Our house is just lovely and the structural fabric is so efficient that we've not had to have the heating on this year," says Audrey. "Our project was a real friends-and-family occasion where everyone just got stuck in – we even had a lamb, dogs and chickens on site! We owe a huge thank you to everyone for their help."



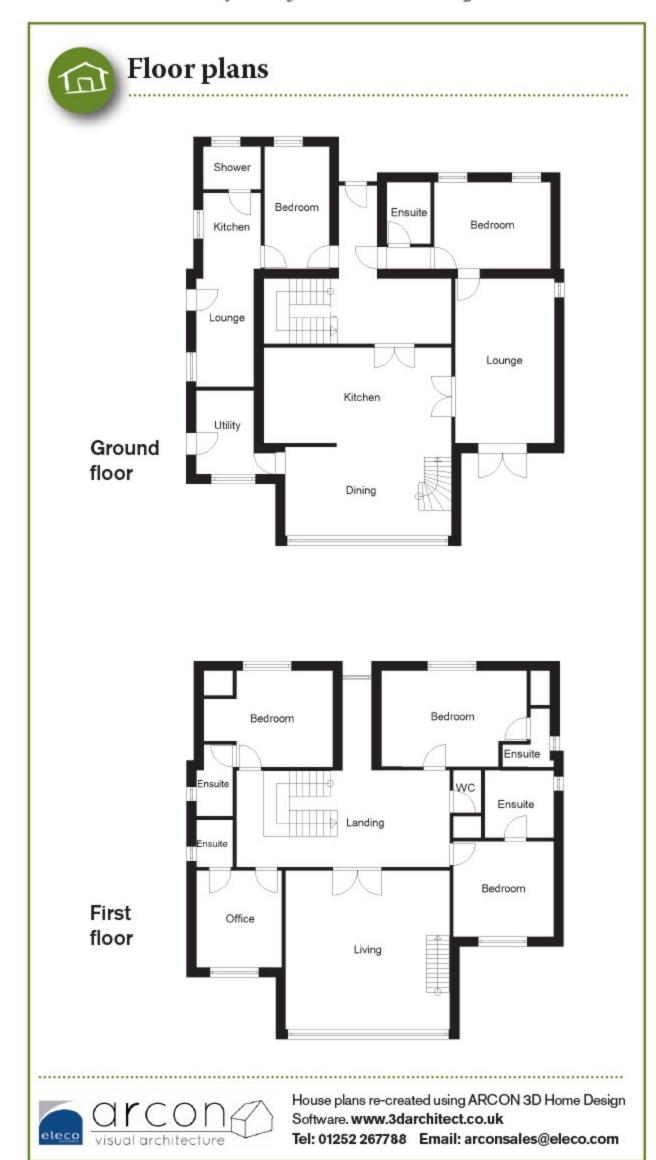
closer look

SIPs for extensions...

Despite their bad experience with the supplier, Audrey and Dale would still recommend structural insulated panels (SIPs) because of the speed of build – the bungalow was their existing home and they would be living in a caravan on site, so they wanted the work to be finished as quickly as possible. SIPs are a composite commonly made of polyurethane (PU) foam or expanded polystyrene (EPS),

sandwiched between two panels of oriented strand board (OSB). As well as

being quick to erect, the panels are lightweight with high levels of insulation, structural strength and airtightness. For a project like Audrey and Dale's – adding a further storey to a bungalow – SIPs can be a good option because they won't impose as much additional load on the original structure as other materials, lessening the requirement for any further work to the foundations. The couple were also attracted by the fact that SIPs panels can be used to create dramatic vaulted ceilings.





PROJECT COST BREAKDOWN

Vaulted ceilings

Elements	Cost m²	Cost %	Total cost
= 2.0000			
Fees	£22	3%	£10,000
Foundations	£11	1%	£5,000
Rubbish	£18	2%	£8,000
External wall SIPs	£178	21%	£80,000
Roof SIPs & covering	£18	2%	£8,000
Internal walls	£33	4%	£15,000
Cedar wall cladding	£44	5%	£20,000
Windows	£44	5%	£20,000
Floor, wall & ceiling finishes	£67	8%	£30,000
Joinery and fittings	£76	9%	£34,000
Carpentry	£156	18%	£70,000
Plumbing & heating	£44	5%	£20,000
Electrics	£44	5%	£20,000
Kitchen	£44	5%	£20,000
Bathrooms	£22	3%	£10,000
Decorating	£22	3%	£10,000

Grand total £380,000

Useful contacts



ARCHITECT Three Eleven Design 01273 688744 www.3eleven.co.uk
ARCHITECTURAL DESIGNER Phil Grant 07774 770448 PLASTERER AND
GENERAL BUILDER J K Plastering and Building 07741 788120 JOINER Lee
Mccatty Joinery 01273 495949 CARPENTER Hyett & Baxter 07920 461726
www.hyett-baxter.co.uk SCREED Easyscreed 01794 324452 www.easyscreed.
co.uk SIPS INSTALLER SIPs Installations 07545 505017 www.sipsinstallations.
com SIP ASSOCIATION UK SIPs Association www.uksips.org (now part of the Structural Timber Association)

Eco-friendly LED bulbs and stylish interior and exterior lighting for your home



WHY CHOOSE LED?

Cost effective

LEDs offer 90% savings on lighting electricity costs and are a direct replacement for your existing bulbs.

Eco-friendly

LEDs are up to 90% energy efficient, compared to just 20% for standard bulbs, and can last for more than 20 years.

Cutting edge technology

Enjoy beautiful, quality light with no warm up time. LEDs also utilise cool running technology, so are safe to touch when lit.

Free first class delivery
5 year warranty on all LED bulbs
30 day money back guarantee

20% FOR THE POST OF THE POST O

For Build It readers with code:



LiGHT MY LIFE
a brighter future for everyone



SOLAR SLATE IS CHANGING THE FACE OF SOLAR PV

Our planning-friendly range of technologies provide solar power from an innovative roof covering that blends seamlessly with traditional slate.

- ✓ No planning headaches unrivalled track record in gaining Planning Approval
- \checkmark No complaints from the neighbours
- ✓ No unsightly solar panels
- ✓ Energy cost security
- ✓ Earn from your investment

For the first time, it's possible to take advantage of solar power without compromise. Unhook from the fossil-fuelled lifestyle and make a real reduction in your carbon footprint.

As a technology, ours is unlike anything else that's available. It truly takes roof integrated solar PV to a new dimension.

Even homes in historic or conservation areas can now tap into an endless supply of free, clean energy, with the added long-term financial benefit of guaranteed payments from the government's Feed-In Tariffs.

British-designed and owned supported by European manufacture, all of our products are guaranteed from a company with a wealth of experience and a wide install base.

We know that every project is a journey. We are able to support our customers every step of the way, from supply and design through to installation and warranty.

SOLAR SLATE

Start your journey today.

T: 01454 627 841
E: info@solarslate-ltd.com
W: www.solarslate-ltd.com

Come and visit our permanent display at the National Self Build & Renovation Centre, Swindon

Order by 8pm. Get it Next Day!



For a huge range of stylish door and window hardware at low trade prices, call today for your **FREE** catalogue!



UK's Biggest Range



Minimum 5 Year Guarantee



Order by 8pm get it **Next Day**



Free





0808 274 69 71



Ironmongery Direct.com



DOWNLOAD OUR FREE APP









MASTERS OF OUR TRADE

TEXT RBA9 to 62244 FREE! With name, address and email for your FREE catalogue.



34 readers' homes

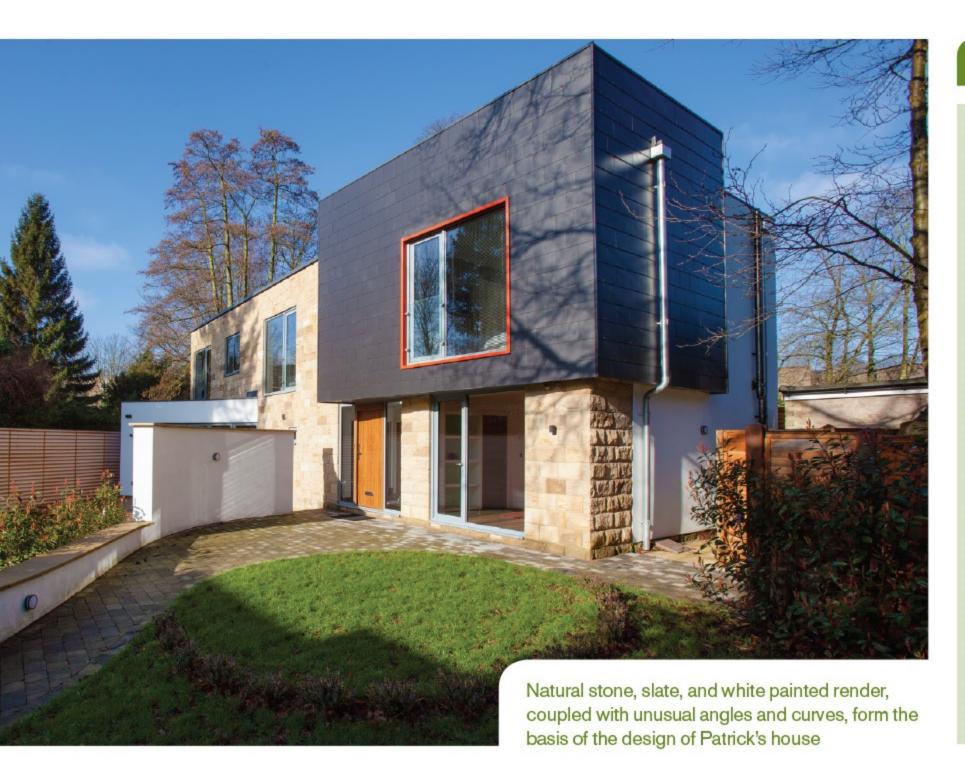
ven before he had finished building his previous house, Patrick Barrett was itching to create another property, this time one that was more cutting edge – and where better than in his own back garden? The wedge-shaped plot in a leafy area of Leeds had come with its own detached cottage and it was only a matter of time before Patrick, an architect, secured planning permission to build a new property on its footprint. He moved into an apartment around the corner while the house was built – a fortuitous move, considering the challenges that lay ahead.

Patrick had already fought long and hard to overcome a string of objections from neighbours who overlooked the plot, and concerned societies that wanted the new house to be in keeping with the traditional Victorian villas of the local conservation area. However, the cottage — once owned by Yorkshire-born Lady Valerie Solti and her husband, the late composer Sir Georg Solti — had been extended over the years and had lost much of its character as a result. Patrick patiently countered the objections, arguing that scale and materials played a major part in the design and its setting on the plot. Furthermore, the plot is adjacent to a number of 1960s apartment blocks as well as his existing self built house, factors that supported his ambition to bring more varied architecture into the area.



(C) I approached it with a very can-do attitude because I believe there is always a way round challenges))





THE BARRETT FILE

NAMES Patrick Barrett OCCUPATIONS Architect LOCATION Leeds TYPE OF BUILD New build

STYLE Contemporary

CONSTRUCTION METHOD Timber frame faced with stone, slate and render

PLOT SIZE 0.25 acres

HOUSE SIZE 334m² (3,600ft²)

LAND COST Already owned

(garden plot)

BOUGHT March 2010

BUILD COST £329,600

COST PER M² £987 (£92 per ft²)

BUILDING WORK COMMENCED

May 2012

BUILDING WORK TOOK

48 weeks

CURRENT VALUE

£850,000





I LEARNED...

DESIGN your house as a whole, not just as a series of rooms. Consider how it will feel as you move through the spaces and how the rooms flow together.

IF YOU have an unusual-shaped plot, design your home to fit it; if it fills the space in a natural way, it will look much more at home in its setting.

ALWAYS confirm everything in writing and, if necessary, take photographs of your supplier standing next to the chosen materials so that if there is any problem over colour or type, you have proof of your choice. I wanted doors the same colour as the floors and had the supplier sign a piece of floor wood to this effect. When the doors turned up a different colour, I had signed evidence of my request.





The site sets the agenda

In the end it took nine months to secure consent to demolish the cottage and start again, but the plot itself presented even more challenges. Patrick had to design a home that worked with its uncompromising wedge shape and the proximity of protected trees. "The site dictated the design," he says. "I wanted a private garden, and for the house to be as far away from the other property as possible, so that determined its shape. I also wanted a wetroom off the main bedroom, and because of the proximity of the trees it couldn't be part of the main home, so that had to be created in an overhang supported by a steel pole."

The dwelling was also going to sit very close to a garage block, which had inadequate foundations and sub bases. Patrick held discussions with local residents' associations and the London-based management company that owned the units, to secure an agreement under the Party Wall Act to strengthen their foundations while building his own. "The ground level of the garages was one metre higher than our ground level. Their raft foundations were built in the 1970s and had been very badly done," says Patrick. "I was concerned that if I excavated down too far, the buildings would collapse."

To avoid a disaster, Patrick built beam-and block-foundations – fitted with reinforcement bars – in sections to shore up the garages. A steel ring beam system, encased in concrete, was built to support the gable wall of the new build.

Concrete contingency

No sooner had one problem been overcome than another raised its head – this time an underground spring. "I had to redesign parts of the foundations and drainage system to create a tunnel around the spring," says Patrick. "As a result of all this, I spent an extra £3,600 on concrete – and we hadn't even got above ground level."

Fortunately Patrick, drawing on previous experience, had set aside a 5% contingency fund to cover unforeseen expenses. He was also project managing the build himself and was able to keep a close eye on cash flow, allowing £1,000 per m^2 for the final figure. Not only did he complete the project below budget, but also well within his one-year time frame. "I approached it with a very can-do attitude because I believe there is always a way round challenges," he says.

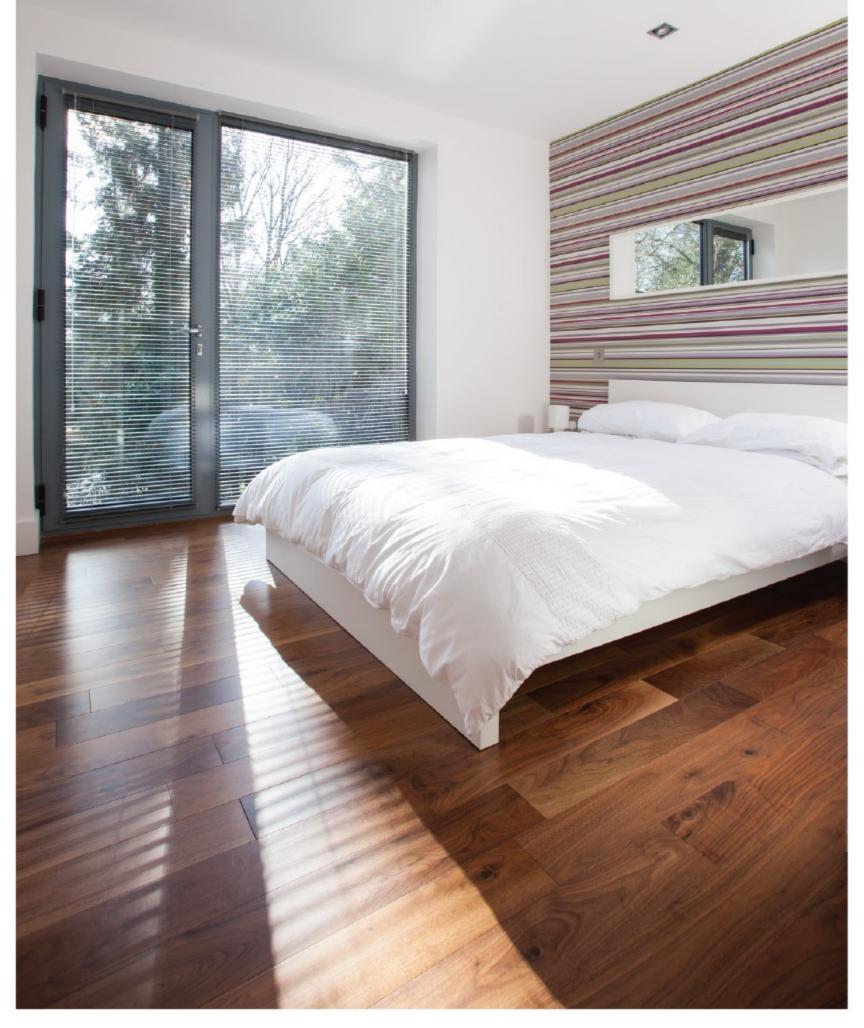
The house is timber framed, and its panels were all ferried to site on the back of 12m trucks before a crane was used to lever them into

For thermal efficiency,
Patrick specified argonfilled double glazed
windows and bi-fold
doors. They include
auto thermal blinds that
operate on daylight and
sun levels. Patrick
bought furniture from
Bo Concept and Heal's











place. Patrick had to remove a stone pillar and take up all the cobbles and flags at the end of the drive - with the consent of the Highways Agency - so the lorry could get to the plot without causing damage. The frame was fitted on both sides with layers of plywood and insulation, leaving gaps for services.

Generous insulation

The insulation for the entire house cost £10,000, but Patrick says this major investment off-set his decision not to include a heat recovery system or solar panels. The walls and ground-level floors are layered with 2,400 x 1,200mm sheets of insulation running in one direction topped with 90mm of Kingspan laid in the opposite direction and secured with thermal tape to prevent cold bridging. Similar levels of insulation have been applied in the roof, too, which includes a flat Wolfin membrane of bonded polyurethane and 250mm of rigid insulation.

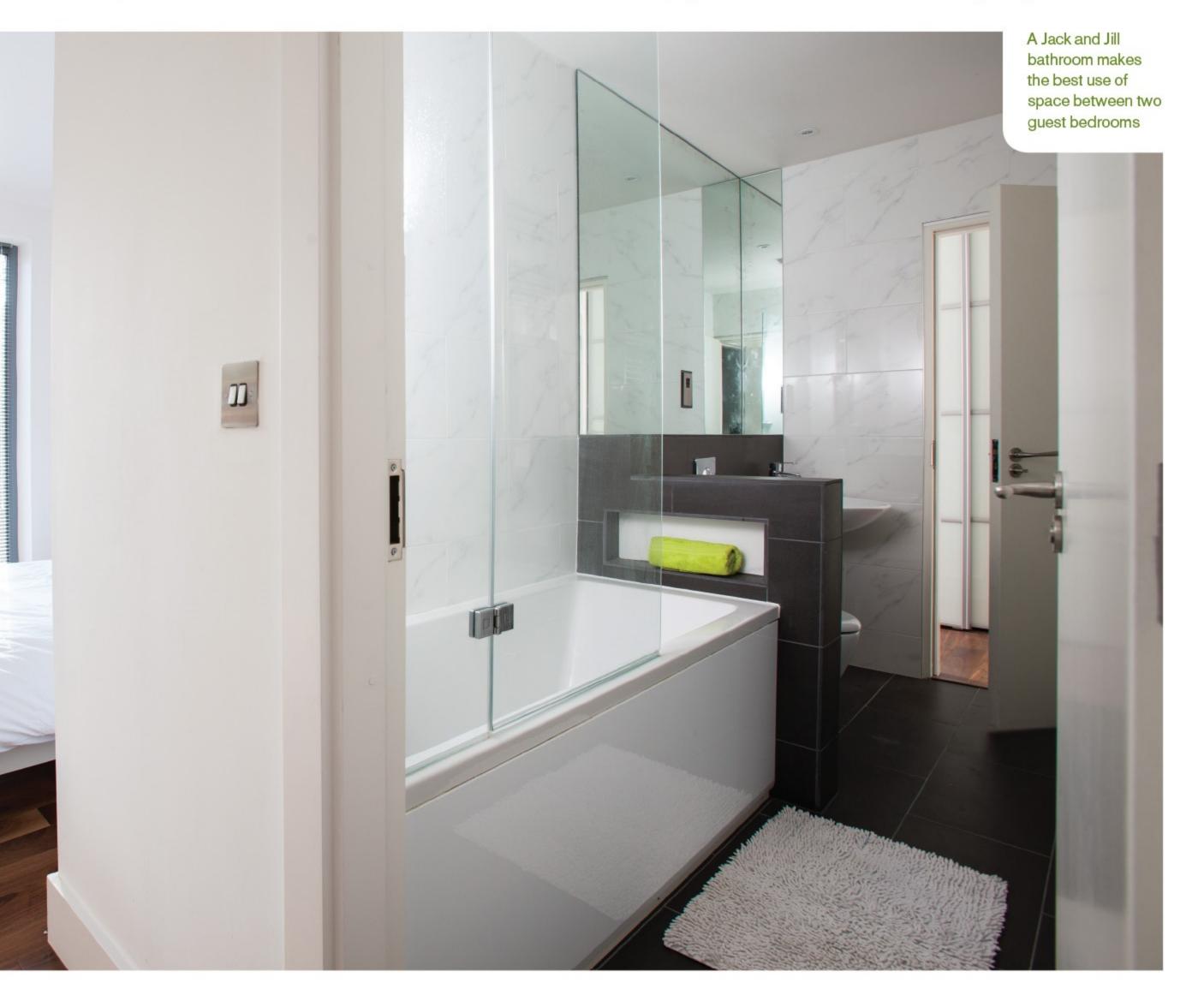
The roof was on within six weeks of completing the foundations. Patrick convinced the planners - who wanted him to use riven slate tiles - that lightweight composite roof tiles would be more in-keeping with the design, and the exterior is faced with 125mm of natural stone and sections of block and render.

Patrick has fitted the entire house with a £5,000 lighting system using bulbs of no more than 3W each, all controlled from his iPad. "I wanted the least capital outlay for the best returns," he says. This same approach also meant investing in a high-spec condensing boiler and fitting an insulated cylinder with exposed, uninsulated heating pipes in a purpose-built drying room: "It's more cost effective to hang clothes here than use a dryer," he says.

A whole-house approach

The interior is designed from a four-dimensional viewpoint - a phrase that simply means that it takes account not just of the floorplan and room layout, but the changing vistas as you walk through the property. "I wanted to design the house as a whole, not as individual rooms slotted together," says Patrick. "I don't like square walls or flat, open spaces so unusual angles, mixed heights and different floor levels were built into the design." The house is simply furnished with key pieces from Heal's, Bo Concept and Made.com so that the emphasis remains with the architectural design and the property's relationship with the garden.

Patrick designed the landscaping in conjunction with the home, so they developed as a whole. The smallest area to the back of the house has been turned into a Japanese-style space while the front comprises a sweeping curved wall that draws the eye from the garage to the front door. Further walls and strategically planted hedging define the outdoor areas and create privacy, while bi-fold



doors on either side of the main living area open up the ground floor to allow house and garden to work as one in the summer months.

"Although the property is based on a minimalist ethos, it's not a showpiece," says Patrick. "I could indulge my whims and ideas

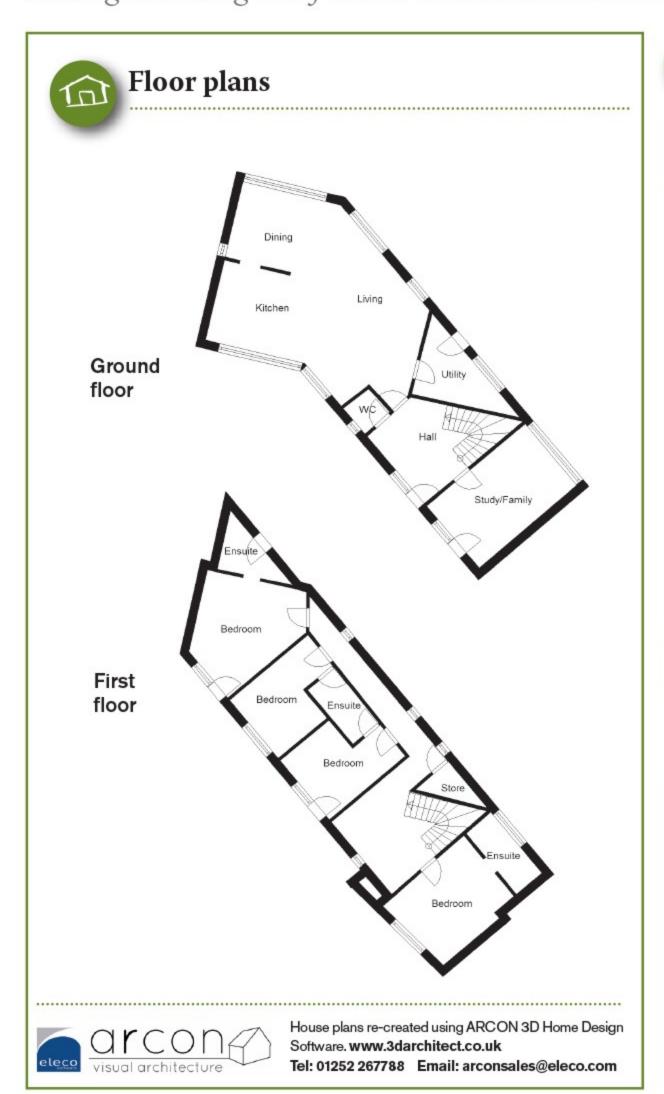
as an architect because I was designing it for my needs and lifestyle, but it's also my home and ultimately I wanted it to feel comfortable and lived in. Achieving the right balance was, for me, the most satisfying aspect of the build."

closer look

Design elements of this house...

Patrick's home is full of different levels and unusual angles, a liveliness that is matched on the exterior facade, where the various internal volumes are echoed by a palette of different materials. The timber frame dwelling has been finished with brickwork, render and grey composite tiles: each has its own distinct colour and texture that stand out from each other, and thanks to Patrick's

design sense they are perfectly balanced. Grey aluminium window and door frames help to create a unifying thread, but where windows appear in the already-grey tile-hung sections, they stand out thanks to a bright ribbon of orange or green, framing them and adding a striking hit of colour on the otherwise neutral facade.





TOTAL BUILD COST BREAKDOWN

Mixed materials

Elements	Cost m²	Cost %	Total cost
Fees	£15	2%	£5,000
Foundations	£75	8%	£25,000
External walls & windows	£180	18%	£60,000
Roof structure	£90	9%	£30,000
Internal walls & doors	£45	5%	£15,000
Floor, wall & ceiling finishes	£75	8%	£25,000
Joinery & fittings	£225	23%	£75,000
Plumbing & heating	£90	9%	£30,000
Electrics	£90	9%	£30,000
Decorating	£30	3%	£10,000
Misc	£74	7%	£24,600

Useful contacts

Grand total



£329,600

ARCHITECT Barrett+Barrett chartered architects 0845 652 6560 www.barrettarchitects.com TIMBER FRAME SMS Timber Frame 01484 609900 www.smstimberframe.co.uk JOINERY Lynn and Jones 0113 234 0737 www.lynnandjones.co.uk ALUMINIUM WINDOWS Alternative Windows 0800 035 4180 www.a-w-e.co.uk FLAT ROOF SYSTEM Wolfin 00 49 6053 708141 www.wolfin.com ROOFING CONTRACTOR Pickles Roofing 0113 275 2620 www.picklesbros.co.uk BLINDS The Carolina Blind Company 0113 393 0800 www.blindsleeds.com KITCHEN Creative Bathrooms and Kitchens 01924 366533 www.creativebathroomsandkitchens.co.uk FLOOR TILES Al-Murad 0113 322 2028 www.al-murad.co.uk DOORS Emerald Doors 0845 625 0755 www.emeralddoors.co.uk WARDROBES KKS Fitted Bedrooms 0113 270 8693 www.kksfittedbedrooms.co.uk



ecoHaus Internorm

THE UK'S LEADING GLAZING SPECIALISTS IN SELF BUILD AND PASSIVHAUS PROJECTS ecoHaus Internorm is the Largest Internorm Partner in the UK.

ecoHaus Internorm boast the Largest Internorm showroom's in the UK, located in Gloucestershire, London and a new "Super Showroom" in Surrey opening Summer 2014.

Extensive knowledge of the Internorm product, coupled with the highest standards of service, survey, installation, at the most competitive prices, make us the only choice when looking for Internorm Windows.

Contact us to discuss your Internorm requirements with one of our fully trained Product Specialists.



NEW HF210 HOMEPURE WINDOW U_w 0.74

- Timber/Aluminium Composite
- Cost Effective
- 48mm Triple Glazed
- Choice of 14 Internal Finishes
- Any RAL Colour Outside



HS330

LIFT & SLIDE DOOR U_D 0.67

(Featured in the above project)

- Lift & Slide Door
- 54mm Triple Glazed
- Large Scale Glazing
- Suitable for PassivHaus
- · Glass to glass corners/joins

tel: 0800 612 6519 web: www.ecohausinternorm.com email: sales@ecohausinternorm.com



For more information and to download our brochure find us at www.idsystems.co.uk

Make space for the things that matter

At IDSystems, we believe in breaking down the boundaries set by traditional building methods. With a complete range of folding sliding doors, windows, moveable walls, glass roofs and balustrades to choose from, we'll help you add another dimension to your home and get maximum enjoyment from your surroundings.





Joined up thinking

Angus MacKinnon built not one but two contemporary houses side-by-side in a remote part of the Hebrides; the fact that he oversaw much of the work from afar makes it even more of an achievement

WORDS JENNY MCBAIN PHOTOS MARGARET SORAYA

ngus Mackinnon has enjoyed a great deal of international travel during the course of his career in journalism — but his heart has remained firmly in the Hebrides, on the Isle of Islay where his mother was born. "I used to go there as a young child when my great-grandmother was a tenant farmer and then I started to visit the

island again in the 1990s," he says.

Towards the end of that decade Angus and his partner, Penny began looking at buying a property on the island, but it proved almost impossible. "It was really difficult to get a house back then. Any that came up sold really quickly," he says. "I did look at buying a 200-year-old farmhouse but around that time I got posted to Hong Kong and the surveyor who went to see it on my behalf had some concerns about its condition, so I decided it would be too risky to take on at such a distance."

At the time, self building didn't seem like a viable option. "A lot of people wanted houses, so there was a huge demand, but the planners were being very restrictive," says Angus. "Islay is

actually prone to drought, believe it or not, so there were problems with the water supply, but these have now been resolved."

An idyllic location

Luck struck in 2002 when a beachside plot of 0.8 acres came up. It already had outline planning permission and a private water supply, plus it was secured for the bargain price of £27,000. "We were really fortunate because within two years, land prices doubled," says Angus. "Because the site had a ruin on it, it made us think that there wouldn't be problems with flooding or anything like that."

44 readers' homes

However, things got a bit tricky and drawn out when it came to trying to get detailed planning consent. "The whole process was gob smacking in terms of its lack of coherence," says Angus. "We wanted to build something that was sensitive to the landscape, but slightly Southfork-style super-bungalows were all the rage at the time. We had a few years of tearing our hair out."

Luckily he had a good architectural practice on his side, Dualchas, which is based on Skye and is familiar with the travails of working in remote Scottish locations. The practice strives to create homes that incorporate contemporary design elements into buildings, but they also pay reference to Scottish architectural traditions that, in some instances, date back to the Viking longhouse. Around the time of the millennium, a lot of their concepts were still very cutting edge and sometimes regarded with suspicion by planners, but Angus says "I really like what Dualchas does. The team is laid back and what they're trying to do is a really good idea."

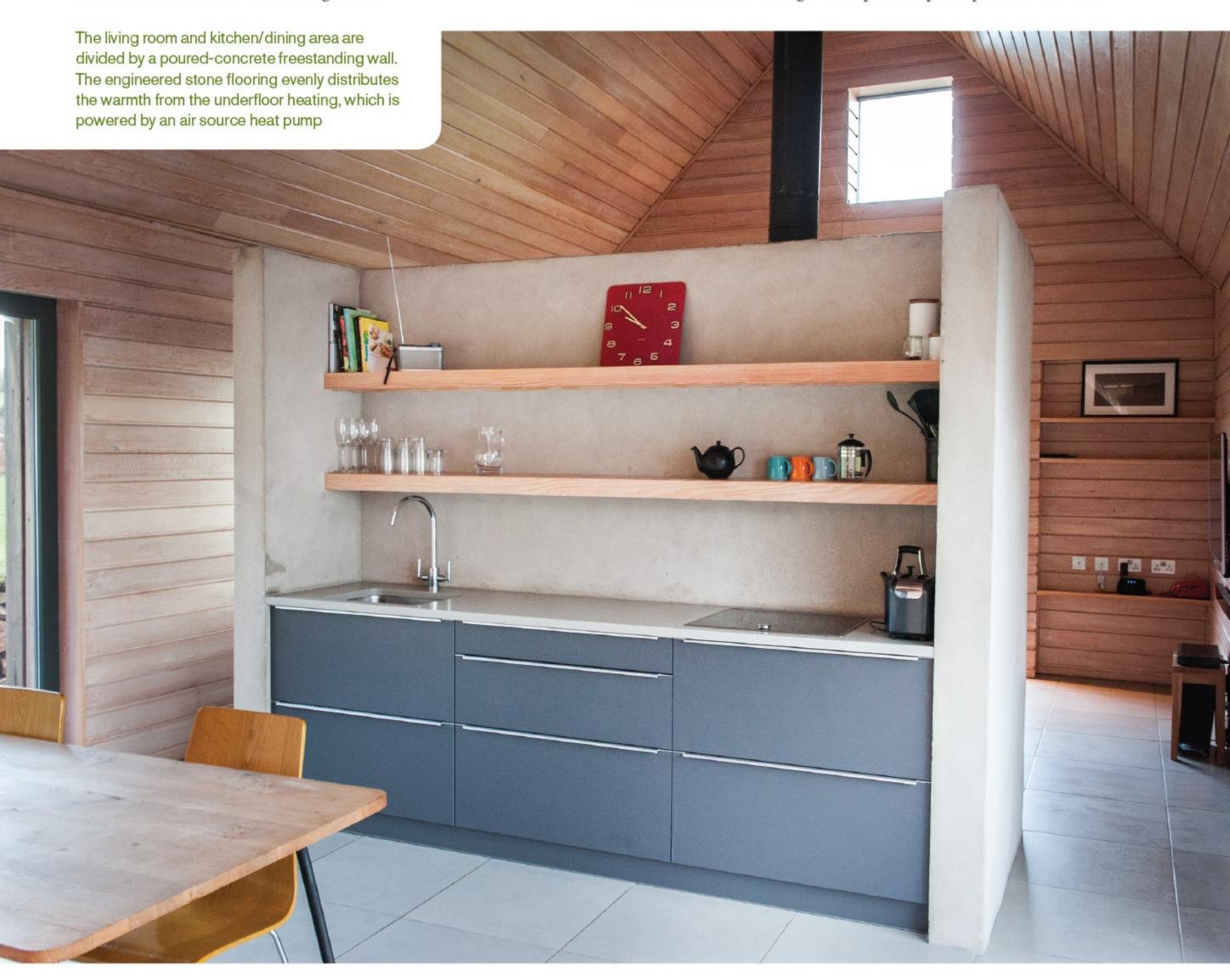
Ideally, Angus wanted to construct a configuration of buildings in keeping with the style of an agricultural steading. Financial constraints were such that it was not possible to achieve that immediately, so he went ahead and commissioned a three-bedroom house with two bathrooms. The property is whitewashed in a similar style to the local vernacular dwellings, but features extensive glazing that maximises the site's amazing views.

Islay Beach Cottage has been a great success — it's rented out for nine months of the year and available for personal use for the remainder. Unfortunately, tragedy struck when Penny died unexpectedly in 2005, and this of course altered building plans. "When I was left on my own with my son Joseph, who was then six years of age, I wanted to have a smaller place as a sort of annex to the main house," says Angus.

A second home

By this time, rental income from the first house was at a good level so the bank was happy to lend more money to facilitate further development. The second property, which has just one bedroom, is timber framed with timber for the cladding and internal lining. It too has extensive glazing — a fact that Angus finds particularly pleasing. "Even when it's raining it's wonderful to look out at the landscape and to feel part of it," he says. "Joseph has always loved it here and when he was younger there was nowhere better in the world than being in a house by the beach on Islay. It was fantastic sitting at the kitchen table watching him play on the sand."

The entire building process was to prove much smoother second time around. Planning permission was granted and the same island based building firm was contracted to execute a second Dualchas design. "I used local tradesmen again as a point of principle and because I





THE MACKINNON FILE

NAME Angus MacKinnon

OCCUPATIONS Journalist

LOCATION Isle of Islay,

Hebrides

TYPE OF BUILD New build

STYLE Contemporary

CONSTRUCTION METHOD

Timber frame

PLOT SIZE 0.8 acres

ANNEX SIZE 30m² (323 ft²)

LAND COST £27,000

BOUGHT 2002

BUILD COST £203,054

COST PER M² £6,768 (£629 per ft²)

TOTAL COST £230,034

BUILDING WORK COMMENCED

November 2009

BUILDING WORK TOOK

44 weeks



was very happy with the standard of the first house," says Angus. "Building can be tricky on an island where there is not necessarily a big pool of skilled labour and specialists are not always available but I knew I could trust them and that we could work together."

Lessons learned from the first project were applied to the second one. "I would advise anyone building on an island to understand that you cannot operate in the same way that you would in somewhere like London," says Angus. "You need to be flexible and find solutions to problems – when things go wrong you need to accept that you or the architect should have been paying closer attention."

For example, during the construction of the main house the builders put down slate floor tiling in every room, instead of putting it in just the hallway and fitting timber flooring elsewhere. In this case, Angus insisted that they change it at their expense. However, when splashback tiling was mistakenly put on the kitchen side of the chimney breast that divides the kitchen from the living room, he

Above: A wood-burning stove provides heat for the whole area due to the fact that the room divider does not go right up to the ceiling



I LEARNED...

CREATING a good rapport with the builders and being willing to reach compromises always pays dividends.

HAVING a professional architect on hand to mediate between client and workforce is really helpful.

THINK ABOUT low energy heating options, they will keep your energy bills low. I find the properties expensive to run, largely because water in the main house is heated by immersion. The outdoor shower and the pumps for the septic tank and water processing also use a lot of electricity. I would consider renewables.

LINING the annex with Douglas fir inside has given it a Scandinavian aesthetic, and makes it very cosy.

paid for it to be removed because he felt that in this case he was responsible for the miscommunication.

Regular visits

One of the issues with builders in remote areas is that they tend to take on a number of jobs at the same time in order to keep business going. During the construction of the annex Angus made regular site visits, which meant flying up from London where he was living at the time. "My neighbours told me that they always knew when I was due to visit because there would be such a flurry of activity on the site," says Angus.







Completion of the first house had originally been delayed by a year, and Angus used that fact to negotiate resolutions to major snagging issues in the annex, such as fixing the engineered stone flooring that had been poorly laid. However, there were other problems on which he was prepared to make concessions, such as with the window sills, which were meant to be flush with the walls. They ended up taking a more conventional form but he didn't insist on correcting them. Angus does not believe in nit picking: "Frankly, I think if you go down that route you are going to cause yourself a lot of stress. It's best not to get worked up about details that you can change at a later date. In any case, it takes quite a while of actually living in a house before you can be sure about what really works and what doesn't."

Expanding on the theme, he says his advice to self builders is that "you should be prepared to accept that it is an improvisational process. You can't lay down a blueprint and expect it to be perfectly implemented. It helps to have an architect who can intervene on your behalf when things aren't right – they can have a professional conversation on your behalf that leaves your relationship with the builders unspoiled."

Island life

Now the annex is complete, Angus is quite delighted with what has been achieved. It is a light, airy and warm property. On reflection, he reckons that there is no need for such a large dining area because he usually has the use of both houses at once and most communal eating takes place in the main house, so more space could have been allocated to the bedroom.

The beautiful island site has a number of buildings on it: the two houses, which are joined by a wooden walkway, a double garage and a shed for water treatment works (the site is too far from the village to access the mains supply, so water has to be pumped into this purpose-built shed, where it is filtered and the PH made less acidic).



48 readers' homes

There is also an outdoor shower, which comes in handy when son Joseph is around. "He just lives in the water when he is here," says Angus. "In summer he swims in the sea every day, sometimes with a wetsuit and sometimes without. He also likes to kayak."

Angus has not ruled out further construction in the future. "I find the whole process really enjoyable. I like the collaboration and creativity involved and I enjoy working on the interior layout and choosing furnishings and fittings," he says. There is a possibility that Angus will eventually go to live on Islay when he retires but meanwhile he is stationed in Paris for work and has a home in London. A new partner is now a part of his life and the couple have a young baby. "I'm looking forward to doing it all over again and seeing my little boy playing in the sand and enjoying all that these houses and this island has to offer," he says.

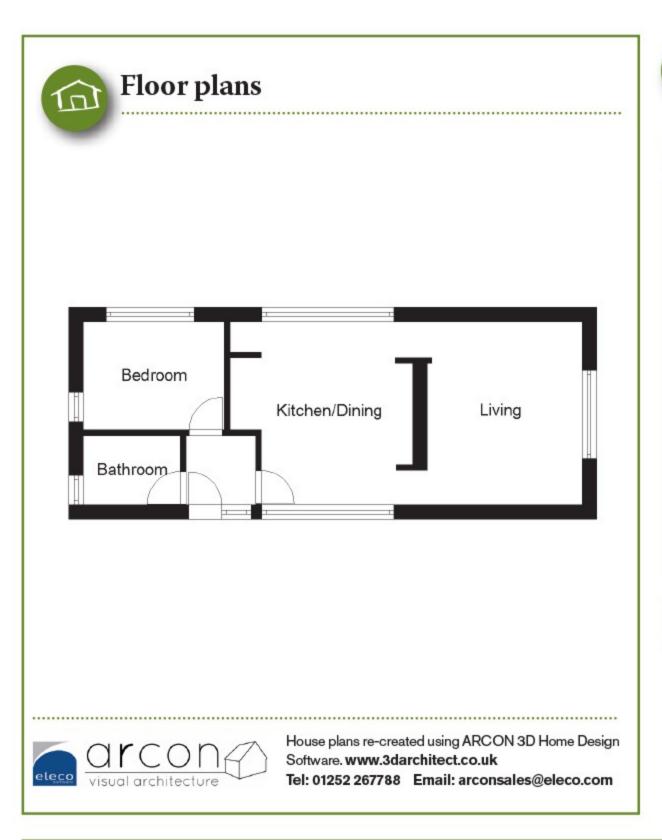
closer look

Outdoor living...

Islay is popular for outdoor activities, and architect Mary Arnold Foster of Dualchas has designed both houses with this in mind. A kayaking enthusiast, Mary takes every opportunity to visit clients by boat where possible, and came up with the idea of integrating storage space for kayaks within the walkway. The kayak store is built into the stone wall along with a timber enclosure to hide the



heat pump and bin store. The main house and the annex are connected by a walkway of larch decking, which is sunk into the site behind a stone faced retaining wall; an outdoor shower, its drain hidden below the decking, is positioned on the wall of an outbuilding.



£

ANNEX BUILD COST BREAKDOWN

Elements	Cost m²	Cost %	Total cost
Groundworks	£441	7%	£13,246
Concrete & building works	£779	12%	£23,384
Joinery (including kitchen fitments)	£2,930	43%	£87,893
Roof works	£926	14%	£27,795
Windows & doors	£420	6%	£12,600
Electrics	£183	3%	£5,500
Plumbing & heating	£550	8%	£16,500
Decorating	£157	2%	£4,700
External works	£381	6%	£11,436

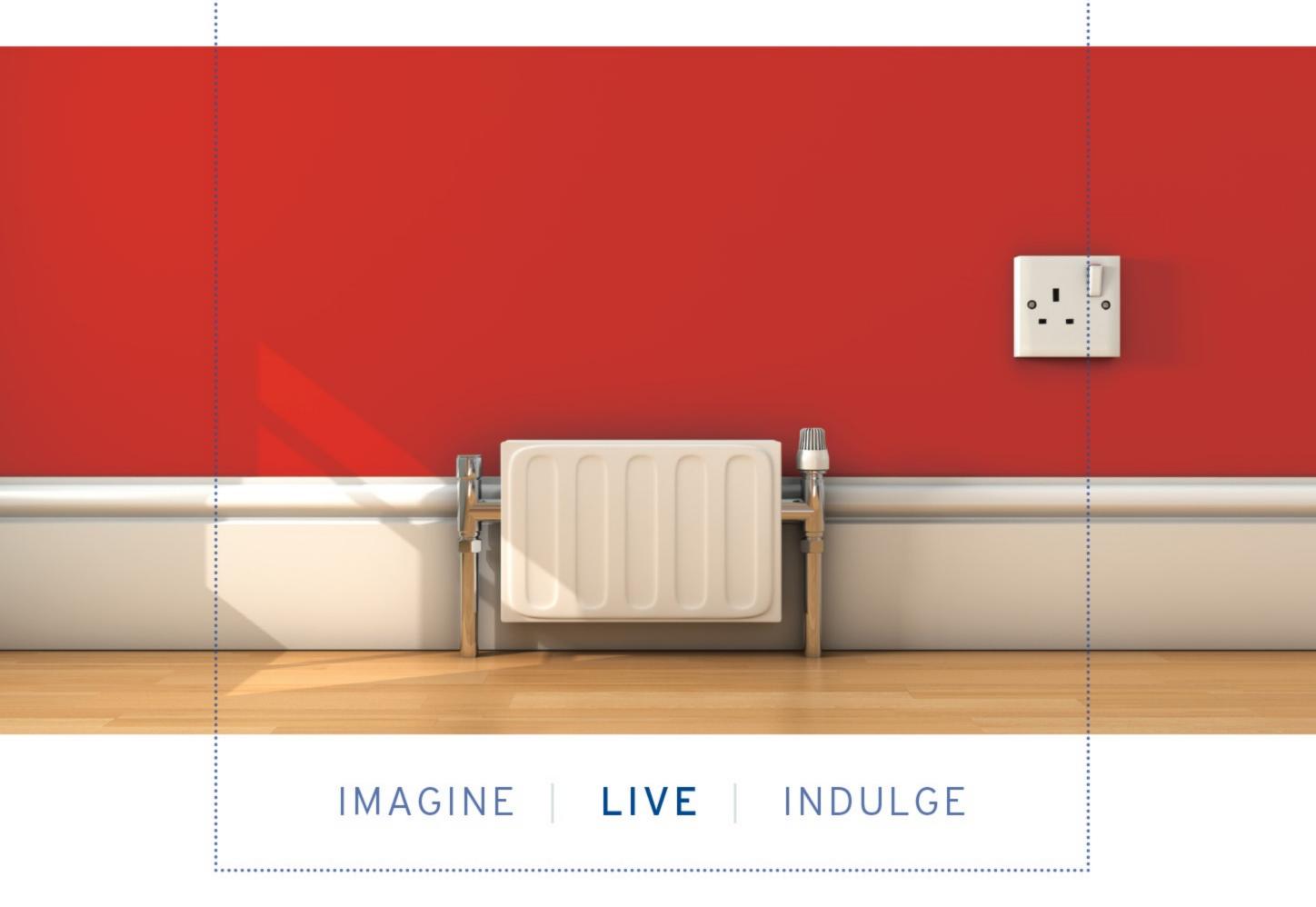
Grand total £203,054

Useful contacts



THE HOLIDAY LET Islay Beach Cottage www.islay-beach-cottage.co.uk ARCHITECT Dualchas 01471 833300 www.dualchas.com BUILDER Colin Logan Building Contractors 01496 810414 www.colinloganbuildingcontractors.co.uk HEATING Fusion Mechanical Services 0141 332 8243 www.fusionmechanical.co.uk KITCHEN Andrew Morren Design and Interiors 07789 052525 www.designandinteriors.co.uk LIGHTING Trilight 0500 454345 www.trilight.co.uk

LIVE IN A HOME THAT COSTS LESS TO RUN



The Kingspan TEK® Building System is a Structural Insulated Panel (SIP) system that offers:

- > Low construction and running costs
- > Outstanding thermal efficiency
- > Quick predictable construction
- > Flexible design

To find out how Kingspan TEK® can save you money during and after your project visit:

www.kingspantek.co.uk/selfbuild or email us at:

Literature@kingspantek.co.uk for your self build guide to TEK.











WOULD YOU LIKE OPEN PLAN LIVING ON DEMAND?

OPEN UP MORE OPTIONS WITH JELD-WEN

Open up your living space with Room Fold internal doors from JELD-WEN and bring a feeling of airiness and light to your rooms. Crafted from high quality American white oak or primed timber, Room Folds glide open at the touch of a finger and have no bottom track, leaving your flooring uninterrupted.

- Available in a variety of widths and opening types
- 2, 3, 4, 5 and 6 door options
- American white oak and primed solid construction doors in a range of traditional and contemporary designs
- Matching single doors to offer a suited look throughout the home

NEW DESIGNS NOW AVAILABLE



Visit **www.jeld-wen.co.uk**call us on **0845 122 2891**or scan this QR code with your smartphone

VIEW PRODUCTS
IN OPERATION
AND FITTING GUIDES
ON OUR WEBSITE





With incredible attention to detail, recently retired couple **Helen and Gordon Dougan** built themselves an eco home that would suit them not just now, but well into their old age

WORDS MAIRI MACDONALD PHOTOS DOUGLAS GIBB

elen and Gordon Dougan decided that after a lifetime of renovating period homes, they would design and build a low-carbon, low-energy and low-maintenance home in which to spend their retirement. Originally they were looking for a house to renovate, but this turned into a fruitless two-year search. "We even contemplated the possibility of doing up a really rundown property, but the one we found required significant amounts of work including insulation and a new roof—

and its beautiful, large single glazed windows needed replacing," says Guy. "It would have been lovely to go ahead with that project but we decided it would have been beyond our tolerance levels and budget."

The couple had renovated (and were living in) a four-bedroom Victorian terraced house in Edinburgh's city centre, and had also self built a holiday cottage on an island off the west coast of Scotland. Their plan was to sell both properties when they retired and build an eco house in a village within easy reach of Edinburgh.



"We've got immense satisfaction from the renovation projects we've done over the years, but nothing could compare to the enjoyment we got from designing and building our beachside holiday home from scratch. We also fell in love with the simplicity of living in a modern house and decided that this was the way forward for our retirement one day," says Helen. Accordingly, five years after building their island retreat, Helen and Gordon sold it, ready to purchase the land for their new project.

A central location

"We only had one stipulation when we were looking for land to build our next house on, but it was a big ask. We wanted a plot of land in the centre of a town or village so that we could easily walk to the shops, library or cafe. It is important to us now, but will be doubly so in our old age," says Helen.

Eventually the couple came across an advert for a plot in a conservation area in the centre of the charming market town of Haddington, 20 minutes east of Edinburgh. The land was the

orchard of the Georgian house next door, but more importantly it came with outline planning permission for a four-bedroom eco house. "The plot could not have been more perfect," says Helen. "Although right in the middle of the town, it had the feel of the countryside with established hedges and trees."

Having purchased the land, the couple got in touch with an architect, Keith Renton – who did the outline planning design for the plot – and put to him their brief. "We had a series of meetings, and at every one the house expanded a metre or so in some direction until the rooms felt right for us. In the end it was slightly larger than our Victorian house – so much for downsizing!" says Gordon.

A low-energy design

The brief was for a light, warm house that would cost as little as possible to maintain and run. As a passive house specialist, Keith's final design was for an airtight, low-energy and low-carbon home, a timber frame filled with wood fibre insulation. Its air-tightness and triple-glazed windows mean that heat from various sources – a



Left: Everything was planned with precision, even down to the positioning of the lights above the dining table. Below: Brightness floods into the house through large feature windows without compromising heat retention, thanks to the triple glazing



woodburning stove, the appliances and inhabitants, plus sunshine from the south-facing windows – is retained. A heat-exchange system pumps stale air out of the house, while warming up incoming air as it comes in. An array of 14 solar panels on the south-facing roof provide the house with electricity, with the potential for the excess to be exported to the National Grid.

"Although it was important to us that low energy meant low bills and low maintenance, it was essential that this occurred without compromising on the style and layout of the build," says Gordon. "We wanted a crisp contemporary look using glass, metal and wood, with a porched area for a Scottish summer and good access to the decking and garden."

THE DOUGAN FILE

NAMES Helen and Gordon Dougan

OCCUPATIONS Retired

LOCATION East Lothian

TYPE OF BUILD New build

STYLE Contemporary passive house

CONSTRUCTION METHOD

Timber frame

PLOT SIZE 714m² (7,685ft²)

HOUSE SIZE 245m² (2,637ft²)

LAND COST £150,000

BOUGHT 2009

BUILD COST £460,000

COST PER M² £1,878 (£174 per ft²)

TOTAL COST £610,000

BUILDING WORK COMMENCED

November 2011

BUILDING WORK TOOK 44 weeks

CURRENT VALUE £650,000

As the Dougans were designing a home that would take them into their old age, the couple thought it sensible to have a wheelchair accessible bedroom and ensuite wetroom downstairs. Until required, however, the master bedroom with ensuite and dressing room would be upstairs along with the spare room, a family bathroom and Gordon's study.

"This was our opportunity to get exactly what we wanted in a house, and we thought long and hard about how we wanted the rooms to flow, what we required for storage, and even where our furniture was going to sit," says Helen. "One of my key requests was for a big, open-plan kitchen with a large table. I also wanted to make sure we had direct access out into the garden and were able to open the bi-fold doors and let the outside in."

Planning for tech

An avid reader, top of Gordon's wish list was to have 36m of shelving to house his library of books and CDs. As a software designer, he also asked for the whole

house to be ethernet wired and for the TV and radio signal to be distributed throughout the main rooms, with all the cables hidden. "I even bought some computer software so I could build a 3D model of the house and see exactly where to put the wiring and lighting and how the layout would work for us," he says.

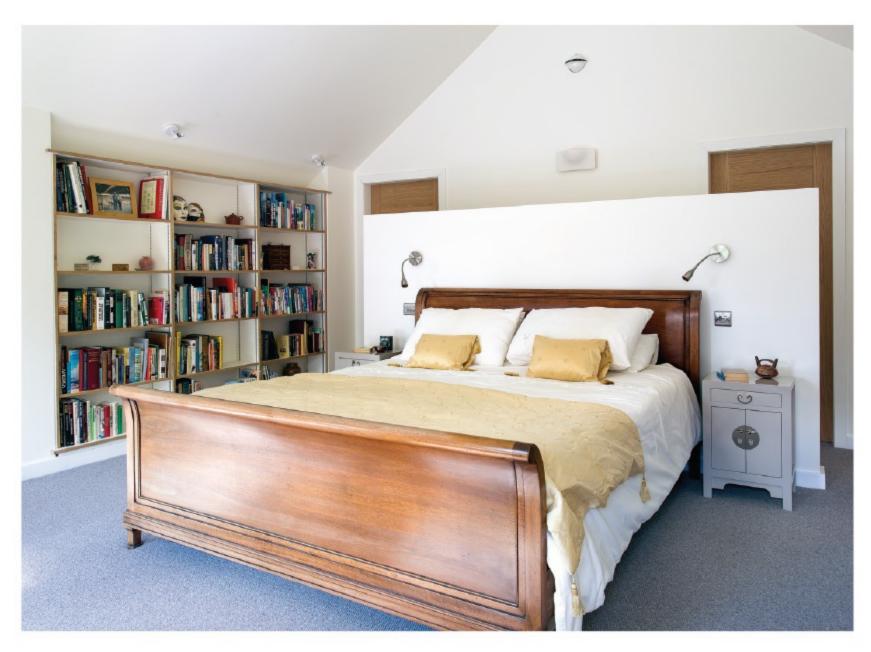
Before work could begin, however, planning permission needed to be sought for the final design of the property. Knowing the restrictions in place for building in a conservation area, Keith's designs conformed from the start. East Lothian council required rendered walls, a slate roof and for the house to be no higher than two storeys. There was also a restriction on where the windows could be placed to avoid them overlooking the neighbouring property.

WE LEARNED...

A LOCAL architect will be very familiar with the preferences of your planning department and will bear these in mind, as well as working to your own brief. This will potentially save you time and money, ensuring your plans get approved first time round.

TAKE advantage of the fact that you're building from scratch to install ethernet cabling throughout. It will ensure that your whole house gets internet coverage, not just the places that wi-fi can reach.

home, devise a layout for when you will become less mobile – for example, you should include a ground-floor guest room (with ensuite) that could in future act as your own bedroom. It makes good sense to create a home for the future.







"Although we had no problems obtaining planning permission and building warrant (the Scottish equivalent of Building Control approval), the whole process took a year," says Gordon. "Meanwhile we put the build contract out to tender. We'd seen Craig's Eco Construction at a building exhibition some months back and asked them to bid, and they were the only company that came to look at the plot and seemed genuinely interested in the contract. Unsurprisingly, they got the job."

Once work started, the main challenge was access. The plot was down a single-track, private lane, which it shared with two other

houses. Everything had to be ferried in and out in small vehicles, including the 300 tonnes of topsoil that needed to be removed for the foundations. This was moved to skips at the end of the lane, effectively blocking it for two days. "Luckily our neighbours were fantastic about the disruption," says Gordon.

Staying close to the site

After months of careful research and planning, the build itself went quickly, taking only 10 months from start to finish. "Although we were very organised, the project would have completed much earlier

had we not faced a wait for the mains water supply to be connected. Our fault was that we underestimated the bureaucracy and should have organised it even further in advance," says Gordon.

With work on the building underway, the couple moved into a rented bungalow around the corner from the plot. "We sold our house in Edinburgh very quickly and having both recently retired, we thought it best to be at hand to make decisions," Helen says.

They chose the design of the kitchen, as well as the tiles, sanitaryware and the positioning of the electrics. "You can never have too many sockets and it was important that they were not going to be covered by furniture," says Gordon. "The same applies to the lighting. It was tricky calculating where the dining table was going to be so the electrician knew the exact positions for the pendant lights."

He marked up the original plans with the positions for all the mains, ethernet, TV sockets, the lights and switches and Keith's associate redrew them detailed plans for the electrician. "They joked that it was the most complex domestic wiring diagram they had ever produced, and I am sure we tried the patience of the electricians somewhat – but it all worked out well in the end," says Gordon.

Everything in its place

With Gordon and Helen paying keen attention to each stage of the build, very little needed changing along the way. Only one built-in wardrobe in the downstairs bedroom had to be moved when it was noticed that a wheelchair would not be able to access the bathroom because of the angle of the door. Otherwise all went closely to plan. "We were in a fortunate position of not being in a rush. We knew exactly what we required and we wanted to get it just right," says Helen.

Taking their time at each stage of the project paid off. It is not by chance that the decking is made of recycled plastic and wood fibre, that the sign for the house is made out of recycled coffee cups, nor that the beautiful up-and-over garage door has a pedestrian entrance and is constructed of Siberian larch whilst the front gates and wooden trim on the house are in Scottish larch. Neither is the colour of the render on the outside of the house, or the colour of the aluminium cladding on the window frames an accident. Everything has been researched, deliberated and agonised over to make this house perfect for Helen and Gordon to enjoy.

"The finishes are what make this house special," says Helen. "We are looking forward to enjoying our retirement in our comfortable, beautiful, warm home. We have no plans to move from here. After years of renovating and building, I am really looking forward to just sitting down and reading a book."



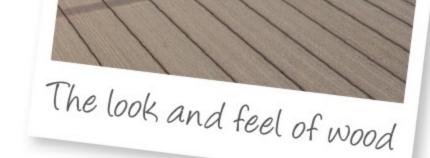


closer look

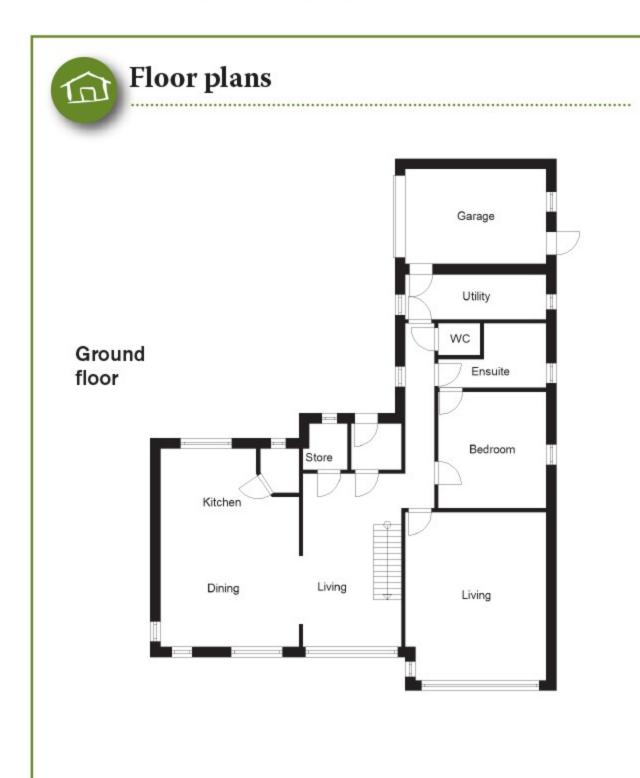
Low-maintenance decking...

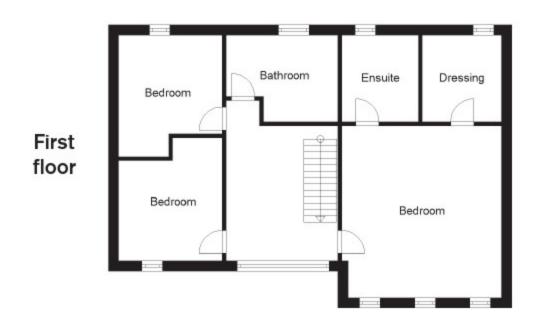


As a retired couple who wanted to be able to continue to live in their home for many years to come, Helen and Gordon put low-maintenance materials high up on their wish-list. For their external decking they chose TimberTech's VertiGrain composite decking, which is made from reclaimed wood fibres held together with resin. It looks and feels like wood but doesn't need the regular treatment required of soft or hardwood decking. It's also gut is line



treatment required of soft or hardwood decking. It's also anti-slip, another useful bonus.







House plans re-created using ARCON 3D Home Design Software. www.3darchitect.co.uk Tel: 01252 267788 Email: arconsales@eleco.com

TOTAL BUILD COST BREAKDOWN

Cost m²	Cost %	Total cost
£82	4%	£19,800
£141	7%	£34,500
£416	22%	£102,000
£268	14%	£65,700
£99	5%	£24,300
£119	6%	£29,100
£104	6%	£25,600
£69	4%	£16,900
£98	5%	£24,000
£72	4%	£17,750
£44	2%	£10,900
£39	3%	£9,650
£45	3%	£11,100
£35	2%	£8,600
£154	8%	£37,700
£91	5%	£22,400
	£82 £141 £416 £268 £99 £119 £104 £69 £98 £72 £44 £39 £45 £35 £35	£82 4% £141 7% £416 22% £268 14% £99 5% £119 6% £104 6% £69 4% £98 5% £72 4% £44 2% £39 3% £45 3% £35 2% £154 8%

Grand total

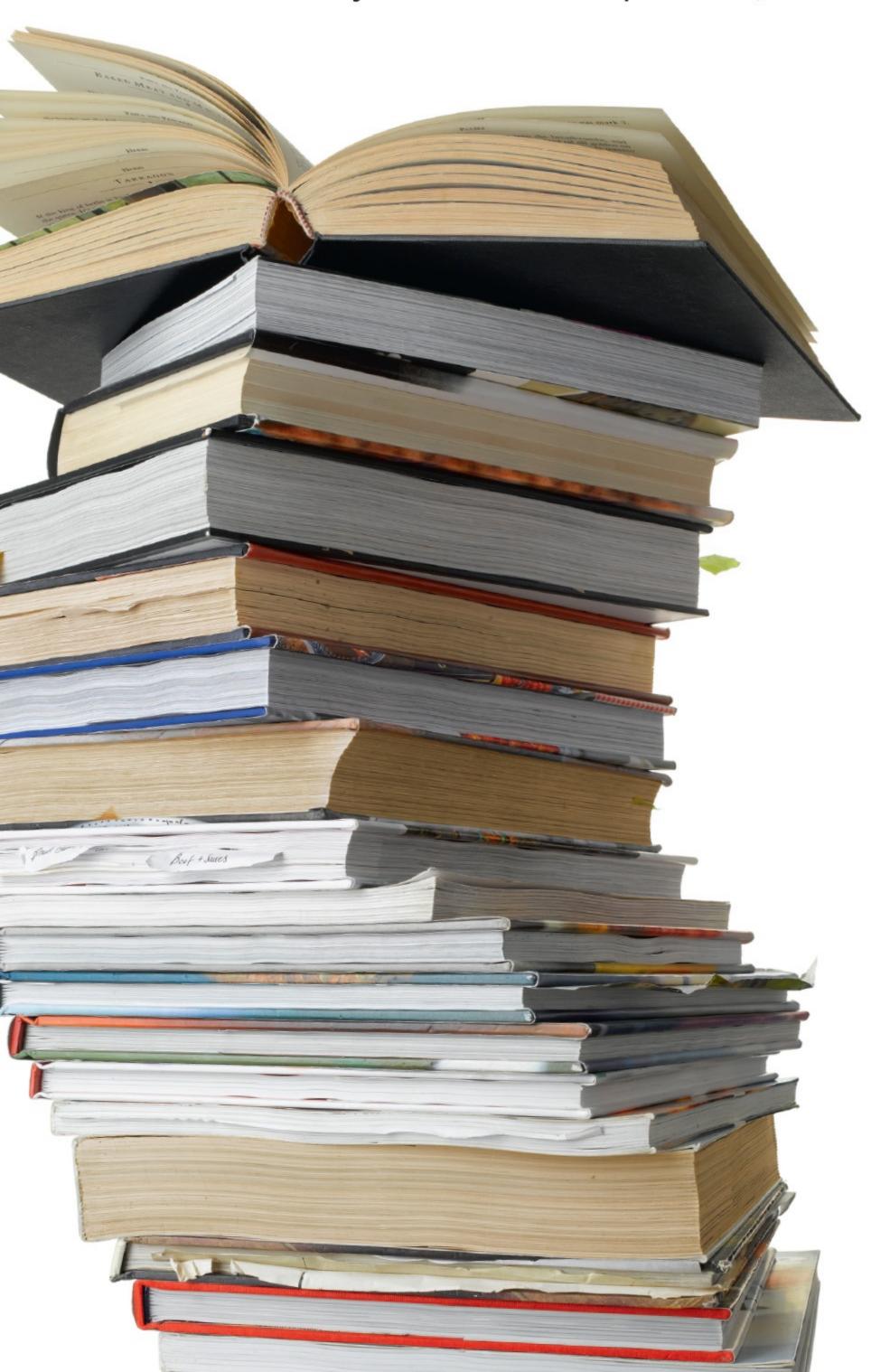
£460,000

Useful contacts



ARCHITECT Keith Renton Architect 01361 810271, www.keithrentonarchitect. co.uk MAIN CONTRACTOR Craig's Eco Construction 01506 841802 www.craigsecoconstruction.co.uk WINDOWS AND DOORS Architectural Doors & Windows 01236 780022 www.adwlimited.co.uk WOOD FIBRE INSULATION Steico www.steico.com RENDER Baumit 0843 557 7666 www. baumit.co.uk OAK FLOORING The Wooden Floor Store 0131 555 1122 www. thewoodenfloorstore.com SOLAR PV SYSTEM Planet Heat 0131 331 4419 www.planetheat.co.uk MVHR SYSTEM Paul Heat Recovery 0845 388 5123 www.paulheatrecovery.co.uk SPRINKLER SYSTEM Fire Prevention 0131 467 4107 www.firepreventionuk.com SANITARYWARE Ideal Standard 01482 346461 www.ideal-standard.co.uk KITCHEN UNITS Howdens www.howdens. com KITCHEN WORKTOP Edinburgh Granite & Marble 0131 448 0075 www.edinburghmarble.com MORSO WOODBURNING STOVE Stove Experience 01501 823006 www.stove-experience.co.uk GARAGE DOOR Silvelox 0800 915 1019 www.silvelox.co.uk BLOCK PAVING/PATHS TRS Landscaping 07551 434406 www.trspaving.co.uk COMPOSITE DECKING Timber Tech 029 2037 1584 www.timbertechuk.co.uk

Lose yourself in a recipe book, not the user manual.



In a busy kitchen, you don't need to be reaching for the user manual. That's why in an increasingly complicated world it's nice to know that turning up the heat is nothing more than a clockwise turn of the oven dial.

There are no digital readouts, no fiddly buttons and certainly no gizmos.

At Rangemaster, we believe our recipe for success is all down to remembering it's the simple things in life that tend to work best.

Call 0844 346 0489 or visit us at rangemaster.co.uk





Built from experience



The 2014 range with

Futuretherm

Technology™



Brilliant Innovation at great **online** prices

Buy Online at **keyliteroofwindows**.com **FREE DELIVERY On All Orders Over £200!**





Stephen Chidgey first converted his Cornish barn a quarter of a century ago, but a major renovation has seen him future proof it with eco technology and timeless design words & PHOTOS ALEX PRATT

hen Stephen Chidgey bought his barn in 1988, it was a derelict wreck with half the roof missing.

Despite the misgivings of friends and family —

"a lot of people thought I was bonkers, as I wasn't a builder," he says — Stephen rolled up his sleeves and converted the property into a home for himself within nine months. Some 25 years later he started to realise that some of the original fabric was beginning to fail, so rather than do a patch-up job he embarked on a major refurbishment that has made the barn fit for the next century.

As Stephen investigated the structural fabric, the problems multiplied. Damp was an issue, the roof was in poor shape and the

windows and doors needed replacing, but worst of all was the property's energy consumption. "I had an old Aga that used oil at a huge rate," he says. "And the oil-fired central heating was drinking fuel and prices had gone through the roof. I worried that when I retired, I wouldn't be able to afford the bills. After a rethink, I decided to tackle everything at once. In a moment of madness I ripped it all out and started again," he says.

Stephen had several key objectives in mind when he began the recent work: making the property sustainable, reducing running costs, making it feel brighter and more spacious, and finally giving it a more contemporary look. His three-bedroom

60 readers' homes









home now feels much more spacious thanks to a new layout with additional windows and vaulted ceilings, and the introduction of a limited palette of simple materials, which include stone, glass and hardwood. The transformation has turned an old granite barn into a comfortable home with the feel of a chic urban pad.

Going it alone

As with the initial conversion, Stephen did much of the work himself, employing sub-contractors as and when he needed them. Although he consulted several architects this time around, he ultimately decided to do the project without one. "It's all about common sense," he says, although that's not to say he wasn't thorough — in fact, he did so much research into renewable technology that he was offered an unconditional place at university to study for an MSc in sustainable building design.

One of the biggest jobs was repairing the roof, which included replacing the rafters and treating the remaining original beams



THE CHIDGEY FILE

NAME Stephen Chidgey

OCCUPATION Strategic business consultant

LOCATION St Columb, Cornwall

TYPE OF BUILD Renovation

STYLE Barn conversion

HOUSE SIZE 150m² (1,615 ft²)

(horn converted in 1000)

(barn converted in 1988)

PROJECT COST £111,265

COST PER M² £742 (£69 per ft²)

BUILDING WORK COMMENCED
November 2011

BUILDING WORK TOOK 35 weeks

CURRENT VALUE £525,000

Left: Oak architraves and skirtings were crafted by the same local firm that made the staircase

for woodworm. The barn was then retiled with Brazilian slate, in part because local Cornish slate was prohibitively expensive but also because Stephen wanted a more sharp-edged contemporary look. He then stripped out the cement mortar from the previous rebuild and repointed the exterior granite walls with lime, which not only gives it a lovely warm, creamy tone but more importantly allows the old building to breathe, ensuring that the damp is unlikely to return.

Bespoke joinery

With the basic structure secured, Stephen commissioned local joiner DJ Newman to supply bespoke exterior doors and windows in iroko hardwood, which were then painted with a water-based sustainable satin gloss from Dulux. All the interior joinery — including the doors, architraves, skirtings and stairs are also bespoke, crafted from a sustainable European oak by the same firm. "The staircase is magnificent, as are all the oak frames and internal oak finishes," says Stephen. The staircase is in the dining room, and this zone suffered with limited natural light. To remedy this Stephen removed a section of ceiling and installed a Velux skylight, one of many in the property, which now floods the area with light.

With a vaulted ceiling on the upper storey and new open spaces, insulation became an even more important part of the equation. "In

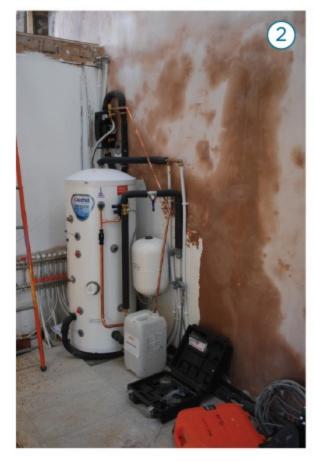
the old barn, all the hot air from the radiators was going into the ceiling or down into the floor," says Stephen. Determined not to lose any warmth this time, Stephen installed Celotex insulation in both the roof and the floors beyond the requirements of current Building Regulations, but decided against treating the solid granite walls, which are 45cm thick. "The walls are a thermal store. When the place is warm, it stays warm," he says.

Effective heating

It is in the heating plan that Stephen's twin concerns for eco technology and good design met. "I hoped to see a reduction in energy usage, but I also wanted to avoid the use of radiators within the property to free up wall space and improve the aesthetics of the interior," he says. The barn is deep in rural Cornwall and therefore does not have mains gas, so the clear choice was a ground source heat pump (GSHP) with underfloor heating. "I studied all sorts of solutions, and I went for both GSHP and solar thermal, as I had the ideal south-facing roof and garden space," says Stephen.

"I went to Kensa for the tech. They are based in Cornwall and are really very helpful; they work with self builders a lot and their online instructional videos are a great resource. Each room is zoned on a thermostat, which can be programmed remotely if required. I love









- 1 Manifolds for the underfloor heating are concealed in the lower part of an old door opening in the living room 2 The tank for the heat pump is fitted
- 3 To compensate for the vaulted ceiling Stephen installed Celotex insulation above Building Regs standards 4 The coils for the pump get laid in the garden





I LEARNED...

START WITH a plan, cost it, schedule it — and then do another that assumes rain!

PLANNING is key. Otherwise you won't have everything on site when you need it.

WHEN WORK is finished each day, clean up. It makes things more efficient, and as the property owner, it helps you to see it all coming together.

LANDSCAPING is very important don't forget to budget for it and factor it into your wider plans.

the gentle radiant heat that the underfloor heating gives off, too. It makes the place feels uniformly warm."

Although Stephen could have run the domestic hot water off the heat pump, he chose to also install solar thermal panels to ensure the pump always works at maximum efficiency by not placing constant high demands upon it. It also means that even on a dull day there is always plenty of hot water in the tank. In winter, an immersion heater switches on at night to ensure the water reaches a suitably high temperature. Both the panels and the heat pump were part paid for with grants from the government's Renewable Heat Incentive.

Combined with a new electric Aga and a log burner, the barn is now wonderfully cosy, but Stephen has further ambitions when it comes to renewable technology. The piping is in place for rainwater harvesting, which will take run-off from the roof for use in the washing machine and loo. "The next stage is a 6kW wind turbine. Then, I'll be pretty self-sufficient," says Stephen.

Functional & timeless

When it came to the interior, Stephen's philosophy was to make the most of the building's raw materials and incorporate them as key elements of the interior. "In terms of design I really believe that less is more," he says, and in testament to this the barn features exposed granite walls and window embrasures with the plaster cut back to reveal the original stonework.

Stephen did spend more than he anticipated on a kitchen from Landmark, but he has no regrets as the painted wooden door fronts and Silestone worktops create a stylish look that works well in the period building. "I wanted the kitchen to be timeless, so it wouldn't need replacing later on" he says.

It is the floors, however, that Stephen is most proud of. The downstairs is laid entirely with porcelain tiling, which is both a highly effective conductor for the underfloor heating and also has the advantage of having no thresholds. "A seamless join makes the





space appear and feel a lot bigger," he says. "The finish looks great and I'm really proud of it."

Despite his experience and attention to detail, not everything ran smoothly, and in Cornwall the one thing that upsets even the best-laid plans is the weather. Stephen experienced "relentless" rain during the construction process, and in hindsight, he believes he should have used scaffolding to put a waterproof shell over the building during repointing. Not doing so led to a wall getting soaked, which then needed time to dry out.

Not giving enough consideration to landscaping was another issue. With the garden largely dug up for the heat pump coils and the rainwater harvesting pipes, Stephen realised he hadn't budgeted enough for the work to restore it. Although he ultimately designed the landscaping and gave it the same attention to detail as the building itself, he thinks there is still at least £900 to spend before the exterior looks as good as it could.

Now the barn is completed, Stephen is justifiably proud of what he has achieved. "I spent a long time planning and costing the refurbishment to be sustainable, and I also wanted more space and light. I've achieved both those things." When he began the work, Stephen expected the barn to become his home, but very sadly, his partner died during the project. For now he lives for part of the year in a converted studio elsewhere on the property, and lets out the barn as a high-spec holiday property. He plans to move in permanently when he retires and reap the rewards of all that future-proofing. "Ultimately, my feeling about the barn now is that you can't beat something that's been made with a bit of love," he says.

closer look

DIY underfloor heating

Stephen's favourite feature is the underfloor heating, but after he was quoted up to £9,000 to supply and install a system, he decided to do it himself. He sent UK Underfloor Heating his specifications and planned heating zones, and in return it supplied

and in return it supplied him with the plans, piping and manifolds for just £2,480. Stephen laid the UFH system in a sand and cement screed on the ground floor, and on a 25mm dry sand mix beneath the oak flooring upstairs. The system is powered by a ground source heat pump (for more on this subject, see page 74).

Useful contacts



THE CORNISH BARN HOLIDAY LET Unique Homestays 01637 881 183 www.uniquehomestays.com SOLAR THERMAL/DOMESTIC HOT WATER TANK Celtic Renewable Energy 01566 781509 www.celticre.co.uk ROOF Cornish Roofing Company 01208 816991 www.cornishroofing.co.uk KITCHEN Landmark 01208 73285 www.landmarkkitchens.co.uk WORKSÜRFACE Silestone 01256 761229 www.silestone.co.uk OAK FLOORING Woodstock 01326 370020 www.wood-stock.co.uk BUILDERS MERCHANT P Glanville 01637 880325 www.pgbm.co.uk UNDERFLOOR HEATING UK Underfloor Heating 0800 232 1501 www.ukunderfloorheating.co.uk GROUND SOURCE HEAT PUMP Kensa Engineering 0845 680 4328 www.kensaheatpumps. com JOINERY **D J Newman Joinery** 01726 890464 www.djnewmanjoinery. co.uk ELECTRICS Davey Electrical Services 01208 815323 BATHROOMS Wadebridge Bathroom Studio 01208 815251 www.wadebridgebathrooms.co.uk TILES Tileworld 01726 65434 www tileworldcomwall.co.uk TOOL HIRE PD Hire 01726 69104 www.pdhire.co.uk DIGGER AND DRIVER Dial a Digger 01637 872937 www.dialadigger.biz INTERNAL DOORS Door Solutions 01326 218796 www.door-solutions.co.uk WOODBURNING STOVE Allen Valley The Fire Place 01 208 852000 www.allenvalleythefireplace.co.uk UTILITY UNITS Howdens www.howdens.com

£

TOTAL BUILD COST BREAKDOWN

Elements	Cost m²	Cost %	Total cost
External works & drainage	£23	3%	£3,500
New roof and insulation, inc. roof light	£132	18%	£19,800
Internal plastering	£20	3%	£3,000
Internal doors	£6	1%	£880
Oak flooring	£21	3%	£3,200
Floor & wall tiles	£10	1%	£1,480
Joinery inc. windows, doors, conservatory and stairs	£60	8%	£9,000
Plumbing	£13	2%	£2,000
Solar thermal panels & hot water tank	£32	4%	£4,750
Ground source heat pump	£40	5%	£6,000
Underfloor heating	£17	3%	£2,480
Kitchen & utility room, inc. Aga	£148	20%	£22,200
Bathrooms	£13	2%	£2,000
Electrics	£55	7%	£8,200
Woodburning stove	£11	2%	£1,675
Tiles	£4	1%	£600
Carpenter	£27	4%	£4,000
Other on-site labour inc. plastering/decorating	£40	5%	£6,000
Digger & driver	£8	1%	£1,200
Plant & tool hire	£5	1%	£800
Misc. building materials	£40	5%	£6,000
Landscaping	£17	3%	£2,500

Grand total £111,265







...And be the envy of all your friends! Made in Sweden, safety and style are built in from the start, but there's also a huge range of options to customise it to your own design scheme. Installations usually take just two days and prices start at around £14,000.00.

Call us to see how an Aritco Home Lift could work for you.

Call 01296 390147 or email jblack@aritco.com





Quality Innovation Evolution









Here at Frame Wise we understand that every project is unique, so have a flexible approach and offer a range of award winning timber frame systems and packages - from supply only services to full supply and construction.

Packages include award winning specified engineered timber frame and panel solutions, as well as roof trusses and we can even incorporate windows, doors and stairs. Your new home deserves nothing less than the quality and excellence we deliver on every energy efficient project.

Contact us to learn more about our services and solutions.

www.framewiseltd.co.uk

t 01544 260125









e enquiries@framewiseltd.co.uk

ENJOY THE SHEER HOMELINESS OF AN OAKWRIGHTS VILLAGE HOME

NOTHING QUITE COMPARES TO A TRADITIONALLY JOINTED AND PEGGED TIMBER FRAME HOME. IT EXUDES A SENSE OF SECURITY, COMFORT, DURABILITY AND SHEER HOMELINESS. THERE IS A TIMELESS ATTRACTION TO TIMBER, AND WHEN YOU COMBINE SUCH A STRUCTURE WITH ALL THE COMFORTS OF A MODERN HOME YOU HAVE SOMETHING THAT IS UNIQUE, BEAUTIFUL AND UNDENIABLY LIFE ENHANCING.

DESIGNING YOUR OWN HOME IS PROBABLY A ONCE IN A LIFETIME EXPERIENCE – FROM THE FIRST MEETING WITH OAKWRIGHTS YOU'LL INSTINCTIVELY KNOW YOU'VE MADE THE 'WRIGHT' DECISION.



OAKWRIGHTS*

T.J. Crump Oakwrights Ltd. The Lakes, Swainshill, Hereford HR4 7PU 01432 353353 enquiries@oakwrights.co.uk www.oakwrights.co.uk

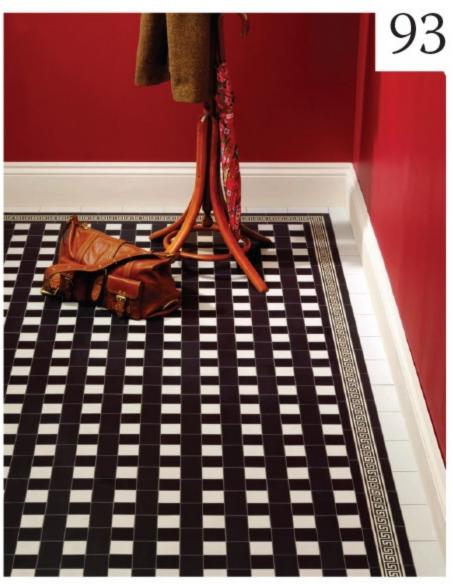




Renovation & building

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT











68 A WELCOMING APPROACH

Whether you want your new home to make a style statement or simply need a quick fix to attract buyers, get instant results with our tips on creating more kerb appeal

74 BUYER'S GUIDE: GROUND SOURCE HEAT PUMPS

Fitting a GSHP could help you save money on your heating bills – but is the technology suited to your project?

9 NATURALLY BUILT HOMES

From straw bale through to hempcrete, Jane Crittenden explores some of the best alternative eco materials available to self builders

4 HOW TO SELF BUILD: CONTRACTS & INSURANCE

Anna-Marie DeSouza looks at the documentation you'll need to have in place to help ensure a successful project

89 CROWN YOUR HOME

Choose the right material for your property's roof with our round-up of the pros and cons of slates, tiles, metal and more

93 FLOOR TILES UNCOVERED

Set the tone for your interior decor with these practical and beautiful floor coverings

PLUS:

BUYER'S GUIDE TO AIR SOURCE HEAT PUMPS ON PAGE 77



Awelcoming approach

Ifeoluwa Adedeji explains how to boost your home's kerb appeal to ensure you maximise its value

renovation project is the perfect opportunity to rectify any niggling issues that you may have inherited when you bought your house. It's also a great time to consider refreshing your home's facade.

You can create a good first impression by making the smallest of improvements to your frontage. However, if you're hoping to add some wow factor or need to replace key elements, planning your next steps carefully will go a long way to ensuring that you get it right.

Here are the tried and tested methods that will help you increase the value of your home and transform it into something highly desirable.

Windows & doors

Your property's openings can either enhance the building's appearance or be its downfall. One simple way to keep windows presentable for buyers is to make sure your curtains and

i blinds are well hung, clean and dust i you should do is to have a good tidy free; you could even place a nice vase of fresh flowers on the sill. This can instantly make your home look more attractive. If you have the budget then upgrading fenestration from single to double glazing will not only give you the opportunity to improve the look of your property, but its energy efficiency, too - which will be shown on the homebuyer's report.

Similarly a sturdy front door speaks volumes in terms of safety and security. Again you should make sure that the style you choose for both of these elements is in keeping with the house design as well as the neighbouring properties.

Tidy up & de-clutter

More often than not you actually have all the elements in place to create a stunning exterior, but they may be hidden behind overflowing bins and flower beds that are being overtaken by weeds. One of the first things that

up and clear out. If you're trying to sell the property, remove the car from the drive before potential buyers arrive so that the space is clear, open and inviting. "Create clean lines. You can easily do this by mowing the lawn and keeping any flower beds neat," says Liam Hancox, regional manager at Spencers.

Repair & maintain

While you're de-cluttering you should take a walk around your property to identify any major as well as minor problem areas. Pay attention to things such as cracked downpipes and gutters, which can cause water damage, plus broken roof tiles that look unsightly. "Often simply refreshing paintwork, washing the front of a rendered property and filling in any cracks will make your home look that much better," says Kate Faulkner, managing director at Propertychecklists.co.uk.

Above: These double Georgian paneled sectional doors in a dark woodgrain finish help maintain the property's grandeur by complementing its style. From £1,250, Hormann

Create boundaries

One of the biggest problems self builders and renovators face is a dwindling budget for the finishes but buyers will often judge a home by its cover. "It's worth working out what you can do in the front garden to make it look inviting," says Kate Faulkner. An effective way to improve the appearance of this space is by establishing clearly defined boundaries. You can do this by installing raised flower beds, laying a paved pathway and illuminating it using recessed uplights, and demarcating the boundary between your home and your neighbour's, with fencing hedges or a brick wall.

If you're rebuilding you may have the opportunity to create something that is more balanced than what had previously existed on the plot.

Above: This 10 Year satin paint in soft cream has given these stunning shutters a new lease of life. £17.99 per 750ml, Sandtex

"Houses that have a bit of space at the front in the form of a garden or a pathway are much more attractive than those that front straight onto a street," says Liam Hancox.

Render & masonry

If you have cracked or damaged masonry it can lead to damp and mould inside your home and you will probably need to repoint your

bricks. Make sure that the replacement mortar is the same as the original both visually and in terms of performance capabilities.

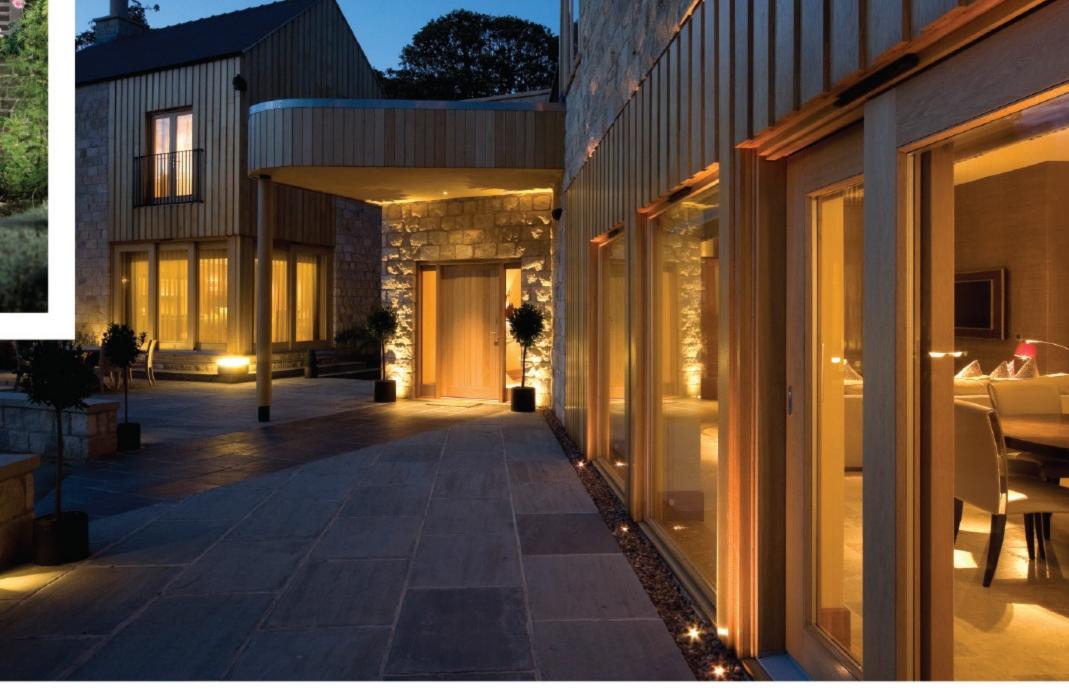
When finishing a property with render do note that a bright hue can be jarring beside a row of subtle and traditional properties. Try to stay neutral when it comes to your home's facade or at least in keeping with the

local vernacular. "The most common reason why prospective buyers cancel viewings is because of the exterior, so try to appeal to the masses by finishing with a neutral shade," says Liam Hancox.

You can, however, add colour using plants and hanging baskets - but make sure that they're manageable so they don't become an eyesore.

Below: Brilliant Lighting worked on this stunning self build to highlight the home's unique features. The lights have enhanced both the property's kerb appeal and its security





CONTACTS Brilliant Lighting 01845 525 664 brilliantlighting.co.uk Kloeber 01487 740044 kloeber.co.uk Hormann 01530 513000 hormann.co.uk Potton 01767 676400 potton.co.uk Propertychecklist 01652 641722 propertychecklist.co.uk Sandtex 0845 618 3004 sandtex.co.uk Spencers 0116 253 8711 spencers.co.uk





TRADITIONAL VALUES MODERN APPLICATIONS

York Handmade Brick are an award winning UK based manufacturer of genuine handmade clay bricks, pavers, special shapes and terracotta floor tiles, perfect for recreating building tradition in a modern environment.

T: 01347 838 881

E: sales@yorkhandmade.co.uk

W: www.yorkhandmade.co.uk



Up front

Want your home to give a off great first impression? Check out our pick of the best products











1 Make a stylish statement with this dome top front gate. Gawsworth gate, £54, jewsontools.co.uk 2 Give a traditional home a fitting finish with these classic double garage doors. Ribbed Sectional in White Silkgrain, £910, hormann.co.uk 3 Replace old windows with modern units and your home will be more energy efficient, and will look better, too. Sliding sash windows, £230, quickslide.co.uk 4 A traditional-style stone property deserves a complementary opening. This oak faced door creates a very welcoming entrance and achieves U-values of 1.5 W/m²K. Therm-L Mosel, £610.80, jbkind. com 5 Enhance a contemporary style home and give it a sleek finish with render. Weber.pral M monocouche render in pearl grey, £POA, netweber.co.uk

72 renovation & building













6 Cover your roof with classic and appealing materials such as these clay tiles. Rivius Riven tile, £12.60 per m², sandtoft.com **7** If you're self building your dream property and want the wow factor then take note of this 210m² family home. It features stock bricks, engineered windows and has been topped off with clay roof tiles. The project cost £325,000, designandmaterials.uk.com **8** Ensure that your windows suit the style of your home. These hidden spring sash windows with single vertical astragal bars finished in pebble grey would suit a period property perfectly. Sash windows, £4,000, dalewindows.co.uk **9** Finish off a contemporary build with a chic and modern opening. Parma Pivot, from £4,200, urbanfront.co.uk **10** This attractive self build uses a mixture of carefully-selected bricks to complement the traditional local vernacular. Old clamp blend, from £800 per 1,000, yorkhandmade. co.uk **11** Make sure that your driveway is designed to last by using durable materials. Resin bound paving, from £50 per m², sureset.co.uk

Experts at Hörmann

advise self builders on what to consider when selecting a garage door from the vast ranges available











When it comes to self builds the choice of entrance and garage doors is often left towards the end of the project. However, understanding the latest developments and options available can add value, security and insulation within budget.

Whether your project is a new build, an extension or a refurbishment, practical considerations can help determine the choices available too. These include the space available, both inside and outside the garage, and significantly how you intend to use a garage. For example will it be a workroom, an extended garden shed or even where you keep your car.

When style is everything you may opt for a truly bespoke door, or select an open-for-infill frame that can be clad in the material and finish of your choice. Hörmann offers both sectional and upand-over frames specifically for this purpose. There are practical considerations with the weight and thickness of the material chosen, but essentially a made to measure one-off design can be created with a proven, reliable mechanism.

If good insulation and security are a high priority, for integral garages for instance, a sectional garage door is the best option. This style of door rises onto tracks at ceiling height, in sections, and is usually automated, though some makes can also be operated easily by hand. Better quality doors have seals on all four sides adding to the insulating properties of this type of door.

Similar benefits are now available with side sliding sectional doors, which are suitable for use where headroom is limited or as a style statement. Modern versions offer smooth quiet travel, can be automated, and make simple pedestrian access easy without the need to fully open the door.

Should interior space be limited then a roller door may present the best compromise. As with the sectional doors, they can be opened even if a car is parked right up to them; however, the interior space required is limited to accommodating the roller barrel. Note that for most garage doors a casing to cover the roller barrel is required so ensure it is quoted for when you are looking at the options available. Another point to note is the ease of operation in the event of a power-cut. Some doors can be operated simply by hand, while others require a difficult to use crank handle to slowly raise the door.

Traditional up-and-over style doors are the least expensive option; however, the levels of security and insulation are significantly lower than with sectional garage doors. These come in two types, the canopy and the retractable. The canopy door is so called since approximately one third of the door sticks out from the garage once opened creating a canopy. The retractable usually costs slightly more but slides completely into the garage on tracks suspended from the ceiling. The latter option is more reliable in the long run but you need to consider how the tracks will restrict access to internal doors and power supplies etc. Both of these doors need space in front to allow the door to swing out to open. For an external garage, used to simply house a car, these are a good option and can also be automated.

Our advice is to take your time and seek expert advice. Write

down what you need your garage door to do, (consider security, insulation, ease of use etc) and ask a specialist to explain the choices that they can offer. If possible go and have a look at some doors in a showroom, you could be surprised at what you can afford and how much of a difference it can make to your home.



www.hormann.co.uk 01530 516888

BUYER'S GUIDE:

Ground source heat pumps

If you want to install a renewable heating system that's tried and tested, this piece of kit may be ideal for your needs. But what is it, and how does it work? Anna-Marie DeSouza explains the key details

ne of the big decisions when you are self building is how to heat your home. While many people opt for conventional highefficiency boilers, there are a whole host of other options available. If you want something that's low maintenance and eco friendly, then installing a ground source heat pump (GSHP) may be the ideal solution. What's more, this renewable technology will help to ensure that your utility bills are minimal and help to boost your home's overall energy efficiency.

Heat pump technology is well established in Europe and continues to increase in popularity in the UK, too. "These products have been in existence for many, many years and can certainly be classed as a proven technology," says Paul Watson from Ice Energy. "In Sweden, for example, heat pumps have been used extensively to provide warmth and hot water for domestic properties with great success for more than four decades."

So, what exactly are ground source heat pumps and how do they work? In this article I'm taking a look at this low energy technology to help you decide whether fitting one of these units will suit your home and lifestyle.

The basics

GSHPs work by taking warmth from the ground and converting it into usable energy for domestic heating requirements. All GSHPs have two parts: a circuit of underground pipework (the collector) outside the house and a heat pump unit (the extractor) usually located indoors.

The pump itself consists of four basic components – an evaporator, a compressor, a condenser and an expansion valve. Together, they power a compression cycle similar to the technology you'd find in a domestic fridge, but working in reverse to extract low grade heat and enhance it to an output temperature of around 45°C, which can then be used for central or domestic water heating.

In the UK, the temperature of the top 15m of the earth's surface maintains a relatively constant 12°C throughout the year. This is due to the ground's large thermal mass, which retains the sun's warmth. To collect this heat, special pipework – the ground loop – is buried in the earth (see box 'collector options' below). The loop is filled with an antifreeze and water mix that circulates through its length while absorbing energy from the earth, which is then passed through to the compressor. This raises the liquid to a higher temperature so it can be used to heat water for circuits in the house. The cooled fluid passes back into the ground, where it repeats the process in a continuous cycle.

The length of pipe required will vary from system to system and will also depend on the design (and size) of your house, how much heat it requires and the site's geology. The groundworks required to dig the trench/borehole can often be expensive and disruptive, which is why the technology tends to be better suited to a newbuild where the excavation costs can be worked into the budget for the rest of the preliminaries. A typical GSHP installation will cost around £8,000-£12,000, though it will vary depending on the nature of your property.

COLLECTOR OPTIONS

As the collector loop needs to be laid in the ground, you'll need enough outside space to accommodate it. There are three principal types of system – horizontal, compact and vertical. Which works best for you will depend on the nature of your project and how much garden amenity you have.

Horizontal collectors come in a variety of forms, but a common example is to bury 40mm plastic pipe in trenches at a depth of up to 1m. The length of the pipe is determined by how much energy you need to extract from the ground; typically, around 15W can be collected per metre of pipe installed. A 9kW heat pump would therefore require around 600mm of buried loop.

Compact collectors are a good option where garden space is limited. They can be buried at an angle or

stacked in rows. The collector usually comes in the form of a plastic panel, around 1.5m wide and 2m deep, and the top panel must be covered to a depth of at least 1m. As a rule of thumb, around three panels are needed per kW of heat pump output.

Where space is at a real premium, or if you want to avoid disturbing a well established garden, a borehole collector (vertical) may be the most suitable option. This type of setup is capable of generating a higher yield in watts per metre of pipe than a more conventional horizontal arrangement, so the length of the collector can be reduced. However, you'll need to hire special plant and labour to create the hole, so expect to pay more for the initial installation.

IN FOCUS







What: Detached new build property in Lincolnshire Products: IVT Greenline HT+ E7 ground source heat pump from Ice Energy Who: Dave & Julie Shakespeare

When the Shakespeares embarked on their self build project they discovered there was no mains gas in the village, so started looking at renewable options and decided upon a ground source heat pump. "The ground loop is buried in two 50m trenches in our garden, which has a very high water table," says Dave. "The pipes are probably beneath the water

table for most of the heating season." The couple have specified under floor heating on the ground floor plus oversized radiators via a manifold and individual room thermostats upstairs. "We simply turn our heat pump on in the Autumn, leave it and enjoy cosy warmth 24 hours a day," says Dave. "The whole house is running on electric and during the coldest months of the year it costs around £130 a month in total. Running the heat pump is costing us less than we paid in our previous property, which was heated using oil and cost around £300 per month."

Performance

Although heat pumps are considered a renewable technology, they still need some electricity to run. "In order to access this free environmental supply, an energy input is required," says Heather Oliver from Nu-Heat. "In a well insulated property, every single kW of electricity used to power the pump can provide up to 3kW of free energy."

This ratio is know as the Coefficient of Performance (COP) and is the unit by which a heat pump's efficiency is measured. The less electricity required per unit of output, the higher the COP and the more efficient the pump - just as you would expect a boiler to have an efficiency rating, so too do heat pumps. For example, a unit that produces 4kWh of heat for every 1kWh of electrical energy it consumes has a COP of 4.

It's easiest to ensure a heat pump works at maximum efficiency on a new build project that's been properly insulated, but it is possible to install a GSHP into an older property as part of a major renovation scheme. "We recommend that the house is brought up to at least the minimum Building Regulations Part L (energy efficiency) standards," says Heather. "Heat loss needs to be addressed so that the unit maintains its COP and operates efficiently. In a poorly insulated home, the pump would have to work harder, so it would be less efficient and more costly to run."

Heat emitters

Because the warmth produced by a pump is at a lower temperature than you'd get from a conventional boiler system, you have to match it with a suitable emitter. Underfloor heating is normally recommended, due to the lower flow temperature the system requires - around 45°C, rather than up to 75°C with conventional radiators. However, if you prefer a traditional radiator setup it's now fairly easy to source products that have been specifically designed and sized to work well with low flow temperatures.

Be aware that heat pumps operate most effectively when they are used to maintain a steady room temperature (rather than trying to warm up a cold space). Therefore, over the winter months it may be necessary to run the pump all day in order to get the most cost efficient performance.

Installers

It's best practice to use a professional who's registered with the Microgeneration Certification Scheme (MCS) to fit your ground source heat pump. This government backed quality assurance scheme was rolled out to ensure that consumers can find trusted and knowledgeable professionals. "An MCS installer will have undertaken specific heat pump installation training so you'll have the peace of mind that the system will be fitted correctly," says Ice Energy's Paul Watson. "Then there's the Renewable Heat Incentive (RHI) - a government cashback scheme - and unless both the system you select and the installer that you use is MCS registered, you wont be eligible to receive the RHI payments. This means missing out on index-linked payments that will be issued quarterly and are designed to help recoup the installation costs."

Accredited professionals can be found online via the MCS register at www.microgenerationcertification.org/ consumers/installer-search

LINKED UP

If you want to make your property run even more efficiently, why not link your GSHP with another renewable technology? Heat pumps are a prime candidate for working in tandem with other renewables, particularly solar power. "Solar PV systems can go a long way towards providing the electricity required to power the heat pump," says Paul Watson.

Solar thermal, meanwhile, is a great choice for topping up your hot water and therefore maintaining the efficiency of your pump. "Solar thermal partners really well with GSHPs as it can take up to 60% of the domestic hot water demand away from the pump," says Heather Oliver.

CONTACTS

Baxi 0843 636 4722 www.baxi.co.uk Dimplex 0844 879 3588 www.dimplex.co.uk Ice Energy 0808 145 2340 www.iceenergy.co.uk Kensa 01872 862140 www.kensaheatpumps.com NIBE 0845 095 1200 www. nibe.co.uk Nu Heat 0800 731 1976 www.nu-heat.co.uk Worcester, Bosch Group 0844 892 3000 www.worcester-bosch.co.uk

Underfloor heating for your renovation or extension?



Think thin and powerful with NEW

LoPromMax

Ultimate underfloor heating for renovations

LoPro™Max, part of the award-winning LoPro™ family, is our latest low profile warm water underfloor heating solution. At just 22mm in height and offering the highest heat output on the market, LoPro™Max is easy to install over your existing floors. With running costs less than a third of electric UFH and warming up as quickly as a conventional radiator, LoPro™Max is a must for your renovation or extension project.









BUYER'S AT SOUICE neat

pumps

Easy to install and offering good returns with eco credentials, ASHPs are sensible heating solution for a wide variety of projects, says Duncan Hayes

f you're looking for a sustainable heating solution, air source heat pump (ASHP) technology is a good bet. It effectively creates a scenario where more useable heat is produced in comparison to the energy it takes to run. "Air, even if it's cold, is a constant and inexhaustible source of energy. Air source heat pumps convert energy from the outside air into heat, even in temperatures as low as -20°C," says Martyn Bridges, director of marketing and technical support at Worcester, Bosch Group.

The appeal of an ASHP over a ground source version is that they're far less disruptive to install, thanks to the fact they only require a relatively small space for the equipment. So they're equally at home in a new build or retrofit situation. They need a space with good, but not excessive, airflow, usually at the side or rear of a house. In addition, for areas without mains gas ASHPs provide an effective renewable alternative to costly electric or oil heating solutions. If you're in England or Scotland, as long as your



home isn't listed and provided the installation meets specific criteria (see www.planningportal.gov.uk), the installation of an ASHP should be considered permitted development, and so won't need planning permission.

In order for ASHPs to deliver savings for your project it's important that you're aware of the limitations of the technology. To work efficiently ASHPs must be carefully specified to suit the situation, as no two installations are the same. You need to know the differences between the systems on offer, and also factor compatibility into the design stage of your project.

What are the options?

There are two types of ASHP; air-to-water and air-to-air. An air-to-water system can be used to warm water for heating (when combined with wet systems, such as radiators or underfloor heating) and even for domestic hot water, which can then be stored in a tank. Air-to-air

systems literally only heat air, which they circulate by means of a fan, and cannot be used to warm water for radiators or UFH.

Air-to-water systems are a great way to deliver low-cost, energy saving heating and hot water all year round. You'll need an outdoor unit, containing the compressor and pump, and a buffer tank that acts as

a thermal store. If you also want hot water you'll need a separate cylinder for this. "This system can operate up to 65°C flow temperature," says Martin, "but is most efficient when operating on lower temperature heating systems, typically around 35-45°C." This means that when it comes to retrofitting you should try to avoid just hooking up the pump to an existing radiator system that was designed for a high-temperature boiler. Instead, these pumps are a perfect match for underfloor heating or specially oversized radiators that can cope with the lower flow temperature.

Air-to-air systems use a fixed-fan to warm your home, so there's no need to hook them up to an existing wet system. These pumps have the advantage that they are cheaper to fit than the air-to-water systems, and conveniently many can be operated in reverse to provide cooling in the summer. It's important to note that most airto-air systems only support a single emitter (fan), which means you'll need one external pump and one internal fan per room. This does, however make them an excellent choice for an open-plan space, extension or loft conversion where you don't want to burden a conventional boiler-run system with extra load. There is a maximum size of room that one pump can heat - between 6-7m long where the heat loss is below 5 kW. Retrofitting for a single room is also relatively easy as the compressor doesn't require a massive space, just a suitable outside wall.

Performance

The efficiency of a pump is rated according to its COP (see the 'Ground source heat pump' feature on page 74 for more about this). This effectively tells you how much heat the unit is producing compared to the cost/amount of electricity it is consuming, but this efficiency will vary depending on seasonal conditions. As an average figure, most ASHPs operate at COP of between 2-3 when averaged out over the year, which means they are between 200-300% efficient.

CONTACTS

Ecodan 01707 282880 heating.mitsubishielectric. co.uk Total Home Environment 0345 260

0123 www.totalhome.co.uk Vaillant 0845 602 0262 www.vaillant.co.uk Worcester, Bosch Group 0844 892 3000 www.worcester-bosch.co.uk

Above: This Worcester, Bosch Group Greensource air-to-air heat pump features a discreet indoor circulator. It can provide heating and cooling for the home and also features advanced air purification technology, which is beneficial to allergy sufferers. Left: This Ecodan air-to-water pump uses the latest inverter-driven technology to upgrade renewable energy from the outside air. For every 1kW of electricity consumed by the unit, it can deliver an average of 3.2 kW of energy to the home

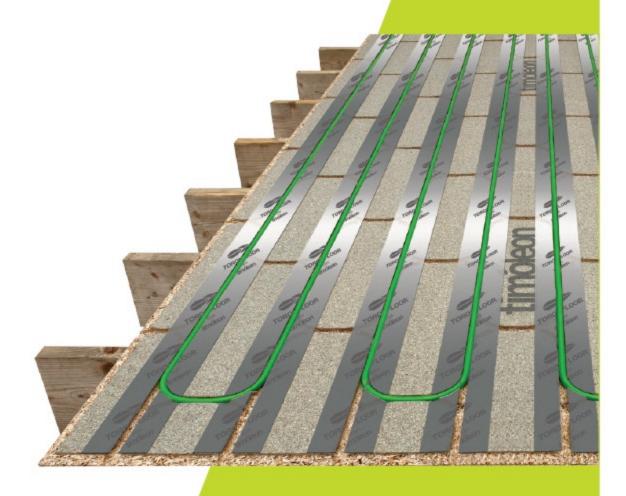
TORON2

The new improved underfloor heating panel from Timóleon.

- Structural floor and heating panel in one
- Pre-bonded aluminium diffuser
- Self-Adhesive covering layer
- Excellent heat output
- Independently tested
- · Easy to install
- Suitable with renewable technologies



Part of the Hydronik range of underfloor heating products from Timóleon.



The next generation of underfloor heating

Underfloor Heating Range

from

timóleon

01392 36 36 05 www.hydronik.co.uk



The new NIBE F2040 air/water heat pump range offers the homeowner a 'World of Possibilities' with pre-selected packs designed for use in new build and retro-fit properties. The new packs include market-leading air/water heat pumps, pre-packaged hot water units, hot water cylinders and solar thermal combinations, all controlled by an advanced intelligent controller with easy to use colour display and featuring NIBE Uplink. Read more about our air/water heat pumps at www.nibe.co.uk

AIR/WATER HEAT PUMP

NIBE™ F2040 | OUTDOOR MODULE

- •New air/water heat pump for residential & commercial buildings
- Produced in three sizes 8kW, 12kW & 16 kW
- Both heating & cooling functions
- Compact design
- •Inverter Controlled compressor
- Built in condensate water tray

NIBE™ VVM 320 I INDOOR MODULE

- An advanced new generation controller with easy to use controls and colour
- Compatible with NIBE Uplink to connect to the internet for complete control anywhere
- Self-regulating, speed controlled circulation pump
- NIBE F2040 together with VVM 320 gives you a complete solution for heating/cooling and domestic hot water

NIBE Energy Systems Ltd - Tel 0845 095 1200 - www.nibe.co.uk





Made-to-order timber windows and doors







Fenestration designed to suit your style

The ultimate collection of timber windows and doors designed for heritage conservation and contemporary style projects. Stylish and elegant, these high performance products offer superb thermal efficiency and are available throughout the UK.

Sash windows + Casements + Doors Tilt turn + Bi-folding doors + Sliding doors

Call 020 8616 2187 www.lomaxwood.co.uk



he environmental impact of using sustainable building materials to construct a house is very low. Straw, earth, hemp and logs are often available locally so have fewer miles to travel, and they don't need processing in a factory like manmade alternatives. Building with natural products often appeals to the self builder who wants a true hands-on experience, but it's just as easy to find a company that can do the work for you. Here's what you need to know about building the natural way.

Straw, earth, hemp and logs may be lesser-known alternatives to standard building materials, but they are gaining traction among eco-conscious self builders who are attracted by their sustainability and the chance to really get hands on, says Jane Crittenden

homes

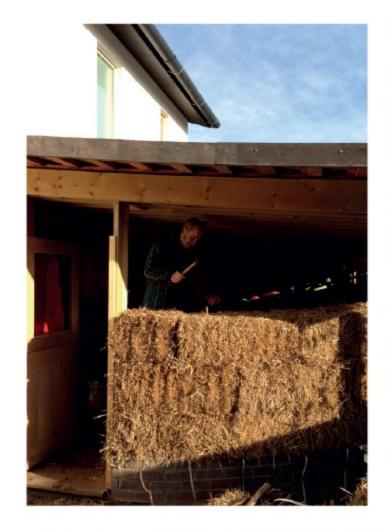
Straw bale

"The UK produces 4m tonnes of surplus straw every year - enough to build 250,000 homes - so it seems logical to use a natural material that mostly goes to waste," says Brian Waite, an engineer who designed and built his own straw bale house in 1999 (www.strawbalehouse.co.uk).

Straw bales comprise of wheat, barley and oat and come in different lengths and densities, but they must be made with clean, dry straw and stored in a dry place until they are used. Despite common beliefs, there's no fire risk because the straw is packed so tightly that there's insufficient oxygen to support combustion. The lack of voids and the inhospitable finish – lime or clay render – also means there's no risk from vermin either.

There are two ways to build with straw: the bales can either be used as the structural building blocks of a home, or as the infill of a timber frame that supports the house. Brian recommends the latter. "Straw is an organic material that will lose some of its structural integrity over time, which can transfer the roof loads on to the plaster/render - personally I would only use straw as an infill," he advises. ModCell has taken the infill concept a step further by

80 renovation & building







Top left: Husband-and-wife architects Steven Harris and Catherine Roberts of CRSH Architects tried out straw bale construction by building their garage-workshop with a curved wall under a large projecting roof. Top right: The garage has the first of its lime render coats and will eventually be painted. Above: The finished structure

devising a prefabricated straw bale panel system. The walling elements can be supplied lime rendered and some versions have a U-value as low as 0.11 W/m²K.

Once the structure of a straw bale house is in place, a breathable lime or clay plaster/render must be applied to the inside and outside of walls to help control humidity and indoor air quality, as well as further insulate the building. Carol Atkinson, from Home Grown Home, says the roof should be designed to overhang the walls by at least 500mm for weather protection. Architects Steven Harris and Catherine Roberts, who own CRSH Architects, built their own straw bale garage-workshop. "We constructed a 450mm thick wall, to match the width of the straw bales, starting at 300mm above ground level with a 700mm roof overhang," says Steven. "But you have to know this is how you're building from the start, because bales are imprecise and lumpy and the design needs to take that into account."

Prices for building the shell of a straw bale house aren't dissimilar to that of a block wall - unless you save money by doing the work yourself. In this case you'll need to source straw bales from a farmer (Steven paid £3 each) and enrol on a straw bale building course like those offered by the Brighton Permaculture Trust, Home Grown Home and Straw Works, run by Barbara Jones, author of Building with Straw Bales (available through Amazon).

The alternative is to go to a specialist company like Yorkshire-based Sam Atkinson Carpentry (who also builds in hemp and timber) or Brian Waite at Strawbale House, where you can buy a straw bale home building kit that replicates his own property.

CONTACTS

Brian Waite 01900 823318 www. strawbalehouse.co.uk Brighton Permaculture Trust 07746 185927 www.brightonpermaculture.org.uk CRSH Architects 01873 853238 www.crsharchitects.co.uk Home Grown Home 01430 410662 www.homegrownhome.co.uk ModCell 0117 955 6731 www.modcell.com Sam Atkinson Carpentry 07872 012901 www.sacarpentry.co.uk Straw Works www.strawworks.co.uk

Earth building



An original 'clay lump' house, extended with cob and straw bale, with a cob staircase and fireplace inside. The project, carried out by Edwards & Eve Cob Building, doubled the size of the cottage for just £10,000

Using earth as a building material is a resourceful way of making use of excavated subsoil from a site. When it's formed as a wall, earth has good acoustics and high thermal mass, which acts like a thermal store, absorbing and storing the heat from the sun and then slowly releasing the warmth into a home as the air temperature cools.

There are three traditional building techniques: cob, rammed earth and earth bricks or adobe ('clay lump'). "Cob is the most common method employed in the UK," says Dr Paul Jaquin, an engineer and the director of Earth Building UK. "There are a couple of modern rammed earth houses and forays into building with unfired earth bricks, but they haven't ever really taken off here."

The beauty of cob is in its flexibility. As there's no need for bricks and straight edges, it can be moulded and sculpted - which makes it ideal for a house with curves. You can also use cob inside to create fireplaces, stairs, floors and shelves burrowed into the walls.

There can be issues with how earth homes meet Building Regulations for insulation and energy conservation, so it might be worth using an independent building inspector with this knowledge to help smooth the way with building control. For example, Kate Edwards, from Edwards & Eve Cob Building, can offer consultation and advice on Building Regulations. "One of the greatest benefits is that cob is free if it's dug from your site," says Kate's colleague, Charlotte

Eve. "The subsoil from the foundation trench can be used and it's easily made in large quantities by using a digger head to crush the particles together in a pit."

Cob is ideally a 75% sand and 25% clay mix; straw is added to improve tensile strength, provide some insulation and to make the cob easier to compress, while mixing in water makes it more malleable. Some self builders prefer to work the cob themselves, rolling the mix into balls that can be easily handled. Cob walls for houses are around 600mm wide and built onto a brick or stone stem wall which sits on a limecrete footing on a gravel foundation. "The base of the cob must be at least 450mm above the external ground surface," says cob and lime specialist, Leslie Cornell from Leslie Cornell Building Restoration. "This stops excessive moisture going into the base, which is the highest load bearing area of the earth walls."

Note that each level in a cob house needs to dry out before constructing the next. But in theory building the walls is relatively inexpensive. "If you dig all the material on site and build the walls yourself, it costs nothing except the straw you mix in," says Charlotte Eve. "At the very worst, if your soil needs more clay or more sand it will be about £5-£10 per tonne, so really the structure of a small DIY twostorey cob house should cost no more than £200 to build."

Leslie Cornell, David Joyce Cob & Lime Specialists and Edwards & Eve Cob Building all design and build cob houses. If you decide to have a go yourself then the latter also runs a four-day Complete Cob Building Course, as does Ireland-based Mud & Wood, while Devon Earth Building has a list of course providers on its website.

Rammed-earth walls are formed by pressing layers of loose, damp soil into a formwork. Ramming is done by hand or machine and when the formwork is taken away it leaves a freestanding wall of around 300mm-600mm thickness. Cement can be added to make the walls stronger, provided the correct moisture content is preserved. Building is still slow going, but there's no need to wait for walls to dry out.





The Centre for Alternative Technology (CAT) in Wales runs an annual summer course on rammed-earth building, as does the Brighton Permaculture Trust. However, if you're looking for a firm to do the work for you, then try JR Building or Earth Structures; the latter has produced its own stabilised rammed-earth wall that looks like cut stone.

Earth or adobe (soil and straw) bricks are formed in a mould; earth bricks are laid on to a clay slurry, while adobe uses an earth and lime mortar. This building tradition is mostly seen in East Anglia, but neither method is load bearing. The East Anglia Earth Buildings Group (EARTHA) lists architects and contractors that specialise in this area. Even the more conventional brick manufacturers are getting on board with clay-based products: Ibstock, for example, makes Ecoterre, a range of unfired clay bricks and blocks suitable for internal walls.

Top: A project by Leslie Cornwell Building Restoration, showing cob walls being built. Above: The finished house. The first floor was repaired using cob blocks and a cob mix, both made on site. Three coats of natural hydraulic lime/sand render were applied along with four coats of natural lime waterbased paint

CONTACTS Centre for Alternative Technology 01654 705950 www.cat.org.uk David Joyce Cob & Lime Specialists 01297 35579 www. davidjoycecobandlime.co.uk Devon Earth Building Association www.devonearthbuilding.com Earth Building UK www.ebuk.uk.com Earth Structures 01858 565436 www.earthstructures.co.uk East Anglia Earth Buildings Group 01379 687705 www.eartha.org.uk Edwards & Eve Cob Building 01493 369952 www.cobcourses.com Ibstock 01530 261999 www.ibstock.com JR Building 01452 741881 www.jrbuilding.co.uk Leslie Cornell Building Restoration 01726 338708 www.cornellcob.co.uk Mud & Wood 00 353 71 930 0488 www.mudandwood.com

Hempcrete

Hempcrete is a natural and sustainable building material made using the woody waste, known as hemp shiv, from UK-based hemp manufacturing. The shiv is mixed with water and a lime binder, creating a lightweight material with excellent thermal properties (a 350mm-thick wall has a U-value of 0.19 W/m²K). It is breathable, making it ideal for building external and internal walls, but also for external wall insulation and in floors and ceilings.

Hempcrete is non-load bearing and is usually mixed on site and either spray-applied or cast in formwork to provide the cladding for a structural timber frame. The curing time for walls is about four to six weeks and the external finish can be anything from a traditional lime render to timber cladding, although the inside must be lime or clay plaster.



Victorian cottages restored by a self builder, who cast hempcrete external solid wall insulation from Hemp Lime Construct as a new cladding

82 renovation & building



Above: A project by Hemp Lime Construct showing hand-placed hempcrete cast around a central softwood frame. Right: Two coats of lime plaster is the usual finish for hempcrete, but clay plasters can also be used internally as with this house by Hemp Lime Construct



"We can create some amazing designs like curved walls because the timber frame and formwork can be flexible," says Nicholas Leigh from eco design and build firm Homes in Harmony. It's also possible to buy preformed hemp blocks, such as Hemp Construct's HC eco block, while Lime Technology makes and sells Tradical Hemcrete (under license from Lhoist) for use with formwork.

You'll need advice if you want to build with hempcrete yourself so take a look at *The Hempcrete Book: Designing and Building with Hemp-lime* by William Stanwix and Alex Sparrow (available through Green Books from October). Otherwise, companies that can build and design your hempcrete house include The Limecrete Company, The Drystone Group or Homes in Harmony (which operates in London but also has close links with Hemp Lime Construct, which works throughout the UK).

CONTACTS

The Drystone Group 01271 327600 www.drystonegroup.com Green Books

www.greenbooks.co.uk/the-hempcrete-book Hemp Construct 01206 396836 www.hempbuildsystem.com Hemp Lime Construct 07818 292705 www.ukhempcrete.com Homes in Harmony 0844 504 8867 www.homesinharmony.co.uk The Limecrete Company 0808 168 5463 www.limecrete.co.uk Lime Technology 0845 603 1143 www.limetechnology.co.uk

Log building

Below: Logs are reassembled on site after being built in British Log Cabins' yard. Below right: A log house, like this one by British Log Cabins, can be built on to a block plinth but the style of footings is flexible

Handcrafting a log house is a carbon neutral method of building, as all of the materials are grown sustainably and minimal energy is used in the labour. Logs should come from local forests that are Forestry Stewardship Council (FSC) approved and the timber is usually Douglas fir or Western Red cedar, although larch, spruce or eastern white pine are other less-used alternatives.

Handcrafted log homes are generally built with the 'full scribe' method, where each log is shaped to fit tightly to

training, as does Log Home Scotland, which can work alongside you on site. British Log Cabins also runs a two-week intensive course to get you started, or you can hire the company to do the log work for you, with options for the level of finish, allowing you to take on as much or as little of the project as you like.

If you're looking for peace of mind, Scandinavian Log Homes has CE certification for its products – a European standard that guarantees structural integrity, permeability



Far right: British
Log Cabins scribes
its structural
elements by hand
on site to achieve a
precise finish and
sound joint that
follows the natural
shape of the logs

the one below. The stacked logs are held together by a saddle notch in each corner to make a strong structural wall, with insulation (often sheep's wool) in between. Prices range from \$900-\$1600 per m² to build the log shell depending on size and specification.

Dan Waring, owner of British Log Cabins, says that one of the most common areas they get asked about is the potential for fire risk. "There's very little risk because the logs are scribed so tightly together that there's no oxygen to sustain a fire," he says. If you're interested in building your own version then Strongwood Log Homes offers





and fire resistance. British Log Cabins, meanwhile, undertakes its projects according to the International Log Builders Association (ILBA) standards, whose website is also a great source of further information.

CONTACTS

British Log Cabins 0121 288 2840 www. britishlogcabins.com Caledonia Log Homes

01835 268317 www.caledonialoghomes.co.uk International Log Builders Association www.logassociation.org Log Home Scotland 0131 552 4928 www.loghomescotland. co.uk Scandinavian Log Homes 0800 033 7178 www. scandinavianloghomes.co.uk Strongwood Log Homes 0117 244 0080 www.strongwoodloghomesuk.com





Custom, Handcrafted, Eco buildings

- Handcrafted Log Homes Woodland Cabins
- Post and Beam Homes
 Log Building Courses
 - Garden Buildings/Garages

Complete Design Service • Custom Self build packages • Nationwide projects

www.britishlogcabins.com info@britishlogcabins.com



0121 2882840



we give away free heat...



What do YOU want from your heating system?

- I want to save money on my heating bill
- ✓ I want to have less CO₂ emissions
- I want to get money back with the RHI
- ✓ I want something that's 350% efficient

Call us to find out more.



total home

heat pumps | central vacuums
heat recovery heat pump ventilation

RECC RECC Nacsba

© 0345 260 0123 Follow @TotalHomeEnviro



Part ten: CONTRACTS & INSURANCE

If you are about to embark on a home building project, you need to have the right documentation in place to ensure that your scheme runs smoothly. Anna-Marie DeSouza looks at the details

structural system, fixtures and finishes selected. That said, there are two key elements that everyone embarking on a bespoke home scheme will want – for their project to be completed on time and to budget. To be in with a chance of this happening, you must have the right documents and insurances in place to ensure that your build is organised and protected from all angles.

If costs start to spiral, work is

very self build is unique,

from the plot to the design,

If costs start to spiral, work is completed later than anticipated or is simply not up to the standards you require, then a contract could go a long way towards remedying the situation. On any kind of self build – be it a package scheme or a super hands-on development – you'll have to deal with a myriad of people, from architects to tradesmen and product suppliers. Drawing up clear and concise documents that specify who is responsible for what will help to protect your relationships, and will ultimately benefit all concerned.

This series is sponsored by the Self Build Academy.



Design and build specialist, Potton has partnered with *Build It* to offer an educational series of courses to guide self builders through the exciting journey of creating their own bespoke home. The independent sessions will cover everything from building with masonry or structural timber, to project management and finding land.

NEXT SESSIONS:

Making the most of your plot 26th Sept How to start your build 17th Oct

For more information and to book, visit www.selfbuildacademy.co.uk

The basics

All too often, people embark on projects without having adequate contracts in place. Contrary to popular belief, verbal agreements are legally binding – they are just much harder to garner a resolution from if a dispute does arise. For self builders it makes good sense to have something written on paper and signed by client and contractor; there needn't be anything too complicated in place.

Write down your list of terms for the job and share this with your chosen builder, and get them to do the same. It's worth noting at this point that you are drawing up an agreement for both parties, and you must both keep up your end of the deal. When hiring individual tradesmen, this simple

exchange (which lays out what is to be done, how much money it will cost and a date that payment is due) may be all that is required. When dealing with bigger jobs, or if you are hiring a main contractor, you should have something more detailed in place.

At the least, these more comprehensive documents should include a timeline of the various work, when tasks will start and be completed, how much each element will cost and dates when staged payments should be made. It's not always advisable to fill your contract with restrictive clauses (such as creating penalties for missing deadlines etc) as it may get you off on the wrong foot and unbalance your relationship before work even starts. However, preserving the right to retain around 10% of the overall price until snagging has been completed is commonplace and makes good sense.

Types of contract

If you so desire, you can approach your solicitor to create a bespoke contract for you. For a (possibly sizable) fee, they'll undoubtedly create a fantastic and watertight document for you, full of terms and conditions. The problem is, firstly, that your builder may be loath to sign it if they don't understand some of the legalese and jargon contained in it. Secondly, it's far cheaper and easier to use widely available 'off-the-peg' agreements, which can be tailored to your project.

The Joint Contracts Tribunal (JCT), an independent body established by the construction industry, and the Federation of Master Builders (FMB) both offer 'Plain English' pre-written contracts, which are available to download free from their websites.

The JCT has two standard documents suitable for self builders – one where the home owner has appointed a consultant to supervise the

Mark Wildgoose and Revis White undertook a project to add a new wing to their country home. Although they had written a contract with their builders, there were a few issues to overcome as a dispute arose from an overrun in the schedule. Despite a penalty clause in the contract for this sort of eventuality, some of the delays were attributed to changes the couple had made along the way - and so the builder levied further fees. "Be aware of all of your costs including potential additions," says Revis. "Understand what your contract means and how it will affect you if you make changes or if your builder runs late. It's there to protect all parties, not just you as the client."



work and one where there is no consultant. The FMB has a range of standard contracts for works up to £50,000, £250,000 or £500,000. Whichever option you select, the documents you obtain will allow for you and the service provider to agree on the project arrangements, such as the quality of work, the price, payment terms and the schedule. With this type of agreement it's easy to establish the division of responsibility for all parties from the outset.

Out to tender

Packing as much information into the tendering process as possible is key to drawing up a successful contract. Send out building control drawings when asking for prices, and gather at least three quotes for the work (this will often mean sending tender documentation out to at least four or five firms). If you only seek one contract price, you could end up with no bar of comparison and pay too much for the work in hand. Be consistent with the information you provide and invite contractors to your site so that they can return as detailed a quote as possible.

When you get prices back, don't automatically go for the cheapest one - it may not necessarily be the best value overall. Think about who you communicated best with, whose work you thought the most of when reviewing past projects and who has the most experience with self builders.

In addition to being wary of the price, also look out for quotes that are under detailed - anything on a single sheet of paper or that just shows an overall price with no breakdown has probably not been thought through properly. Unless all elements are shown clearly,

you're leaving yourself susceptible to extras being added at a later stage, which the builder may claim were never included in the original price.

Terms of payment

You should avoid paying for things up front as it may put you in a weak position if your contractor goes under. There are a few exceptions to this rule though, such as where you have to pay for prefabrication of a timber frame. Good builders will allow you to pay in stages on a regular basis, which will be related to the duration of your project. You should set these fixed stages out in your contract so that you can budget for them or so that they reflect when you're able to draw down cash from your mortgage.

It's a fair assumption that all self builds will change as they progress, which is likely to affect your budget. For example, you may want to up the spec of certain fixtures and fittings or find that you want to cut back on some nonessentials from your original wish list. Keep a site diary and make regular progress entries - so where there are any amendments to be made you can refer back to them. This will

also give you a reference point for any faults that you spot or if you feel a certain element has been finished below standard. Here, make an additional written reference to give to your contractor.

Disputes

All self builders will want to avoid any major problems or disputes with their main contractor, the key to this is good communication. It's advisable to arrange regular meetings between yourself, your builder and your project manager (if you have one) throughout the development - at least at the completion of each key stage. This will provide you with the opportunity to discuss progress and issues that may have arisen, as well as any details your



Mike Dillon was a self build novice prior to completing his traditional style home in Yorkshire. A friend of his who is a contracts manager compiled a schedule of works for the project with indicative costs. Mike spent many hours travelling around the local area looking at examples of tradesmen's work. When he selected who he wanted to work with, he arranged a fixed price for the building of the shell.

When the project started on site, Mike encouraged a daily 15 minute catch up in the mornings and provided workers with a cup of tea and bacon sandwich. "It was a great way of team building and encouraging everyone to get along," says Mike. "As a result there were no fall outs and everyone was happy to pitch in when we needed them. I had a clear idea of what I wanted to achieve, so if there was a problem they discussed it with me and came up with solutions. Communication was key."

86 renovation & building

trades aren't clear about. If problems do arise, always discuss them with the most senior team member on site, otherwise minor discussions with subcontractors may get lost in translation.

Obviously, some issues are unavoidable and you should try to resolve them between yourselves in an open and fair manner. The law should be your last recourse and only be turned to when amicable attempts to solve the problems are drawing a blank. Formal routes of reconciliation, such as adjudication or arbitration, will be made easier if you have a detailed and clear contract to fall back on.

The FMB and JCT contracts allow for adjudication through three industry bodies – the Royal Institution of Chartered Surveyors, Royal Institute of British Architects and National Specialist Contractors Council. So, if anyone wants a dispute decided formally, they can apply to one of these bodies. Once an arbitrator has been appointed to review the situation, they will make a decision within 28 days.

It's worth remembering that the vast majority of self builds are completed without this type of issue. Once your dream home is completed, any stresses you've experienced with tradesmen will be soon forgotten.

HOW TO SELF BUILD

To guide you through the process of creating a bespoke home, our 11-part educational series covers all aspects of self building, from finding land and planning to design details and project management:

- 1 Why self build?
- 2 Finance & budgeting
- 3 Finding land
- 4 Self building: structural systems
- 5 Design options
- 6 Buying materials
- 7 Project management
- 8 Planning permission
- 9 The regulations
- 10 Contracts & insurance
- 11 Final matters

INSURANCE

Site insurance, sometimes called contract works insurance, will protect you and your project against a range of risks. This includes environmental issues (storms, flooding etc) and fire, as well as covering temporary buildings on the site, such as the site office or a caravan. In addition it will protect what you are constructing. It's also worth checking that site insurance includes any professional fees, site clearance and debris removal in the event of a claim.

Your cover should also protect you against theft – paying out if someone comes onto site and steals tools or materials. In most cases this will include personal effects belonging to employees, though the limit is usually rather low. Of course, it's up to you to keep the site locked when not in use – and most insurers will insist on a high level of security.

You are responsible for your site as soon as the deeds for the plot are in your name, so think about how you are going to get protection from the start. Your tradespeople and contractors may have their own insurance, but the buck for any accidents may still rest with you. Therefore it's essential to have public liability cover in place from the off and for the duration of the build. If someone, even a trespasser, came onto the site and injured themselves you might be held legally responsible, which means you could end up with a big compensation bill. Your policy should typically cover public liability up to £5m.

It's possible to obtain products that last 12, 18 or 24 months, and if your project completes before the cover ends you should be able to convert the remaining time into regular buildings insurance. On the flip side, you can easily extend shorter policies if your scheme overruns.

The level of indemnity will vary between policy providers, but typical site insurance will cover the following as standard:

- **Building works**
- Materials
- Plant, tools and equipment (owned or hired)
- Temporary residence (caravan, site office etc)
- Employees' personal effects
- Personal accident (including broken bones)
- Public and employers' liability
- Legal expenses
- Your personal possessions

It's a good idea to consider buying a structural home warranty, too. In fact, many lenders insist that a 10-year warranty is in place before they will consider a self build mortgage. This type of warranty will give you peace of mind as it will cover the expense of any repairs if you were to discover a serious defect in the structure within a decade of completion. For example, if your home gets flooded because your roof was damaged in a storm, your normal home insurance will cover this. But if the roof is leaking because of a fault in the structure (how it was designed, built or the materials used) the warranty will protect you. It should also cover the cost of any legal fees if you were to sue a designer or contractor for negligence.

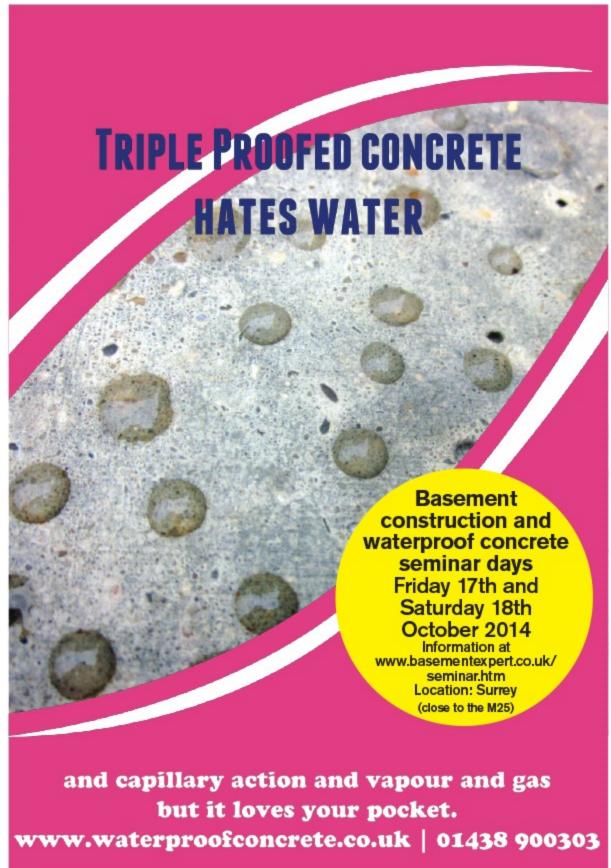
CONTACTS

BuildStore 0845 223 4888 www.buildstore.co.uk Federation of Master Builders www.fmb.org.uk Joint Contracts Tribunal

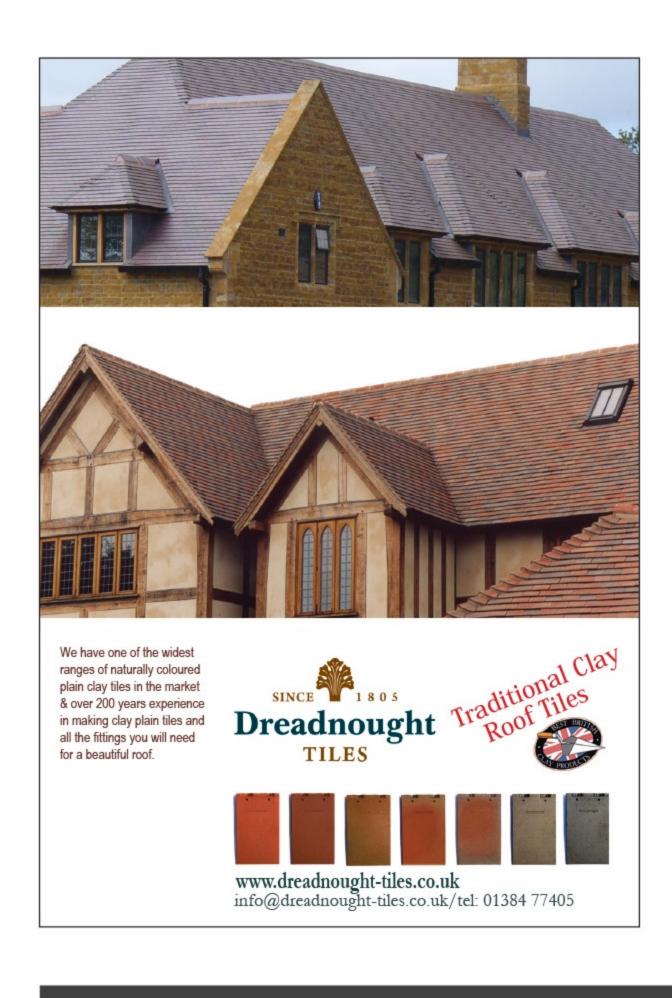
www.jctltc.co.uk Potton 01767 676400 www.potton.co.uk















Premium Flat Roofing Solutions for your Home





You want the pinnacle of your home to complement its overall design, be durable and meet the planners' requirements – but what are the options? Anna-Marie DeSouza looks at the most popular roof coverings in the UK

ccounting for up to 30% of a property's exterior, the roof will be one of your home's prevailing features. The covering you select could be the defining element in creating an authentic period cottage or achieving the perfect sleek finish to crown your contemporary pad. Whatever you opt for, your choice must be carefully calculated otherwise you'll risk ruining the overall aesthetic appearance of your new dwelling.

Obviously, the design of your house will be a major factor in the type and style of covering you choose, but it's not the only consideration. Your local planning department will undoubtedly have a lot to say about your selection - and will probably push you towards using something that matches the colour and profile of vernacular dwellings. This doesn't mean your choice is limited to conventional materials, but you may have to give a detailed explanation of why the covering you want is the best fit for the property you are creating.

An important factor when selecting your finish is the price. In basic terms, the roof should account for 15% of your construction budget; typically the structure should cost around 10%, with 5% allocated to coverings (this may increase depending on the complexity of installation).

There is much to choose from, with options ranging from bespoke handmade tiles or timber units through to sleek swathes of zinc or copper. Suffice to say that you should easily be able to find something that suits your style, budget and planning conditions. Here we will review some of the most popular options.

Cedar shingles

Shingles can be made from a wide variety of materials, but most popular with the self build community are characterful timber units predominantly cedar. A shingle is produced by sawing a block of wood on both sides, which creates tiles with a relatively smooth face and back. A rustic alternative to shingles

are shakes, which are hand split from a block of cedar, along the grain of the wood, and then re-sawn to provide a textured face. In terms of installation, they are usually applied in straight single courses and nailed in place. However, the configuration can be varied to achieve other design effects, if you so require. Cedar shingles can be left untreated to weather to a beautiful silver, or, alternatively, they can be treated to aid preservation of some of the original colour. If you want to get the longest life out of your product, opt for premium types that have come from high-grade heartwood.

Clay tiles

With many benefits to offer, clay tiles remain one of the most popular options for self builders. Durability is a key plus point; tiles are fireproof and will naturally fend off mould, rot and water damage, which adds to their long life span. You can also specify tiles that are resistant to freezing and thawing damage.

Above: This characterful and natural slate roof covering comes from the Penrhyn quarry in Wales and will give a high quality finish to any style of home - be it contemporary or traditional in style. Penrhyn Heather Blue (Celtic 9mm), from £37 per m², Welsh Slate

90 renovation & building

Fibre-cement roofing

mimic a host of other

option for covering your home. It can be made to

materials – for example, the roof of this highland property looks as though it has been finished in copper. Green profile

sheeting, from £12 per

m², Marley Eternit

is another modern



This contemporary home designed by Nicolas Tye Architects, is a replacement dwelling on a greenbelt site. To give the property a unique edge, copper from KME Tecu has been used for the flat roof and cladding

roof and cladding



A natural clay roof will always be a statement of quality, and look gorgeous set against a heritage-style home.

Collingwood Blend, from £490 per 1,000 pre mixed, £415 per 1,000 un-mixed, Dreadnought Tiles



These gorgeous handmade tiles have some irregularity of shape to add character and give the roof an established look. Handformed Dark Heather tiles, from £730 per 1,000, Dreadnought Tiles

This cedar roof covering gives this home a warm and natural looking finish. The variety of colours in each shingles provides interest and character, too. Blue Label Western Red cedar shingles, from £20.88 per m², Silva Timber

This elegant contemporary home is finished with zinc cladding and roofing – giving it a unique architectural appeal. Supply and fit price from £100 per m² (not including the substrate), VM Zinc



Clay tiles come in a vast range of colours, shapes and sizes, so you'll be able to create intricate details if required. Special units for valleys and gulleys are available, too, which will add more character and interest to the appearance of your home.

Another advantage comes with installation; as they are such a popular covering, you'll easily be able to find a professional experienced in fitting.

Bear in mind that if you are replacing an existing roof with clay tiles you must ensure that your current structure will hold the weight. This is often made possible by adding supports before laying the tiles.

Vibrant hues can be achieved with clay and should not significantly fade over time. The colour is an integral part of tile, so can't be bleached by the sun. As a natural product, using clay is

environmentally friendly by definition. Also, when tiles have reached the end of their life, they can be recycled for new applications.

You can specify handmade, hand finished or machine made units — your selection will depend on the look you are trying to create. Modern handmade clay tiles are produced by skilled craftsmen who use special processes to ensure strength and impermeability. They are available in a wide range of shapes and sizes — the most common options are plain tiles and pantiles.

Factory-manufactured units offer many of the benefits of handmade versions. They may have slightly less rustic character, but tend to be considerably cheaper and are available in a wide range of sizes. Handcrafted tiles sit between the two – the process is automated up until just before the tiles are fired. At this point they're taken off the line and finished by hand to replicate the required texture. Whatever you select, always mix batches to ensure an even blend of colours is achieved across the entire roofscape.

Expect to pay from £32 per m² for handmade plain clay roof tiles, compared to from around £20 per m2 for machine made alternatives.

Concrete

Concrete tiles win the award for versatility - there's a huge range of colours, sizes, styles and fixing arrangements on offer (including interlocking versions). Units can mimic the appearance of traditional clay, shakes, slate and stone - sheet material can even look similar to metal. Their surface can be textured or smooth, and edges can be uniform or ragged to match the appearance you are trying to achieve.

Standard concrete roofing is grey or white, but the raw material can be blended with pigments to produce virtually any desired hue. You can specify batches of uniform tiles, blend colours and opt for random or standard patterns to create a unique finish - the choice is yours. What's more, a full range of profiles are available - as are 'special' shapes and sizes - making it fairly easy to achieve more difficult roof forms as well as ridges, gulleys and curves.

This budget friendly option – from approximately £10 per m2 - is a popular choice, but units do vary in quality. Cheaper versions will not be as durable, nor be as colourfast as the higher end products available from the likes of Marley Eternit or Monier Redland. Also, as with clay or stone tiles, if you are renovating, ensure that your roof structure can bear the load.

Metal

Although metal roof coverings have become synonymous with contemporary style homes, they have been used to finish buildings for hundreds of years. In the past copper was the material of choice, but nowadays there's a gamut of varieties on offer, including zinc and steel. Metals can be laid on relatively shallow pitches if required (as low as 3°), and the installation and seam types vary according to the material and fixing system used.

Sheet metal is long-lasting and very adaptable for all manner of roof styles including curves and complex shapes as it's so malleable. All products are lightweight, recyclable and lowmaintenance. Galvanised steel will

resist corrosion, so is ideal for coastal homes, while copper and zinc will both develop an attractive and protective patina over time (some manufacturers offer pre-weathered versions). Tile options are available, too, for example pressed steel units, which are popular on the continent. Alternatively, corrugated sheets look stunning on industrial-style barn conversions.

Costs can be high for metal roofing, with prices dictated by fluctuating market prices for raw materials. However, they will give your home a unique edge and an impressive finish.

Slate

Characterful and elegant, slate roofs continue to be a favourite for self builders and renovators. Slate provides a smart yet traditional covering, usually grey, but is also available in hues ranging from purple to green.

Wales, Cumbria and Cornwall are among the areas well-known for their slates (where there's plentiful supply), with natural products literally split from large blocks using a hammer and chisel. These high quality offerings cost around £35-40 per m2, while imported tiles from Brazil, China and Spain - which vary in class - can cost from around £20 per m2.

In terms of installation, slates need significant overlapping on several sides to ensure water-tightness, and the tiles must be laid on battens over an underlay. A slate roof requires a pitch of around 30° and should preferably be finished with clay or metal at the ridges and junctions. Curves are fairly hard to achieve with slate - but not impossible - and simple roof shapes are usually the most economical.

If you want to get the effect, without the price tag, composite look-alike slates are available from around £12 per m². These units are factory-made from coloured and textured clay, reconstituted slate or lightweight fibrecement. Manufactured versions can be interlocking or pre-drilled for nailing.

Stone

A beautiful and natural option, stone roofs are synonymous with traditional homes in some of Britain's finest areas of outstanding natural beauty, including the Pennines and the Cotswolds. This type of covering is probably most suited to period home restoration projects or where your

METALLIC INSPIRATION

Using metal roofing can give your home a sleek and attractive finish, here's our pick of some of the best examples from across the board:



Aluminium This larch clad home has weathered to a sleek silvery grey, which perfectly complements the shade of the gently pitched aluminum roof.



Copper The copper roof covering on this split elevation home has been treated to retain its original colour, which blends perfectly with the brick mix.



Steel This industrial-inspired and contemporary barn conversion is covered in corrugated steel sheet roofing, which is similar in style to the wall cladding.



Zinc Curved and uniquely shaped roofs, like the crowning glory of this modern dwelling, can be easily achieved using zinc as it's so malleable.



Get the look If you want the 'look' of metal without the price tag consider using roofing membrane - this home is topped with leadcoloured Sarnafil.

local authority requires you to match the vernacular material.

To create stone roof tiles, excavated blocks of sedimentary rock are split into thin sheets. Obviously, the rock type varies between regions - most commonly, limestone or sandstone but so does the size, thickness and style of edge. The weight and nature of stone means that it's best suited to steeply pitched roofs of 45° or more. It is traditionally laid in diminishing courses, with larger tiles at the bottom and smaller ones at the top.

Characterful and durable, stone roofs come with a hefty price tag, and you'll require a specialist installer, too.

CONTACTS

Copper Development Association (CDA) 01442 275705 www.copperalliance.org.uk

Dreadnought Tiles 01384 77405 www.dreadnought-tiles.co.uk KME Tecu 0845 519 5514 www.kmetecuuk.com Marley Eternit 01 283 722588 www.marleyeternit.co.uk Nicolas Tye Architects 01525 406677 www.nicolastyearchitects.com Monier Redland 0870 560 1000 www.monier.co.uk Silva Timber 01895 271300 www.silvatimber.co.uk Sarnafil 01707 394444 www.sarnafil.co.uk Tata Steel 020 7717 4444 www.colourcoat-online.com VM Zinc 01922 822288 www.vmzinc.co.uk

nicolas tye architects

As award winning architects and designers we aspire to create extraordinary buildings and spaces for our clients, sometimes from the most difficult of design briefs. Central to our philosophy is that good design should reflect the needs of our clients and respond to the surrounding environment.

Pushing the boundaries of design we are able to achieve timeless, highly innovative and sustainable projects. We offer a complete design service from initial advice through to the completion of your project.

We complete works all over the UK and internationally.

nicolas tye architects t: 01525 406677

Email us or call with your new project enquiry.

e: info@nicolastyearchitects.co.uk w: www.nicolastyearchitects.co.uk





FOOF tiles uncovered

Whether you're aiming for a classic and understated look or are interested in experimenting. with colours and patterns, make sure your flooring suits each space within your home, says Ifeoluwa Adedeji

hoosing floor tiles for the kitchen or bathroom is part and parcel of any self build or renovation project - and they're becoming more popular for use in other parts of the home, too.

As finding the right floor covering is such an important aspect of a good interior scheme, we've spoken to the experts to find out how to select the best tiles to suit each zone.

Design & planning

Functionality and practicality are key considerations when it comes to picking your floor tiles. Put simply, some materials are better than others for different areas of the home. "Porcelain is particularly resilient and low maintenance so it's an excellent choice for high traffic areas such as kitchens and hallways," says Caroline Gow, tile category manager at Fired Earth. Bathrooms and other wet zones will require non-slip and waterproof materials such as ceramic or stone.

Tiles are produced in batches and the colour will vary between each set, so make sure you buy enough from the same batch to get full coverage.

If you want to try your hand at laying the tiles yourself then opt for large format styles, which are perfect for keen DIYers as there'll be fewer of the units to lay and less cuts to make.

Underfloor heating

"Natural stone, ceramic and porcelain tiles are great because they allow the warmth from the underfloor heating (UFH) to transfer easily to the surface," says Tim Tatlock head of buying at Topps Tiles. This is encouraging more homeowners to include tiles and UFH in areas of the home that have traditionally been carpeted, as they strive to maximise energy efficiency and benefit from UFH's low running cost.

"A very thick stone tile will take longer to heat up and cool down than thinner types, which means that the system will take longer to heat the room; but this will also result in the zone remaining warmer for longer," says Heather Oliver, Product development manager at Nu-Heat. Do bear this in mind and make sure you install the right combination to suit your family's lifestyle.

Trends

Homeowners are increasingly experimenting with vibrant colours and intricate designs - although if you want to go bold on your floors then you might want to leave the walls quite plain. "I always tell my clients to think of their spaces like a film. Casting too many stars would spoil the movie, so make a feature of the floors and keep the walls simple to complement it," says Phoebe Oldrey, designer at Smart Style Interiors.

Maintenance

Due to their longevity and resilience tiles can last over a decade before they need updating. If you choose classic designs in subtle hues the style is likely to last even longer and there are ways for you to optimise their durability. Some stone and porcelain floor tiles will actually need to be coated with a sealer to minimise stains and markings - especially in wet zones. Check with the manufacturer or supplier if you're unsure. In bathrooms and other humid areas, use water-resistant grout to preserve a good finish.

Above: A clever combination of Imni grey, Draa blue and Dades white tiles makes a distinctive feature of this entrance hallway. Arabesque tiles, £119.85 per m2, firedearth.com

94 renovation & building













1 Make a bold and beautiful statement, Ambleside, £119.04 per m², decoramic.co.uk 2 Radiate class and style, Melange, from £71.88, sacw. co.uk 3 Establish a timeless finish, Bridgehampton marble tiles, £149.88 per m², firedearth.com 4 Create a neutral palette in your kitchen, Light tumbled travertine, £24 per m², floorsofstone. com 5 Combine stunning design with durability, Antique Blonde Bari, £450 per m², parisceramics.com 6 Bring out the wow factor with your tiles, Trafic, £55.15 per m² porcelanosa.co.uk 7 Brighten up your space with porcelain floor tiles, Zellij, £9.55 per m², wallsandfloors. co.uk 8 Install a traditional design, Camden Floral Lys, £46.12 per m2, toppstiles.co.uk

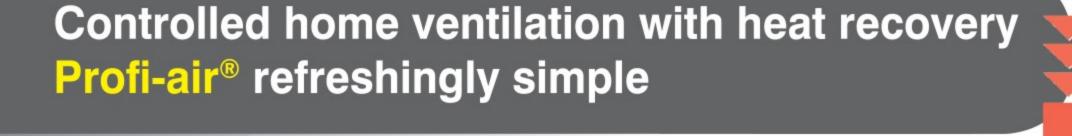


Underfloor Heating and Ventilation

is a part of FRANKISCHE

Underfloor Heating





- Home ventilation with heat recovery
- Flexible 75mm ducting
- Each vent individually supplied



To get your FREE quote today visit www.underfloorheating.co.uk or call 01424 851111

ROBBENS SYSTEMS- the name you can trust for underfloor heating and ventilation with heat recovery

Keep reading for project success!

From design to final fix – whether new build, renovation or extension – let *Build It* guide you through your whole project.



Plus all subscribers receive 2 FREE tickets to their nearest **BuildIt** Live worth £24!

Visit: www.self-build.co.uk/suboffer or call: 01442 820580 quoting 'BIOCT14'

Expert help

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT



98



98 VERNACULAR DESIGN DETAILS

From doors and windows through to chimneys and staircases, architect Julian Owen identifies the key features that could be essential to a heritage building project

103 HOW TO SOURCE & BUY MATERIALS

Self build consultant Mike Hardwick gives his insider tips on getting the right products and materials at the right price – and how to make sure they reach your site on time

111 VILLAGE LIFE

Could one council's lack of a sufficient five-year housing land supply open the door for the Chapmans to self build in their parents' garden? Our planning guru investigates

115 AUCTION ETIQUETTE

Mike Dade cuts through the mystique to gives his tips on how to ensure you bag a bargain plot at auction – and avoid the potential pitfalls

PLUS:

YOUR QUESTIONS
ANSWERED & LAND
FOR SALE >>>

Vernacular design: Traditional details

In the final instalment of his guide to the crucial design elements of historic buildings, Julian Owen looks at the finishing touches that will add credibility to your project, whether you're renovating a gem or building from scratch

> o enthusiasts of vernacular design, the details of a traditional building are as important to its character as the overall appearance when seen from a distance. Historic houses were built by hand and this is most apparent when you approach, touch and feel the construction. However many hundreds of years old they may be, when you see their work up close, you can sense a direct, personal link with the craftsmen who created them.

Doors

Even today, the most important external feature of a house is the doorway, and in very early properties it was often the only opening in the

wall. In the dim mists of time, the first doors were made of nothing more than ox hide or fabric, and a cord was used to pull them up and lower them down, much like a blind. These were replaced over time, first with stone slabs then wattle and daub panels

before carpentry skills developed enough to use timber.

Early timber doors comprised of a series of solid vertical planks, fixed together with horizontal members across the back - and this formed a ledged door. The original version was very draughty until door frames were introduced in the 16th century to make a tight fit possible.

The metal straps that supported the doors and formed hinges evolved into a design feature, sometimes decorated with intricate patterns. The final 19th century refinement was the introduction of diagonal supports (ledge-and-brace) to prevent the door from sagging, a design that is still in regular use today. As carpenters

Windows

The word window comes from the Saxon for 'wind doors' - so called because they were designed to allow in air to help the fire burn, facing away from prevailing wind to reduce heat loss. Sometimes the openings were criss-crossed with a diamond pattern of reeds but the more expensive option was to use vertical square section oak bars, set at an angle to deflect more light into the rooms. Larger buildings had stone mullions supporting long horizontal openings. The worst of the weather was kept out by sliding or hinged timber shutters.

The Normans introduced glazing to the British Isles but it was far too expensive for ordinary houses. In



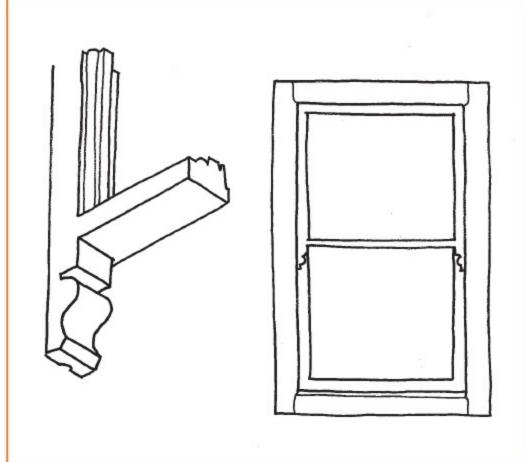
became more skillful they were able to make framed and panelled doors, which used less wood and were also cheaper and lighter overall. Cast iron hinges and mortice locks arrived in other ironmongery was blackened.

contrast to the modern view that fresh air is healthy, in medieval times it was believed that the wind carried disease and pestilence. This fear was so deep-rooted that most houses were built with their narrow, windowless ends facing south to

the 18th century, which along with the

Right: A typical medieval ledge door made from vertical boarding with decorative studs. Far right: A modern version of a traditional ledgeand-brace door





shield occupants from the southern wind, which was believed to be the source of the Black Death.

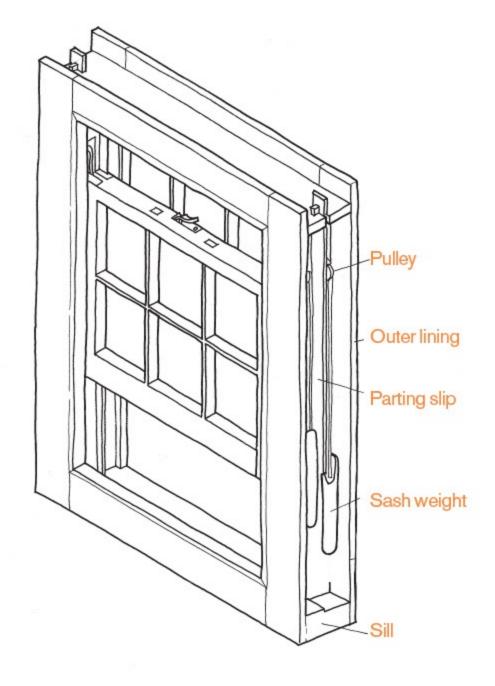
Early glass came in small panes, held together with lead cames and fixed on iron hooks so that they could be easily lifted off if required. They were so valuable that owners used to

than 10" (250mm), with sections cut out for glazing. But by the 18th century technological developments allowed the production of discs of up to six feet across, with the thinnest and clearest glass cut from the edges. The central, thicker portion of glass was referred to as the 'bullion' or

with the casement design. Hinged on one side like a door, casement windows have been widely used for centuries, opening inwards in the UK rather than outwards as in Europe.

Glass production methods started to improve and once the vertical sliding sash design came across from Above left: Fixed windows were set directly into the structural timbers. Above right: Sash windows after the mid 19th century had horns to strengthen the corner joints





remove them and take them away when they moved house.

It was only in the 17th century that ordinary home owners could afford glass. In the poorest provinces, it took until early 19th century for glazing to be used on humble dwellings. Until then occupants had to make do with substitutes such as paper, fabric or most prized, the afterbirth of cattle.

Originally in the UK, glass was blown and spun into a disc no larger 'bull's eye' and was considered very inferior. It was only used in less important windows or for inns and taverns where its extra strength made it less breakable. Because the glass was made in a circular shape, it was possible to get more panes out of it by cutting diamond panes rather than square or rectangular.

Once they were glazed, it had to be possible to open windows and the first way that this was achieved was

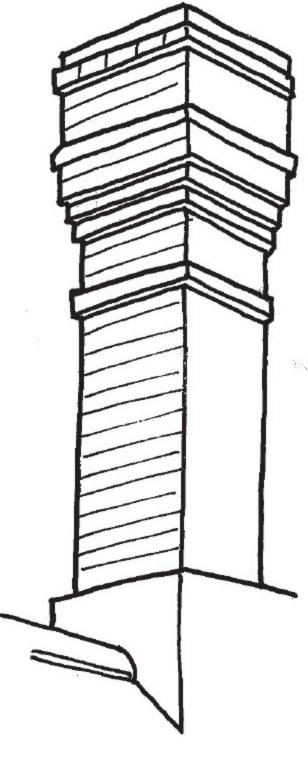
Holland in the 17th century it caught on rapidly, since it was suitable for large, heavier frames. However, lead cames were not rigid enough to take the strain of being lifted without distortion, which meant wood frames replaced them entirely.

In the 18th century laws were passed to protect the new all-timber frames from fire. They had to be set well back into the outside reveal of the opening and recessed into the

Above left: Early windows had a diamond pattern to make the best use of the round glass sheet that the panes were cut from. Above Right: Sash windows were developed to allow larger, heavier frames to be openable

100 renovation & building





Chimneys provided an opportunity for brick layers to really show off their skills, and by the 17th century most homes featured versions made from this material inner leaf of the wall, making the frame appear comparatively thin. Many modern window designs trying to look authentic fail because they are not designed with these characteristics. Another detail that identifies the period in which an old window was made is the 'horn' little extra bits of timber that can be found each side at the bottom of the top sash window frame. As the glass panes available increased in size meaning fewer sections, there was less timber to brace the window. So by the mid 19th century the corner joints had to be redesigned to be stronger, necessitating the horns.

Vertical sliding sash windows would ideally need large, high rooms to look in scale with the rest of the property –

a characteristic that was not available for the houses of most ordinary working people. In the early 18th century a horizontal sliding sash window was invented. This was short but wide and was ideally suited to more modest rooms and houses. Although the credit for inventing it has been claimed by Cornwall and Norfolk, it is most commonly referred to as the Yorkshire sliding sash.

Chimneys & fireplaces

The fire was the centrepiece of all early homes but for centuries there was nothing above it but a hole in the roof. The best solutions available to prevent rain penetration at this time were pottery or timber louvers.

Chimneys, possibly the greatest innovation in the history of house design since the roof, first emerged in a few select homes in the 12th century. However, with the increased use of coal in the 14th century they became essential as the fairly tolerable wood smoke was replaced with unbearably acrid coal fumes.

By the 15th century, chimneys had moved from being located in the centre of the room to an end wall – large fireplaces had now become universal. Wood or coal was burnt in a free standing iron basket until the end of the 18th century when the modern

fireback and flue was invented, which made fires more efficient at radiating heat whilst maintaining the flow of air up the chimney.

Poorer dwellings had fireplaces and stacks made of timber and plaster but by the 17th century most houses had solid chimneys that were the most expensive and substantial structure within the house. At this point timber frame was used universally, so bricklayers spent most of their time building chimneys and were occasionally allowed some artistic licence to add interesting design features. Chimney pots are a comparatively recent invention, being only about 150 years old.

Staircases

Very early houses were just a single storey and had no need for staircases. Some had a sleeping platform open to the ground floor, so here, the first 'stairs' were just simple wooden ladders, placed in a gap between the floor joists.

From the mid 16th century, stone staircases emerged in halls and stately homes. They had shallow flights and would make sharp 180° turns. They became popular as first floors, rather than ground floors, took on the role of grandeur and advertised the owner's wealth.

The first staircases in ordinary homes were of stone or brick, sometimes within the thickness of the walls or on the outside where a straight flight of steps would ascend along a wall. Stairs were often squeezed into corners, or around a central chimney.

In the 1600s straight flights of wooden – often oak – stairs rising from one half landing to another emerged. Craftsmen often used staircases as a means to show off their skills and decorated them with intricate patterns. Turned balusters and half landings showed up in many houses, while wrought iron became fashionable in mansions.

By the early 1700s, Georgian architectural taste changed house design completely. The main rooms for visitors were placed on the ground floor and grand staircases were no longer necessary in order to display wealth. Two straight flights became the norm, the lower reached to a half landing midway between the floors, and the other continued upwards.

JULIAN OWEN



Julian Owen is an East
Midlands-based chartered
architect and author of
several books on self build
and house alterations. His
publications include Self
Build, Home Extension
Design and Kit and

Modern Timber Frame homes. He's also chairman of the ASBA Architects network. To find out more visit www.asba-architects.org



- Air tightness levels to PassivHaus standard
- Unsurpassed insulation values
- Combines speed and strength with time proven record
- Ultimate cost effective build solution
- Most flexible offsite construction method



www.taylor-lane.co.uk

sales@taylor-lane.co.uk | t: 01432 271912

Taylor Lane Timber Frame | Chapel Road | Rotherwas Industrial Estate | Hereford | HR2 6LD



0845 40 40 400 www.designandmaterials.uk.com





It was freezing outside, we've only been home for half an hour...



...and we're already cosy and warm - thanks to our amazing **EZEE•FIT Overfloor Heating**, from Wunda.

Wunda's **EZEE-FIT Overfloor Heating** is fantastic, our home heats up as quickly as radiators. This is because the pipes are situated in low profile panels, just under the surface of our finished floor. It also uses far less energy than radiators - helping to keep our fuel bills down.

Installation was a breeze, as our builder didn't even have to dig up our existing floors. The pipe and panels were fixed directly on top - no effort, no mess!

The real beauty of overfloor heating is in the comfort we experience - the heat gently rises from the entire floor, enveloping your body, keeping our feet warm and our heads cool. Plus, there's virtually no draughts or cold spots and very little dust - but best of all, I can place my furniture anywhere I want, without ugly radiators getting in the way!

Installing EZEE•FIT has transformed our home and been one of the best decisions we've ever made. Why not join the overfloor heating revolution yourself, just give Wunda a call - you won't regret it!





How to source and buy materials

Purchasing the materials for your house means coming up with the biggest shopping list you'll ever make. This month Mike Hardwick takes you through the process of sourcing and buying everything you'll need

or a typical self builder, the thought of procuring all the materials that go into creating a house can be a daunting prospect. For a start, how do you know what is required, in what quantity and to what level of quality? The list is endless, but fear not, we're here to help. There are ways to make the process a lot simpler and to ensure that – vitally – you get what you need when you want it.

The basics

When projects run over budget, more often than not, it's due to an overspend on materials. A common mistake is to buy top-of-the-range designer goods when working with limited funds, where less glamorous options would be more appropriate. I recall speaking to one client who complained bitterly that she was overshooting her build budget, while proudly showing off the designer-made, solid pewter door furniture she'd bought at great expense because: "I saw it and fell in love with it." Well, there's your trouble, ma'am.

Now, I'm not suggesting that you use cheap materials to build your home, but if you can find something that gives the 'wow' factor for a competitive price, that's half the battle. New fixtures and fittings seldom look anything other than

fantastic when brand new, regardless of cost. So think value-for-money rather than outright price if you are on a tight budget.

Buying materials yourself

Many of the external material specifications will have been worked out during the planning process, so buying is simply a matter of ordering the right quantities. Purchasing these yourself can offer tremendous savings, but don't forget that securing everything you need will inevitably take up a huge amount of your time.

If you do decide to go it alone, the best advice is to concentrate on the big stuff, and don't get too worked up about the price of the smaller items. What's the point of haggling 20p off a sheet of plasterboard when you can save thousands of pounds getting a large discount on your fenestration?

When it comes to purchasing, you have a number of options but probably the most obvious one is to go through a builders' merchant. There are several to choose from and they range from the large national chains to your local independent trader.

The personal touch can count here, and it's worth spending time chatting with your local branch manager as they'll want your business, which means you're in a great position to negotiate significant discounts. The

Roof tiles Boiler Timber frame Insulation Damp-proof membrane 9 doors Plasterboard Under floor Solar panels Bath & show Tiles

manager will size you up as a potential customer in seconds and be thinking of some key questions: how much are you going to buy, how much of it will be through him and are you going to pay on time? The answers will inform the level of discount on offer.

Explain your position, prove your finances are in place and offer to set up a trade account. Make the right noises to say that you're prepared to do most of your purchasing through that branch and you will be in a strong position to start discussing concessions. Different products attract different levels of discount, so don't expect a blanket figure, but the more you buy, the greater the overall savings you can expect to achieve.

DIY warehouses

Many of the out-of-town DIY stores are moving into the construction materials market and have set up their own trade counter services to rival the merchants with very competitive prices. There are also some good deals to be had in the stores themselves and it's not uncommon to see tradesmen buying retail stock as it can be cheaper than the merchant's own prices.

Keep an eye open for sales, too, when there are often bargains to be had. It's also worth checking online where the same items available in the store can be offered for a far cheaper price on a 'buy and collect' basis. Internet prices can also be used as a bargaining tool to tempt stores into matching the online price.

How will I know how much I need to buy?

Most builders' merchants will offer a take-off service whereby they calculate the materials you will require from your construction drawings – then of course

MIKE HARDWICK



Mike Hardwick is a self build consultant and project management specialist. He is NaCSBA's self build representative. He has first-hand experience of the process involved, and

helps to deliver a three-day self build course at Swindon's NSBRC (www.nsbrc.co.uk)

offer to sell them to you. You can also hire your own quantity surveyor (QS) who can do the calculations for you, in addition to working out labour costs, which you can then use to order your materials. A full QS service will cost you anything from £1,000-£3,000+, but it can act as a useful tool to check the validity of builders' quotations as well as informing you about your materials choices.

Another option is to let your builder or individual tradespeople buy all the materials for you using a 'supply and fix' arrangement. After all, they will know what they need to fit and when it will be required on site. The downside of this is that the builder or tradesman will usually add a mark up to the materials so he makes a profit, too. However, I would argue that this is not unreasonable if the agreed price is within your overall budget. After all, he will be using his time and resources for your benefit and may well be able to negotiate better prices that can be passed on to you, meaning it shouldn't cost too much more in the long run.

The big advantage of a supply and fix arrangement is that you minimise risk by having the right materials in the right quantity at the right time – so there is no passing the buck if work is held up for lack of a particular product. Also, there will be far less waste and returns to manage.

Supply and fix takes a huge amount of stress off you and I'd argue that, while it can be the more expensive option, this is often money well spent. As a bonus, if the builder or tradesman is VAT registered, he can deal with the VAT at his end, which means you don't have to pay the tax up front and then claim it all back, which will help your cash flow enormously.

Wastage and returns

Getting the quantities right is always a challenge, but it is better to have slightly too much rather than too little. For things like bricks and roof tiles, there will always be wastage because some items will break or need to be cut to fit, so you should over order by 5%-10% to allow for this. For reclaimed materials, make it around 20% as there will be far more breakage involved with older and fragile goods. Any surplus materials can be retained for repairs, for example roof tiles can be left to

weather at the same rate as those on the roof should a repair be needed.

The danger in ordering too much is having to pay for returns, but think how much an extra delivery will cost. If you need to order another pallet of concrete blocks for example, the cost of delivery will probably be the same as for 10 pallets, so it's more cost effective to minimise delivery charges and over-order rather than hope you've guessed right.

Lead times

Items that are being made to order, such as handmade bricks or tiles – and especially bespoke glazing units from Europe – can have an extraordinarily long lead time, so make sure you order early enough. Failure to plan ahead can result in delays to the entire project while you wait for the delivery of these critical items.

Supplier design & advice services

Providers of anything from kitchens to central vacuuming systems know that offering a free design service often means there's a good chance that they will sell their products to the client. If they can create something that hits the spot aesthetically and financially, what's not to like?

I'd suggest that you make full use of these services to find out what works best for you. However, disregard using your own local suppliers and manufacturers. For instance, a good local joiner can deliver a bespoke kitchen or staircase for a similar price to the national suppliers because their overheads are that much lower, so don't discount the hand-made option without checking first.

And finally...

From personal experience, I remember that one of the biggest challenges we faced during our self build was the sheer amount of stuff out there and the seemingly impossible number of choices that had to be made. You can't start too early doing your research and the more thought you put into what you'd like and how that fits in with your budget, the easier the task will be. If you leave yourself enough time this can be one of the most enjoyable aspects of your build, but to paraphrase the old saying; buy in haste, repent at leisure!



QUICK PRICEYGUIDE

SLIDING SASH WINDOW MANUFACTURERS

4 Bed Semi Detached 10 Sliding Sash Windows White PVC-U Sash Horns + Toughened Glass Included Compliant with Building Regs

£3200 + Vat



Medium 5 Bed Detached 24 Sliding Sash Windows Cream PVC-U **Authentic Georgian Bars** Compliant with Building Regs

£9700 + Vat



Large 8 Bedroom Detached 61 Sliding Sash Windows White Woodgrain PVC-U Authentic Georgian Bars Compliant with Building Regs

£23,000 + Vat



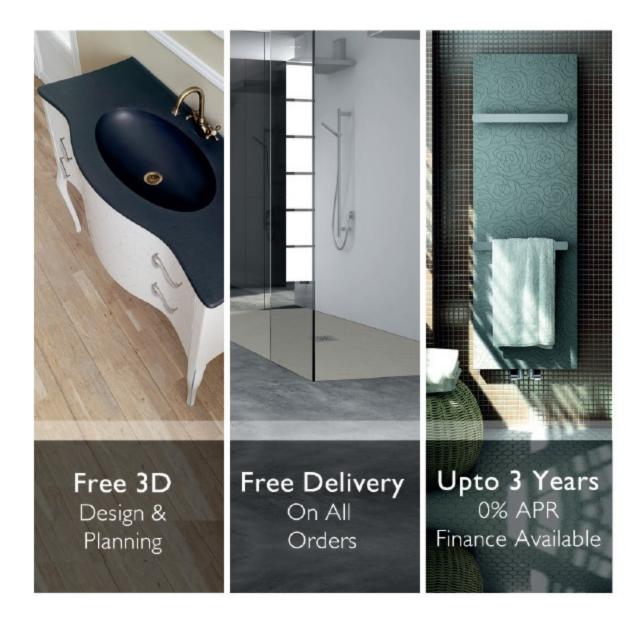
Delivering Nationwide Heaton Estate, Bradford Road, Brighouse HD6 4BW







Working with the World's 'TOP 100' bathroom brands, no other UK bathroom company can match our extensive portfolio of products and competitive pricing. Our mantra is 'Making the Desirable More Attainable' by delivering to our clients outstanding bathroom design and elite bathroom products, within your budget combined with the exceptional offer of 0% finance up to 3 years. We truly believe we stand out from the crowd in the Bathroom sector.



FOR THE ULTIMATE BATHROOM EXPERIENCE

VISIT www.designerbathroomconcepts.com sales@designerbathroomconcepts.com

SPEAK TO OUR BATHROOM EXPERTS 0845 873 4055





The UK's premier online luxury bathroom design and shopping portal.



LAUNCHING SUMMER 2014

Exclusive branded product access & trade features never seen before.



DESIGNER
FURNITURE
CONCEPTS

The UK's premier online
luxury furniture &
homeware portal.



EXPERTS

Essential advice on your problems with building, budgeting, DIY & planning from the most experienced names in the self build industry



PLANNING

Mike Dade is a land and planning specialist. He is a contributing editor of Build It, a plot hunting expert and author of books on planning and plot issues



FINANCE

Rachel Pyne is director of financial services at BuildStore (www.buildstore.co.uk). She has worked in self build finance for over 10 years and works with a diverse portfolio of lenders across the whole market as well as on exclusive self build and renovation mortgage products



BUILDING SERVICES

A site engineer, Simon Middleton is behind the 10-year structural warranty product: www.build-zone.com. Using approved inspectors from JHAi and BBS, he's able to answer questions on construction methods and Building Regulations



CONSERVATION

Douglas Kent is a chartered building surveyor and technical and research director of the Society for the Protection of Ancient Buildings (SPAB). He is responsible for the organisation's technical activities, including enquiries, publications and courses. For more details visit www.spab.org.uk



BUDGETS

Tim Doherty was the founding MD of the National Self Build & Renovation Centre and a founding member of NaSBA. He runs Dobanti Property Consultants, a specialist surveying & building consultancy providing support to the residential and commercial sectors, including surveys and site appraisals, project management, dispute resolution and custom build solutions



PROJECT MANAGEMENT

A self build consultant, project management specialist and NaCSBA's self build associate Mike Hardwick has first hand experience of the process involved and helps to deliver a three-day self build course at Swindon's National Self Build and Renovation Centre



DESIGN

Opinder Liddar is a director at lapd architects. The practice specialises in residential projects from extensions to new build, making him the ideal person to answer all your home design questions

PROJECT MANAGEMENT

Should I be worried about the cracks in my render?

Three months ago I moved into my new build house, which has been externally finished using self-coloured Tyrolean render. Diagonal cracks have started appearing from the lower corners of the window frames to the bottom of the wall. I've been told that they can't be patched successfully, rather they would need to be filled in and the entire wall painted – somewhat defeating the object of a low maintenance self-



coloured material. If this is the case then who is financially responsible: my architect for specifying the material, my builder for applying it, the manufacturer or myself? I have a warranty with a specialist provider but it hasn't been finalised yet, however, I will soon have an architect's certificate. Where do I stand?

Significant cracks are a sign that something is obviously not right. This could be down to settlement of the structure or the render drying out too quickly. If it was applied in hot weather this could cause cracks. Any repair patches will be visible, even with careful colour matching, but I agree that painting defeats the object of the exercise.

I'd arrange a meeting on site with both the architect and the builder to see if there is a way to ascertain the cause and to rectify what is clearly an unacceptable defect. I would argue that it is the builder's job to undertake this work as they should have mixed and applied the finish to the architect's specification.

If you have a structural warranty in place this would indicate regular inspections have been undertaken by the warranty provider, so I would have expected them to have spotted any latent defects. However, if this has not been finalised, they might not be interested. Check with them to see if they can help.

If all else fails, call in an independent structural engineer to assess the likely cause so you have something to support your argument.

Diagonal cracks could indicate stress rather than settlement, so it would be worth getting an independent professional opinion. You could call on the architect's certificate for redress, but to do this you effectively have to sue the architect and claim against their professional indemnity insurance, which can be long-winded.

If you haven't done so already, write to your builder expressing your dissatisfaction with the quality of the workmanship and ask them to sort it out. You must give them a reasonable period to rectify the fault. If they don't take action then I would speak to your solicitor and get them to send a letter. This should say that you will get someone else in to do the job properly and will sue for the cost, including your legal and professional fees, through the small claims court. That should be enough to spur them into action.

PLANNING

Can I complete my barn conversion using the PD rules?



I own a 1960s timber frame barn and want to convert it into a two storey, highly insulated dwelling using the new permitted development (PD) rules. I would keep the low-pitched roof line

and add solar electric and hot water panels. However, the existing timber frame is not stable enough to support these additions so I would have to create new structural support, which would no doubt expand upon the original footprint. I'm aware that there are restrictions under the PD rules as to what work I can do. Does this project sound viable?

The permitted development rights for barns are new and somewhat open ended, creating considerable doubt, for the time being at least, as to what sorts of buildings might be suitable — and how much work might be allowed to enable the conversion. Your barn doesn't sound like the sort of building that councils would generally grant permission to convert, and initially at least different authorities are likely to apply the rules with varying degrees of flexibility. With that in mind, it would be sensible to run your proposal past the council for pre-app advice, to establish whether they agree the building would be suitable and that the works you propose would fall within the various PD criteria. Bear in mind the rules are explicit in restricting the external dimensions so that any cladding added on to the exterior of the building — or solar panels, for example — would fall outside what's permitted. So you should first establish whether the building could be converted under PD, which would then provide a solid foundation for a future planning application for your suggested scheme.

PROJECT MANAGEMENT

When should we take over our shell scheme?

We are keen to self build and have heard that it's possible to purchase a project at 'shell' or watertight stage and then complete it to our own specification. What do we need to know in terms of Building Regs and contracts?

Shell construction is one of the most popular self build routes, and the stage at which you take over on the project depends on the build system. For a traditional masonry house to be watertight, the roof tiles would need to be fitted, windows and external doors in and all external walling complete. However, with a timber frame or structural insulated panels (SIPs) build, wind and watertightness can be achieved by simply erecting the frame, fitting doors and windows and covering the frame outside with a breathable membrane (ie with no roof tiles fitted and no external cladding) which offers more flexibility in terms of house style.

OF THE

MONTH

Whichever route you opt for, make sure Building Regulations inspections (and any structural warranty stage inspections) have been carried out up to the point that you take over. Building Regs won't be fully signed off until completion, however.

Consider using a free Small Works Contracts (SWC) offered by either the Federation of Master Builders (FMB) or the Joint Contracts Tribunal (JCT) – see page 84 for more on this. Assuming you are buying a masonry shell I'd suggest sitting down with the builder and agreeing what is and isn't included in the price. You should make this a part of the SWC. The important thing is for you to pay a fair price for the shell, be able to budget for the work to completion and know what needs to be done to finish the build – and what this will cost. Try to get as much of the external work included as possible.

These state-of-the-art laser tools are perfect for keen DIYers who want

These state-of-the-art laser tools are perfect for keen DIYers who want something to aid them when completing those niggling odd jobs around the home. Eliminate the risk of drilling or knocking into gas pipes and live wires with the Bosch PMD 10, worth £79.99. It will help detect these before any damage is done. You can also

before any damage is done. You can also record ceiling heights and measure in the knowledge that your calculations are correct with the new Bosch PLR 15 laser, worth £49.99. Make sure you align pictures and lay tiles with precision using the Bosch PLT 2 tile laser, worth £59.99, as your trusty assistant.

Each month, Bosch gives away a handy power tool to our question of the month writer. For your chance to win, send in your self build, renovation and DIY questions for our experts to answer to: buildit@castlemedia.co.uk





Worth

£189

ANY QUESTIONS?

Send all your self build, renovation and conversion questions to buildit@castlemedia.co.uk for our panel of experts to answer. Please note all correspondence may be published in the magazine.



JG Aura is the new heating control concept that gives complete control of your home heating from the palm of your hand.

- Smart App control at your fingertips
- Unique '4 in 1' thermostats
- Slimline design, touch sensitive control
- Energy saving
- 5 year guarantee



App available FREE for iOS, Android and Windows phones as well as your desktop computer.





Speedfit Support: 01895 425333
www.speedfitUFH.co.uk





Are you really covered?

A build, conversion, renovation or extension project is a big investment - so you need to make sure it's adequately covered. Identifying the risks you face and who is actually responsible for the works in progress is absolutely crucial, because if a loss occurs you might not be in a position financially to rectify the damage and your contractor might not be either!

Just relying on a Public Liability cover isn't always going to provide you with the protection you really need and if you are renovating or extending then Home Insurance isn't always going to be suitable either. The use of Contracts is very important and if you are exercising control of the works on site you will have responsibility under workplace health and safety law to consider as well.

At Self-Build Zone we understand the risks you face and are here to help.



Insurance Legal Contracts & Structural Warranty

www.selfbuildzone.com 0845 230 9874

Whatever type of home you're creating, we've got it covered.

Self-Build Zone is a trading style of Sennocke International Insurance Services Limited who are authorised and regulated by the Financial Services Authority.

Whole House Ventilation with Heat Recovery...



- Virtually silent operation
- Low energy DC electric motors
- Range of control options
- Acoustically insulated ducting
- Filter reduces effects of respiratory allergies
- Reduces heating bills
- Can promote conditions for improved health
- Easy to install for DIYer or professional alike
- Conforms to Building regulations
- Full installation service available



Send your plans for a FREE ventilation design quotation

...for a fresher, healthier, home

Rega's unique WhisperFlow[®] technology ensures that even when operating at full 'Boost' mode (usually during the morning bathroom rush hour!) the system remains whisper quiet - unobtrusively and effectively venting stale, damp air, replacing it with air that's been gently warmed and filtered.

Low energy DC fans, insulated ducting and a high efficiency heat exchanger also ensure that power usage and energy losses are kept to an absolute minimum.

RegaVent systems are designed and built here in the UK, to our own stringent quality assured standards, you can be sure that your RegaVent system will give you the optimum balance of a technical specification that's exactly right for the UK climate, coupled with low energy consumption - for lower heating bills!



Call us on 01767 600499 or visit www.regavent.co.uk

Rega Ventilation Limited

21/22 Eldon Way, Biggleswade, Beds SG18 8NH fax: 01767 600487 email: sales@rega-uk.com

PLOT WATCH:

Mike Dade investigates

Village life

Can the Chapmans get permission for a new energy efficient family home in a rural hamlet? Mike Dade explores their options and looks at local planning policy

WHO Chris and Pam Chapman

WHAT The Chapmans would like to build a four bedroom home on a garden plot in a small village – which used to house a small property many years ago. The council's local plan focusses on new developments in the larger towns, so the key planning question is whether building a home in this small and very rural location would be acceptable in principle

WHERE Essex

For more planning advice visit www.speerdade.co.uk



hris and Pam Chapman would like to build a four bedroom house on land owned by Chris's family. The site is part of a large garden in a small rural village. It did once have a dwelling on it, but no trace of the building remains – although there are signs of a former cess pool and an electricity connection. The settlement is really no more than a hamlet, although there's a larger village and a town within a couple of miles. Is it possible to construct a new dwelling here?

The plot

Chris's parents have an unusual garden. It extends out the back of their property in a conventional manner, but also takes in a swathe of land behind adjoining houses and then runs back to the road beyond those properties. The part fronting the road forms a wide gap in an otherwise built up area — this would be the logical location for the new house. There's an access drive off the road, which is shared with an adjoining property. The plot is home to a garage, extensive vegetable beds and fruit trees, chicken runs, a polytunnel and an old caravan (the latter is used as a shed). It's more or less level and has an open, sunny aspect.

The site sits more or less centrally within the village, which comprises a scatter of 25 or so houses along both sides of a minor road. There's a pub, small garden centre, a craft centre and an equestrian establishment, but no school or village shop. There's a bus service to the nearby town from a road about half a mile from the village.

The project

Chris and Pam would like to build a highly energy efficient home. They've no fixed ideas about design and would be happy with either one or two storeys. As the houses on each side are two storeys, then something similar would fit comfortably into the street scene. The back of the building would face south, enabling use of solar panels on the rear roof, which is ideal as they wouldn't then be seen in the traditional surroundings of the village street.

The plot is more than adequate in size for a detached family house, and the level land and absence of significant trees would make it straightforward to develop. The access drive has rather limited visibility where it joins the street, but the road has a 30mph limit and traffic calming measures at each end of the village. It would be worthwhile for Chris



If you'd like Mike Dade to cast his expert eye over a plot you're considering for your build, and flag up any

potential problems, send your details and those of your potential site to buildit@castlemedia.co.uk



and Pam to talk with the Highways Authority (HA) to ensure it would be happy with a new dwelling served by this drive.

Planning principle

The key planning question here is whether building a house in this location would be acceptable in principle. The council's local plan takes a fairly typical hierarchical approach to new housing, focussing most of it in the larger towns, with a few small towns and bigger villages earmarked for expansion – plus some smaller villages identified where limited numbers of additional houses might fit in. Chris and Pam's village is too small to register on this scale, however, so for planning purposes it is regarded as countryside.

Here, new housing is only allowed in limited situations, such as where it's needed to support a rural business, or where it's a replacement or a conversion of an existing building. There's also provision for some new affordable housing, where there's a recognised local need and where the location is well-sited in relation to shops, schools and public transport. On the face of it, the local policy doesn't look too promising.

Five year land supply

Councils must be able to show that they have enough housing land in the pipeline to meet projected demand for at least five years. This is known as a five year land supply. If the council can't show an adequate allowance, then their housing policies are deemed to be out of date. In this situation, government guidance contains a presumption in favour of sustainable development and says that

where policies are out-of-date, permission should be granted unless adverse impacts of doing so would significantly and demonstrably outweigh the benefits or specific policies in the guidance indicate development should be restricted. As it happens, the local council here does not currently have a five year land supply.

Government guidance also says that councils should avoid new isolated homes in the countryside unless there are special circumstances, including the exceptional quality or innovative nature of the design. Recent government guidance also refers to the importance of rural housing in supporting local services and businesses. It says that all settlements can play a role in delivering sustainable development in rural areas, adding that blanket policies restricting housing development in some settlements and preventing others from expanding should be avoided.

So, despite the lack of local policy support, there does appear to be a chink of light from the land supply deficit and recent government guidance. A key point though is whether a new house in this location would be considered sustainable. It could certainly be built in an eco-friendly manner, and that's what Chris and Pam intend, but the location is a little remote from services such as a local shop, school, or bus route. The village does though have other facilities and a new house would no doubt contribute towards their viability.

First steps

Because safe access is a fundamental requirement, ensuring HA would be happy with the access serving a new house would

be a sensible first step. If that comes back positive then either pre-app advice or a formal planning application could be made. Pre-app advice usually comes back negative in these situations because of the likely conflict with local policy. A formal application tends to illicit a more carefully considered response. Chris and Pam could go for outline permission, but if they make a detailed application their energy efficiency aspirations would earn them brownie points if the decision was finely balanced.

It would also be important to have the support of the local community and that might be easier to get if a specific design was put forward. People can perceive outline applications as the 'thin end of the wedge' and react against them. Time, though, is likely to be short, as councils don't like being without a five year housing land supply, so are likely to try to fill the gap as quickly as they can. If detailed plans can be obtained quickly, so much the better. If not, an outline application might be the best way forward.

Conclusions

If it wasn't for the lack of housing land locally, then the chances of success here would be very slim indeed. Even now, the location of the village is a little more remote than ideal, although the plot location within the village is fine. On balance, because this is family owned land and there's little to lose, putting in an application now would be sensible – especially before the housing land shortage eases. Local lobbying is essential and if neighbours, parish council and ideally the local borough councillor are all supportive, then the prospects for success will be enhanced.

BuildIt

Making your dream home happen

SELF BUILD + RENOVATION + EXTENSION + CONVERSION

Do you ever have difficulty getting hold of a copy of **Build It** from your newsagent?

To guarantee your issue each month, just fill in this form and take it into your local newsagent, who can then place a regular order for you. Your copy of Build It will then be held for you to collect, meaning you don't even have to search the news stand.

To make it even easier each month, why not ask if your newsagent offers a home delivery service?

Please reserve/deliver* a copy of Build It on a regular basis.

*delete as appropriate

Buildit

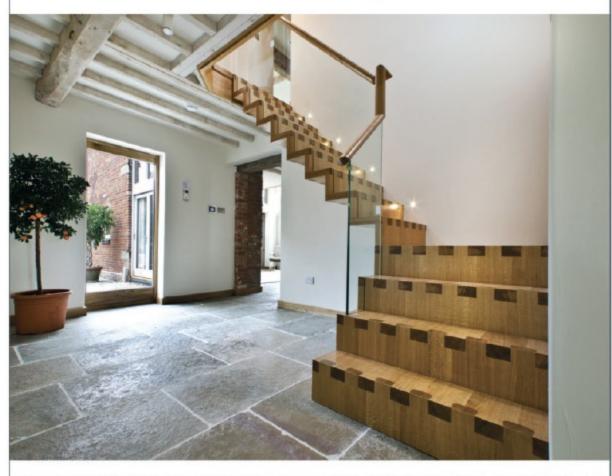


Daytime telephone number -----

Don't miss an issue. To guarantee future copies of Build It, fill in your details and hand this form to your newsagent.

MEER END

BESPOKE STAIRCASES & JOINERY



BESPOKE STAIRCASES, CURVED STAIRCASES AND ELLIPTICAL STAIRS FROM WARWICKSHIRE BASED JOINERY MANUFACTURERS MEER END

Meer End Bespoke Staircases and Joinery Manufacturers have been established for more than 20 years. But the philosophy behind the way we approach our craft is timeless. We design and manufacture high quality bespoke staircases, curved staircases and elliptical stairs.

MEER END STAIRCASES & JOINERY

St Michael Stud | Meer End Road | Meer End | Nr Kenilworth | Warwickshire | CV8 1PU Tel +44 (0)1676 534226 or +44 (0)1676 533679 | Fax +44 (0)1676 532224 | Email sales@meer-end.co.uk

www.meer-end.co.uk



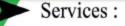
NEATWOOD HOMES LTD www.neatwoodhomes.co.uk

The Ultimate Choice In Timber Frame Construction

A company with a knowledge base exceeding 40 years of experience in the designing and manufacturing of Timber Frame Packages for the Domestic, Commercial and Leisure Markets.

> Our Dedicated Team are ready and waiting to help you with your build now !!! Flexibility, quality and personal attention at all times.





At Neatwood Homes Sales office Introduction & Guide to building your Dream Home

Computer Aided Designs (CAD) service available

Free quotation provided with detailed breakdown of costs

Supply only or supply & Erect

Extensive range of products available including PVC External Joinery

All designs individually certified by a qualified Structural Engineer

All components supplied to NHBC requirements

➤ Delivery Program to suit your Build















Unit 6, Westwood Industrial Estate, Pontrilas, Herefordshire, HR2 0EL Tel: 01981 240860 | Fax: 01981 240255 | sales@neatwoodhomes.co.uk





Home Show



The Big Green Home Show is the UK's biggest event for anyone wishing to make their home more eco-friendly.



- **FREE Seminars**
- **n** Ask the Experts FREE Consultations
- n Live Practical **Demonstrations**
- **m** Guided Tours
- n Real Life Case Studies
- **n** Over 200 Exhibitors

To claim your FREE show tickets, simply visit www.nsbrc.co.uk enter promo code BUILDIT14 together with your details and you can then download a maximum of 4 free tickets.



0845 223 4455 or Visit www.nsbrc.co.uk











Auction etiquette

Fancy a bargain? Too good to be true? Auctions are prime portals for picking up a renovation property or buying land, but do your research and make sure you know what you're signing up to, says Mike Dade



here's a bit of mystique surrounding property auctions and they're sometimes seen as the preserve of the professional investor or developer. But they offer both the promise of picking up a bargain and the risk of getting landed with something suffering insurmountable problems. The reality is that anyone can successfully buy property at auction provided they understand both the process and the potential pitfalls.

Why auction?

Property gets sold at auction for a number of reasons, usually either because it's hard to value, the vendor needs to be seen to be getting the best price, or the vendor's in a hurry and wants the certainty of a quick sale.

Properties with problems, such as houses in poor condition, contaminated land or plots saddled with restrictive covenants, can be hard to value accurately. In these cases an auction is a good way to flush out what the

market would pay for such properties. However, because of this, some people believe that if a property is sold at auction then there must be something wrong with it. This isn't necessarily the case, as charities, trusts and some public bodies have to be seen to be getting the best possible price for property assets they sell and auction achieves just that. Mortgage lenders flogging repossessions and others seeking a quick and certain sale tend to sell at auction too. Finally, unusual

properties like chapels or water towers that are also hard to value, may well turn up at auction.

Auctions are not just beneficial to sellers. From a buyer's point of view you avoid uncertainty over things like gazumping and delays caused by chains of purchasers. You also have the comfort of knowing that, if you are successful, you've only paid just over somebody else's best bid. The whole bidding process is transparent, unlike a normal, so-called 'private treaty' sale.

Auction basics

From a purchasers' point of view, the auction process starts with the publication of an auction catalogue

auction. Alternatively, if it doesn't sell in the auction room, you can make an offer after the process finishes.

First steps

There are a few key things you should do if you're intending to buy at auction. First, you need to have a solicitor lined up, and possibly a surveyor if you're purchasing a building – so you can get the necessary professional inputs in good time before the auction date.

If buying a plot or property for conversion, you might also need a planning consultant or an architect to advise on suitability and likelihood of gaining permission for what you want to build. Importantly you must have your

realistic budget, so you go into the auction with a clear ceiling bid in your head. Bear in mind that guide prices can be set low to entice buyers. You also need to talk to your lender about the project and ensure you have the required deposit and funds to hand, and the money available to complete at the prescribed time after the auction.

At the auction

You'll need to register your intention to bid, either in advance or at the auction. Take along ID to meet the auctioneer's requirements, plus the means to pay the deposit. You should sit where you can clearly see the auctioneer, and he or she can see you. The very front of the room might seem sensible, but from there you can't see who else is bidding, at least not without getting a cricked neck. It's not unusual to find serious bidders either at the back or sides of the room where they can see what's going on.

When bidding, make a clear sign by raising your hand or waving a copy of the auction particulars. Some auctions use numbered cards or paddles, which you pick up when you register.

Twitching eyebrows might work in the movies but are unlikely to impress an auctioneer. Note that properties are often offered with a reserve price. The auctioneer might indicate when the bids have reached it.

You can make bids by telephone, send someone to bid for you, or put a written bid in to the auctioneer before the event, although these things must be agreed with the auctioneer in advance. Bidding is exciting, and excitement can result in bidders getting carried away. Know your limit and stick to it.

If you're successful, there'll be paperwork to sign, a deposit and buyer's premium to pay, plus insurance to arrange as you'll be liable for the property from the moment you are contracted to buy. You should notify your solicitor immediately, too, as the deadline for completion may be short.

To conclude, buying at auction, perhaps counter intuitively, is not for the impulsive or spontaneous. Rather, it's ideally suited to those who are methodical researchers and tight budgeters. The latter can sort the genuine bargains from the problem properties and, with a bit of luck, secure them for a favourable price.

The whole bidding process is transparent, unlike a conventional private sale ***)

detailing the properties to be sold. This includes guide prices, information and terms for purchasers, and importantly, the auction time, date and location. There should also be a link to a legal pack setting out the details of the title and any restrictions, plus any planning details – this is essential reading!

At the auction itself, the fall of the hammer marks an exchange of contracts, triggering the need to pay a deposit plus buyer's premium there and then. Make sure you check what the buyer's premium is with the auction house in advance. The sale then completes at a prescribed date after the shortly auction, probably 28 days but it can be less.

The key point to reiterate is that a successful bid is a successful purchase; once the hammer falls, you are committed to buy. It's worth knowing too, that you might be able to make an offer and secure a property before an

source of finance secured and the deposit ready to be paid on the auction day if you bid successfully.

Before the auction

Keep close tabs on where and when auctions are coming up in your area. With limited time between the publication of the catalogue and the sale itself you can't afford to be a latecomer. Attend a few auctions if you can, to get a feel for how they operate, and read the conditions of sale in a few catalogues to ensure you understand all the small print.

Assuming you find a likely looking property in a directory, arrange a viewing as early as possible. If it's a house for refurbishment or property to convert, get a surveyor or builder to come with you to assess its condition. If it's a plot, find out all you can from the agents about the planning permission and look at the council's website to see the site's history.

There's obviously no time to get planning consent for your own design, but you might be able to get pre-app advice from the council. Alternatively, discuss prospects for success with a planning consultant. Pass the legal pack on to your solicitor and be sure they're happy with all aspects of it.

Assuming the property appears to meet your needs, you must draw up a

MIKE DADE



Mike Dade is a land and planning specialist, and Build It's plot guru. He's one half of Speer Dade Planning Consultants and the author of several must-read books on plots and planning

Plotsean Buildstore

Begin your project today:

join Britain's BIGGEST online database of plots, renovations and conversion opportunities!



- Over 9,000 opportunities updated daily from thousands of information sources
- Search by county, town or postcode
- Receive email alerts as soon as new opportunities go online
- Choose from our range of great value subscriptions
- Full subscription refund when you complete a mortgage with BuildStore
- Share your 'BuildStory' with us & we'll send you a bottle of champagne!

And listings aren't all we do...

Custom Build Register

The nation's self builder register!

Custom Build is the new way to create your own home – a completely flexible way to get the house you've always wanted & save money:

- Fully serviced plots on exclusive sites
- Hands-on, self finish or turnkey solutions
- Trade sharing & bulk ordering to save you ££!

www.custombuildregister.co.uk

Practical Site Assessment

Don't let a bad plot ruin your build

Practical Site Assessments are back by popular demand, providing all the relevant checks & information you need to know before deciding if a plot is right for your project:

- Personal site visit by industry expert
- Full written report & site photographs

0845 223 4445

JOIN TODAY! www.plotsearch.co.uk



The plots collated here are a hand-picked selection taken from the 10,000 sites that are listed on the PlotSearch database (there are hundreds more site details available at www.plotsearch.co.uk).

To get access to the full list, you can take out an annual subscription to PlotSearch for £35 (or pay £20 for three months). If you'd like to find out more about the service call 0870 870 9994 or log on to www.plotsearch.co.uk

ENGLAND

East

Bedfordshire

Bedford, Marsh Leys, Woburn Road, Kempston, 1 Plot with DPP for the construction of two unique barn style properties. Both barns are approximately 1,500ft². Guide price £250,000. Taylor & Co 01234 855875. PS-id: 121689.

Bedford, How End Farm, How End Road, 1 Conversion with planning application lodged to convert to a residential dwelling. Guide price £300,000. Taylor & Co 01234 855875. PS-id: 122009.

Cambridgeshire

Chatteris, Huntingdon Road, 1 Plot with OPP for the construction of a detached house in an excellent location, close to local amenities. Guide price £60,000. Ellis Winters 01354 694900. PS-id: 120083.

Ely, Mildenhall Road, Littleport,

1 Plot with OPP for the construction of two detached properties. Offers over £140,000. William H Brown 01353 663311. PS-id: 120411.

Huntingdon, 16A Roman Way, Perry, 1 Plot with DPP for the construction of a three bedroom detached house. Guide price £79,995. Thomas Morris 01480 403020. PS-id: 122624.

Essex

Hornchurch, Nelmes Road, 1 Plot with DPP for the redevelopment of the exisiting building. Guide price £940,000. Davis Estates 01708 476666. PS-id: 120000.

Maldon, Former Coal Yard, Maln Road, Mundon, 1 Plot with DPP for the construction of a single house. Guide price £950,000. Curtis O'Boyle 01621 855558. PS-id: 122147.

Potters Bar, The Ridgeway,

1 Renovation with DPP for the modernisation and the extension of the existing dwelling. Guide price £2,800,000. Statons Estates 020 8440 9797. PS-id: 122291.

Saffron Walden, The Wheelhouse, Middle Street, 1 Plot with DPP for the construction of two, four bedroom houses with garages and gardens. Guide price £500,000. Mullucks Wells 01279 755400. PS-id: 122296.

Hertfordshire

Hitchin, Fontley, Weston, 1 Plot with OPP for the construction of a 7,000ft², classical-style mansion with leisure centre. Granny accomodation and oak framed au pair house have already been built on site. There is a large office space already in existence in barn conversion. Guide price £3,500,000. Lucie Wood (private seller) 07971 227338. PS-id: 121474.

Letchworth Garden City, Adj to 37 Kimberley, 1 Plot with DPP for the construction of a three bedroom detached dwelling with off road parking. Letchworth Garden City, most commonly known as Letchworth, is a former civil parish town located within Hertfordshire and is one of the world's first new towns and the first garden city. Guide price £150,000. Connell Estate agents 01462 685271. PS-id: 122336.

Tring, Bulbourne Road, 1 Plot with DPP for the construction of two substantial properties. Much of the surrounding area is designated as an area of outstanding natural beauty with many superb walks such as The Ridgeway. Offers in the region of £1,500,000. Cesare & Co 01442 827000. PS-id: 122665.

Norfolk

Sporle, Highview, 1 Plot with DPP for the construction of an individual build design that will establish rural feel. This plot is in an elevated postion with open field views and is fully serviced. Guide price £175,000. Gent Consultancy 07796 333398. PS-id: 119688.

Swaffham, Necton, 1 Plot with OPP for the construction of a single property. An individual corner building plot, conveniently situated in the centre of this highly sought after West Norfolk village. Offers over £90,000. Revell Independent Estate Agents 01760 720909. PS-id: 122609.

Norwich, Thorpe St. Andrew, 1 Plot with DPP to build a detached family house in excess of 6,000ft² with garage and swimming pool. The site is located in Thorpe St. Andrew, a popular suburb of Norwich offering easy access to both Norwich station and the town centre, as well as easy access out of town with the A47 under two miles away. Offers over £575,000. Jackson-Stops & Staff 01603 612333. PS-id: 120049.

Suffolk

Woodbridge, Old Post Office Lane, 1 Plot with DPP for the construction of four detached/semi-detached houses. Guide price £250,000. William H Brown 01362 699999. PS-id: 119991.

South East

Berkshire

Maldenhead, Stonehouse Lane, Cookham, 1 Plot with DPP for the demolition of the existing property and the construction of a five bedroom home. Guide price £1,900,000. Savills 01753 834600. PS-id: 122664.

Reading, Bridle Road, Whitchurch Hill, 1 Plot with DPP to build a detached house in a delightful semi-rural location and tranquil setting. Guide price £250,000. Davis Tate 0118 984 5333. PS-id: 121068.

Buckinghamshire

Milton Keynes, Stratford Road, Cosgrove, 1 Plot with DPP for a residential property on the site that was originally the village Post Office. Guide price £279,995. Brown And Merry 01908 562011. PS-id: 122158.

Greater London

London, Barnet Lane, 1 Plot with DPP for the demolition of the existing dwelling and for the construction of a new house. It is set on a good size plot in an exclusive location. Barnet Lane provides convenient access to the open spaces of Totteridge Green and Totteridge Common. Guide price £2,200,000. Statons 020 8445 3694. PS-id: 120864.

London, Crediton Hill, 1 Conversion with no planning required for the change of use of the existing building into a residential dwelling.

The current premises are being used as a habitable artist's studio space, which enjoys wonderful setting that offers views of the 10 acres of cricket ground and its two tennis clubs. Guide price £1,499,999. Abacus Estates 020 7431 3777. PS-id: 122329.

Hampshire

Isle of Wight, 2 Parkhurst Road,
Newport, 1 Plot with DPP for the
development of a terrace of three,
two bedroom houses with gardens.
Access to the properties will be
pedestrian only, although there
is an option for vehicular access
subject to gaining the necessary
planning consent and purchasing
a section of land from the
neighbouring property. Guide price
£120,000. Hose Rhodes Dickson
01983 527727. PS-id: 119844.

Inverness, Plot 2, Gorthleck, 1 Plot with DPP for the construction of a residential property. There are four plots available. The sites range in size from 1 acre to 2.4 acres and are fully serviced. Guide price £95,000. Macleod and MacCallum 01463 235559. PS-id: 122650.

Newport, Isle of Wight Clifford Street, 1 Plot with DPP for a detached one bedroom house. Guide price £39,750. Fox Property 01983 524000. PS-id: 121552.

Kent

Sittingbourne, Plot 2, Bottles Lane, Rodmersham, 1 Plot with DPP for to build a substantial four bedroom detached live/work property extending to approximately 4,520ft². Guide price £375,000. Quealy and Co 01795 429836. PS-id: 122003.

Swanley, Swanley VIIIage Road, 1 Plot with DPP for the construction of a three bedroom detached house with parking located in the heart of Swanley Village. This site is in a sought after location. Guide price £125,000. Robinson Jackson 01322 666444. PS-id: 122167.

Oxfordshire

Banbury, Millers Lane, Hornton, 1 Plot with DPP for the construction of two large executive family dwellings. This plot is situated within a highly sought after village location in a picturesque North

ABBREVIATIONS

OPP: Outline
Planning Permission
DPP: Detailed
Planning Permission

Oxfordshire village, which is protected by a conservation order in place since 1988. Guide price £380,000. Mark Andrews (private seller) 07881 916997. PS-id: 120875.

Didcot, Mereland Road, 1 Plot with DPP for the construction of a pair of detached three bedroom houses. Guide price £275,000. Thomas Merrifield 01865 515000. PS-id: 122668.

Faringdon, Sandshill, 1 Conversion with DPP for the change of use of the existing building into three dwellings. Currently set up as an office and showroom to serve the vendor's business, along with a two bedroom first floor flat. Guide price £395,000. Perry Bishop & Chambers 01285 646770. PS-id: 122663.

Surrey

St. Leonards-on-Sea, 228 Harley Shute Road, 1 Plot with DPP for the construction of a five bedroom detached house. Guide price £195,000. John Ellman-Brown (private seller) 01273 311495. PS-id: 120787.

Sussex

Horsham, Brooks Green, 1 Plot with DPP for the construction of two substantial detached country dwellings. Guide price £1,200,000. HJ Burt and Son 01903 879488. PS-id: 121999.

St. Leonards-on-Sea, 817 The Ridge, 1 Plot with DPP for the construction of two large detached houses with garden. Included in the sale is a four bedroom detached and a five bedroom detached property with a two bedroom annex. Guide price £940,000. Terry Connolly (private seller) 01424 757883. PS-id: 121198.

South West

Cornwall

Bodmin, Bodiniel Road, 1 Plot with lapsed planning for a three bedroom house. The vendors have applied for renewal of the consent and will provide this as a condition of the sale. Guide price £87,500. Webbers Property Services 01208 73298. PS-id: 119835.



Camborne, North Roskear, 1 Plot with DPP for the construction of a three bedroom detached home with garage, parking and garden. Guide price £55,000. Fulfords - Land and Planning 01392 813300. PS-id: 120927.

Truro, Goonvrea, Perranarworthal, 1 Plot with DPP for the construction of a single dwelling of just over 107m² with garage. The plot is within an easy drive of Falmouth. Guide price £75,000. Lodge and Thomas Estate Agents 01872 272722. PS-id: 120435.

Devon

Torquay, Plot 2, 1 Plot with DPP for the construction of a two storey contemporary detached house with four bedrooms. This large building plots extend to approximately 0.88 acres. Guide price £275,000. Fulfords - Land and Planning 01392 813300. PS-id: 119469.

Torrington, Church Lane, 1 Plot with DPP for the construction of a two storey detached property with off street parking. Guide price £60,000. Webbers Property Services 01805 624334. PS-id: 122684.

Dorset

Poole, Harbour View Road, 1
Plot with planning applied for the construction of three dwellings in established residential area with excellent road links. Guide price £700,000. Arlington & Hall Ltd, Poole 01202 744944. PS-id: 122672.

Poole, North Road, 1 Plot with OPP for the construction of three detached dwellings in an established residential area with access to all local amenities. Guide price £650,000. Arlington & Hall Poole 01202 744944. PS-id: 122673.

Shaftesbury, Paddock Close, 1 Plot with DPP for the construction of two dwellings with garages and gardens. Guide price £325,000. Symonds & Sampson 01258 473766. PS-id: 121085.

Swanage, South Instow, 1 Plot with DPP to extend and convert the existing building into a four bedroom dwelling measuring approximately 196m². Guide price £600,000. Goadsby 01929 425055. PS-id: 122445.

Gloucestershire

Mitcheldean, Townsend, 1 Plot with DPP for the construction of one property with garage. The plot is located in the popular village of Mitcheldean. Guide price £85,000. Dean Estate Agents 01594 835751. PS-id: 121780.

Stroud, Church Road, Randwick, 1 Plot with DPP for the construction of a detached house with garage. The design of the new dwelling takes into account the sloping nature of the site and we are advised that it has been arranged over a series of levels. Offers over £280,000. Parkers Estate Agents 01453 763542. PS-id: 120181.

Somerset & Avon

Taunton, 1 Combined with DPP for the renovation of a large 4,000ft² house and the change of use of agricultural buildings to large family homes. The property is situated in an attractive village location, with views across The Quantocks. Guide price £750,000. The Land Bank Partnership 07976 104751. PS-id: 122126.

Wiltshire

Wylye Valley, Former George Hotel
- Plot 1, High Street, 1 Conversion
with OPP for the conversion
of part of the former George
Hotel into a two/three bedroom
property. Preparatory works already
completed on this excellent period
building. £Offers. Edward Toomer
(private seller) 01420 563625.
PS-id: 120483.

North East

Durham

Trimdon Station, Trimdon Colliery, 1 Plot with DPP for the construction of three detached dwellings with integral double garages. Guide price £200,000. Robinsons Chartered Surveyors 01740 621777. PS-id: 122510.

Wingate, Former Fir Tree Inn - Plot 3, Durham Road, 1 Plot with DPP for the construction of a five bedroom detached house with a double garage. The seller will consider selling the whole site. Offers in the region of £65,000. Euro Property Management 07814 936580. PS-id: 120610.

Northumberland

Newcastle upon Tyne, Western Way, Ponteland, 1 Plot with DPP for the construction of a large dormer style house. A quaint bridge gives access over the River Pont towards the rear of the site, which then leads to landscaped gardens. Guide price £650,000. Trading Places 01661 820082. PS-id: 121569.

Seahouses, plot 3, North Sunderland, 1 Plot with DPP for the construction of a three bedroom dormer bungalow. Guide price £120,000. George F White 01665 603581. PS-id: 120196.

Wooler, Milfield, 1 Plot with DPP for the construction of a 1.5 storey house. The site is tucked away in a secluded position within this quiet and sought after cul-de-sac location in Milfield. Offers in the region of £100,000. Michael Aitchison and Partners 01668 281819. PS-id: 121083.

Tyne & Wear

Ryton, Prospect Cottage, The Folly, Greenside, 1 Combined with DPP for the construction of a detached six bedroom property. Guide price £200,000. George F White 01388 527966. PS-id: 120775.

North West

Cheshire

Sandbach, Moss Bridge Cottage, Moss Lane, 1 Plot with DPP for a detached two storey, four bedroom house. Guide price £225,000. Artie Chalmers (private seller) 07970 151996. PS-id: 120581.

Cumbria

Ulverston, Nr Vale Vlew, Pennington, 1 Plot with OPP for the construction of two detached properties. This superior building plot is on the village outskirts enjoying open countryside views and a good sized garden. Guide price £375,000. Corrie & Co 01229 525333. PS-id: 120101.

Lancashire

Wigan, Durham Street, 1 Plot with OPP for to build a detached family home in the popular area of Whelley Guide price £40,000. Ashtons Estate Agency 01942 498862. PS-id: 122197.

Merseyside

Wirral, Plot 1, Croft Drive West, 1 Plot with DPP for the construction of a residential dwelling. This is an exciting opportunity to purchase a prime building plot of 1 acre. Guide price £900,000. Clive Watkin Partnership 0151 625 0900. PS-id: 119699.

Yorkshire

Yorkshire East

Scunthorpe, Plot 2, Broadford House, High Street Eastoft, 1 Plot with OPP for the construction of a three/four bedroom detached house. Offers over £30,000. Springbok Properties 0800 068 4015. PS-id: 120444.

Malton, 41 Westgate, Rillington, 1 Combined with OPP for the change of use of a substantial brick barn into a four bedroom dwelling and the construction of two residential houses. £Offers. Cundalls 01653 697820. PS-id: 119796.

Yorkshire North

Whitby, Stakesby Road, 1 Plot with DPP for the construction of a residential property. The plot is slightly elevated above the road – it's the original embankment for the railway line running from Whitbys old Westcliff station towards Scarborough. Offers in the region of £135,000. Richardson & Smith 01947 602298. PS-id: 122099.

Yorkshire South

Sheffleld, Cooper Lane,
Hoylandswalne, 1 Plot with DPP to
build an outstanding contemporary
eco-house in a sought after
location. The house will have
spacious open plan living areas and
integral triple garage with scope for
private landscaped gardens. Offers
over £500,000. England Residential
01484 842105. PS-id: 120493.

East Midlands

Derbyshire

Swadlincote, 149 Woodville Road, Overseal, 1 Plot with OPP for the construction of three residential properties including the provision of access and turning area. Offers in the region of £200,000. Paul Carr Estate Agents 0121 353 9200. PS-id: 121204.

Leicestershire

Leicester, Main Street, Desford,

1 Plot with DPP for the construction of three houses with garage and parking areas. The plot is set within a conservation area of Desford, which is the old part of this picturesque village. Guide price £375,000. Connells Estate Agents 01455 230523. PS-id: 120315.

Lincolnshire

Tupholme, Low Road, 1 Plot with DPP for the demolition of the exisiting bungalow and the construction of a new dwelling. Guide price £165,000. Perkins George Mawer and Co 01673 843011. PS-id: 120984.

Northamptonshire

Northampton, Harlestone Road, Church Brampton, 1 Plot with DPP to build a detached family home. A superb location in the pretty village of Church Brampton overlooking undulating countryside and the village church. Guide price £500,000. Carter Jonas 01604 608200. PS-id: 121347.

Wellingborough, 5 Townwell Lane, Irchester, 1 Plot with DPP for the construction of a detached three bedroom house. This is an individual building plot situated in a secluded location in this popular village nearby to Wellingborough and Rushden. Guide price £122,500. Simon Musto 01536 522155. PS-id: 121566.

West Midlands

Hereford

Leominster, Manor Farm, 1 Conversion with DPP for the change of use of these traditional agricultural buildings into four new detached dwellings. The buildings are arranged around a traditional farm courtyard and are of principally brick, stone and half timbered construction. Guide price £375,000. Brightwells 01432 343800. PS-id: 121135.

Shropshire

Whitchurch, Burleydam Road, Ightfield, 1 Plot with DPP for the construction of four detached houses and three garages with associated parking. Guide price £290,000. Balfours 01743 353511. PS-id: 121854.

Staffordshire

Stoke-on-Trent, Watlands Road, Bignall End, 1 Plot with DPP for to construct a two/three bedroom detached dormer house. The permission granted is for a property comprising entrance hall, study/bedroom, lounge, dining kitchen and W..C. Guide price £69,000. Stephenson Browne Estate Agents 01270 883130. PS-id: 119950.

Warwickshire

Shipston-on-Stour, Green Lane, 1 Plot with DPP for a two storey, three bedroom family house with garden and off road car parking. Guide price £215,000. Seccombes 01608 663788. PS-id: 122172.

West Midlands

Wolverhampton, Rear of 1-5 Baylls Avenue, 1 Plot with OPP for the construction of three detached bungalows. Ashmore Park is a popular development within the area of Wednesfield. Offers in the region of £180,000. Connells 01902 710170. PS-id: 120456.

Worcester

Worcester, Westfield Barn, Main Road, Hallow, 1 Plot with DPP for a single storey dwelling. Guide price £178,000. G Herbert Banks 01299 896968. PS-id: 120511.

WALES

Carmarthenshire

Llanybydder, Church Vlew, Llanwenog, 1 Plot with DPP for the construction of a large dormer style property. Offers in the region of £99,500. John Francis Estate Agents 01570 422846. PS-id: 121505.

Pencader, 1 Plot with DPP for the construction of one house and two bungalows. Guide price £150,000. Evans Bros 01570 422395. PS-id: 119773.

Ceredigion

Aberystwyth, Pengeulan, 1 Plot with OPP for the restoration of a dwelling, and change of use of farm buildings. Guide price £245,000. Aled Ellis and Co 01970 626160. PS-id: 120001.



Conwy

Llandudno, 100 Penrhyn Beach East, Penrhyn Bay, 1 Plot with DPP for the construction of a luxury contemporary dwelling with a balcony. Guide price £275,000. Mr Brian Davies (private seller) 01492 583900. PS-id: 119702.

Flintshire

St. Asaph, 1 Plot with DPP for the construction of a three bedroom detached property within the heart of St. Asaph and overlooking Gemig Street, the property offers vehicular access from the High Street. Guide price £62,000.

Jones Peckover 01745 812127.
PS-id: 119692.

Mold, Tristernaugh, Main Road, New Brighton, 1 Plot with OPP for the construction of a four bedroom dormer bungalow. The village of New Brighton has sports ground, good access to schools and good public transport links. The historic market town of Mold is a short distance away. Guide price £125,000. Town & Country 01352 750501. PS-id: 122281.

Glamorgan

Swansea, Land Adj to 26
Bryntywod, Llangyfelach, 1 Plot with DPP for the construction of a detached property situated in a sought after village. It's ideally placed for access to the M4, Morriston hospital and the city centre of Swansea. Guide price £74,950. Clee Tompkinson & Francis 01792 795727. PS-id: 121814.

Gwent

Monmouth, Manor Wood Cottage, The Narth, 1 Plot with DPP for the construction of one house. From the front of the site the grounds fall gently towards the rear with a frontage to a village lane. The land extends to the rear behind several neighbours. The plot will have both mains water and electricity made available. Guide price £300,000. Parry's Property 01600 713030. PS-id: 121494.

Newport, adJ 1 Church Crescent, Coedkernew, 1 Plot with DPP to construct one property, subject to conditions. Full Building Regulations have been obtained to construct a three or four bedroom detached family house with detached garage. Guide price £140,000. Kelvin Francis 029 20766538. PS-id: 120783.

Gwynedd

Llannerch-y-Medd, High Street, 1 Plot with OPP for the construction of two Bungalows plus two detached houses. Offers in the region of £120,000. Dafydd Hardy Estate Agents 01286 677774. PS-id: 119770.

Mynytho, Nr Abersoch Finnish Village, 1 Plot with OPP for the construction of a two storey, four bedroom wooden chalet for holiday use. Philip Martyn-Smith (private seller) 01905 621569. PS-id: 119809.

Pembrokeshire

Pembroke, Lower Lamphey Road, 1 Plot with OPP for the construction of detached bungalows. Guide price £105,000. John Francis Property Services 01646 685577. PS-id: 122579.

Powys

Welshpool, Watergate Street, Llanfair Caereinion, 1 Renovation with no planning required for the refurbishment of the existing end of terrace two storey, two bedroom house with solid fuel room fire and good sized terraced gardens to the rear it features a pleasant rooftop views. The property is within walking distance of amenities and is approximately eight miles west of Welshpool. Guide price £65,000. Parry Lowarch 01743 343343. PS-id: 119484.

Wrexham

Wrexham, Brymbo Road, Bwlchgwyn, 1 Plot with OPP for the construction of three detached dwellings. Guide price £150,000. Reeds Rains 01978 368000. PS-id: 119718.

Wrexham, Temperance Road, Southsea, 1 Plot with DPP for the construction of three detached houses with garages and gardens. Guide price £150,000. Wingetts 01978 353553. PS-id: 119769.

SCOTLAND

Aberdeenshire

Peterhead, Monyruy, Longside,
1 Plot with DPP for the construction
of a single detached dwelling
located within the former walled
garden of Monyruy. It offers the
opportunity to build a substantial
house within a unique location. Most
of the boundaries are enclosed by
the former stone wall and would
offer considerable privacy and
shelter. Offers in the region of
£80,000. Stewart and Watson 01771
622338. PS-id: 120625.

Strathdon, Cottown West, 1 Plot with DPP for the construction of a detached dwelling. The plot occupies a sought after position overlooking the River Don. Offers over £75,000. Ledingham Chalmers 01224 632500. PS-id: 120635

Angus

Brechln, Hoodston Farm, 1 Plot with DPP for the construction of a single house and garage. Offers over £75,000. Blackadders 01307 461234. PS-id: 120066.

Forfar, West Hemming Street, Letham, 1 Plot with DPP for the construction of a single house. Forfar is close by and Aberdeen is within easy travelling distance. Offers in the region of £78,000. Remax Town & Country 01738 565800. PS-id: 121668.

Kirrlemuir, Pierhead, 1 Plot with OPP for the construction of a single storey property. This is a rare opportunity to purchase a generous building plot within the town centre of Kirriemuir. Offers over £60,000. Blackadders 01307 461234. PS-id: 120060.

Argyll & Bute

Oban, Balnagowan - Plot 1, Kilmore, 1 Plot with DPP for the construction of a four bedroom house. The plots are situated in Glen Feochan, Kilmore approximately 4.5 miles south of Oban. Offers in the region of £75,000. Bell Ingram 01631 566 122. PS-id: 120187.

Oban, Plot 2, Morvern, 1 Plot with OPP for the construction of one residential property. Guide price £35,000. MacPhee & Partners 01397 702200. PS-id: 121310

Avrshire

Isle of Arran, Silverhill, Whiting Bay, 1 Plot with Lapsed Planning for the construction of a one and a half storey property in an elevated position. Offers in the region of £95,000. Arran Property (Miller Stewart) 01770 302139.
PS-id: 121805.

Borders

Newcastleton, North Hermitage Street - Plot 1, 1 Plot with OPP for the construction of a residential dwelling. Two residential building plots providing a rare opportunity to build your own house in the attractive village of Newcastleton. Guide price £75,000. Edwin Thompson 01896 751300. PS-id: 121294.

Selkirk, Midlem, 1 Plot with DPP to build a contemporary detached four bedroom family home. This impressive plot extends to approximately 0.25 acres and situated on an elevated site. Fixed Price £90,000. Rettie & Co 01896 824070. PS-id: 122625.

Dumfries & Galloway

Lockerble, Victoria Road, 1 Plot with OPP for the construction of two detached houses. Offers over £125,000. Henderson and Mackay 01576 202137. PS-id: 122016.

Lockerble, Waterbeck, 1 Plot with OPP for the construction of three detached bungalows. Guide price £145,000. Harper Robertson and Shannon 01461 203418.
PS-id: 119779.

Fife

Dunfermline, Low Causeway, Culross, 1 Plot with DPP for a two storey detached house with detached double garage. Fixed Price £65,000. Morgans 01383 620222. PS-id: 121806.

Leven, 69 Leven Road, Lundin Links, 1 Plot with Plan Appl. Lodged for the construction of two properties. Guide price £300,000. Richard Sanders 07780 995180. PS-id: 121902.

Greater Glasgow

Glasgow, Drumbeg Loan, Killearn, 1 Plot with DPP for the construction of a detached villa in a good location. Offers over £200,000. G and S Properties 0141 942 9090. PS-id: 120757.

Helensburgh, Rahane, 1 Plot with OPP for the construction of two residential properties. £POA Rettie & Co 0141 248 4160. PS-id: 122481.

Johnstone, North Street, Houston, 1 Plot with DPP for the construction of a substantial detached, modern villa with double garage. This generously proportioned plot was formerly the low garden of Houston Cottage and is positioned on North Street within the conservation area of the village. Guide price £110,000. Corum Estate Agents 01505 691400. PS-id: 120685.

Highlands

Strathcarron, 44 Ardaneaskan, Lochcarron, 1 Plot with DPP for the construction of a detached residential dwelling. It is approximately five miles from the popular west coast village of Lochcarron site. The site extends to approximately 0.49 acres and enjoys a tranquil rural setting in the Highlands. Guide price £98,000. The Macleod and MacCallum 01463 235559. PS-id: 119245.

Lanarkshire

Glasgow, Newlands Road - Plot 4, East Kilbride, 1 Plot with DPP for the construction of a detached villa. An opportunity to create a dream home that would be unique in character. Offers in the region of £100,000. Scottish Property Centre 01698 843132. PS-id: 119936.

Lothian

Musselburgh, Lot 2, Drummohr House, 1 Plot with OPP for the construction of four residential dwellings. Guide price £275,000. DTZ Debenham Thorpe 0131 222 4500. PS-id: 121016.

Moray

Kelth, Oxhill Farm, Newmill, 1 Plot with DPP for the construction of a house. Offers over £69,000. Stephen and Robb 01542 887405. PS-id: 120623.

Perth & Kinross

Auchterarder, Rossle Place - lot 1, 1 Plot with Lapsed Planning for the construction of two dwellings. The property is located in a well established residential location within walking distance of Auchterarder town centre. Offers over £62,500. Bidwells 01223 841841. PS-id: 121954.

Blairgowrie, Bankhead of Alyth -Plot 2, Alyth, 1 Plot with DPP for the construction of a substantial house. Offers over £95,000. Condies 01738 441124. PS-id: 121269.

Stirling

Falkirk. Glen Brae, 1 Plot with DPP for the construction of a very large house with attached triple garage and a large self contained flat above. Offers over £145,000. Frank Barr (private seller) 07742 956560. PS-id: 121522.

Stirling, Biairlogie Kirk, Biairlogie, 1 Conversion with DPP for the change of use of the former church into a unique home. Offers over £160,000. Property Bureau 01786 464449. PS-id: 122047.

NORTHERN IRELAND

Antrim

Ballymoney, Ballynarry Road, Derry Kelghan, 1 Plot with DPP for the construction of a detached 2,500ft² chalet bungalow. Offers over £79,500. Armstrong Gordon and Co 028 7083 2000. PS-id: 122455.

Armagh

Cralgavon, Killycomain Road, Portadown, 1 Plot with DPP to construct a modern architect designed home. Guide price £125,000. Michael Hannath Estate Agents 028 3839 9911. PS-id: 120449.

Down

Banbridge, 42 Poyntzpass Road, Loughbrickland, 1 Plot with OPP for the construction of a replacement dwelling. £Offers. Shooter Property Services 028 3026 0565. PS-id: 119307.

Dromore, adj 18 Drumaknocken Road South, 1 Plot with OPP for the construction of a stylish chalet style property. Guide price £50,000. Bill McCann Estate Agents 028 9266 6222. PS-id: 119472.

Londonderry

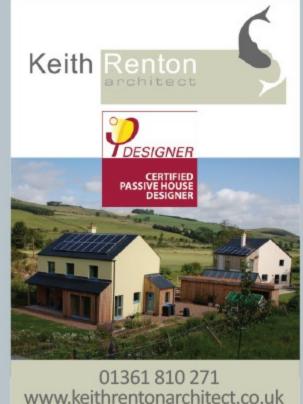
Coleraine, adj 138 Moneydig Road, Kilrea, 1 Plot with OPP for a detached property. Guide price £67,500. Burns & Co 028 7964 2271. PS-id: 119259.

Limavady, 18 Main Street, Ballykelly, 1 Plot with lapsed planning for four properties. The sale includes a bungalow. Guide price £124,950. O'Connor Kennedy Turtle 028 70344244. PS-id: 120371.



Making your dream home happen

Your essential guide to choosing quality products and services for your new home



www.keithrentonarchitect.co.uk

Antique Buildings Limited The Leading Company in the UK specialising in ancient oak framed buildings We have immense stocks of: Ancient Oak Beams . Ceiling Joists Bressumers • Wide Oak Floorboards Handmade Bricks • Peg and Nib Tiles Terracotta Floor Tiles . Yorkstone Paving

+44 (0) 1483-200477 www.antiquebuildings.com









Open 7 days Delivery - buy back from £500 Tel: 01299 878872/877577

GIVE YOUR HOME A MODERN MAKEOVER WITH OUR RANGE OF CONTEMPORARY INTERNAL DOORS & FRAMES...

To arrange your **free internal door survey** and to find out more about how Silvelox can transform your home, with our range of stylish internal doors and surrounding frames, call 0800 915 1019.

SILVELOX

0800-197-6565

www.qvsdirect.com

Split Load Consumer Unit

C/w 100A

Mainswitch,

2 x 80A RCDs

& 12 x MCBs

of your choice

www.silvelox.co.uk

Traditional Cottage Doors



CLAVELL CARAVANS LTD

www.clavellstaticcaravans.com



Doors made to standard sizes or to customers' own specifications

Versatility

Doors supplied ready for decoration or staining

Service

Standard sizes delivered in 7 to 10 days

Quality

Only top quality kiln dried Swedish Redwood used

Value

Quality at a realistic price

Timber

All doors made traditionally from 1" thick timber from sustainable sources

Cottage Doors & Joinery Ltd Bush Bank, Hereford, HR4 8EN

Tel: 01568 720323 Fax: 01568 720140 email cdandj@btconnect www.cottagedoorsandstairs.co.uk



CATALOGUE



We are manufacturers of these traditional cottage style doors. By using only top quality materials and workmanship we can guarantee our doors against shrinkage and warping, which makes them ideally suited for internal use. Established for 30 years.





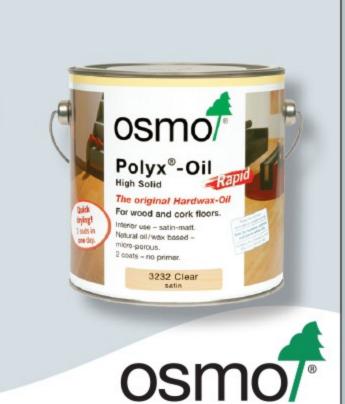
Polyx Oil Rapid provides a professional finish in double quick time.

- > Extremely quick drying.
- > TWO coats in a day.
- > Polyx Oil for wood, cork and OSB floors.
- Highest coverage of any oil on the market.
- > Satin or matt finish.



Call or visit the web for stockists.

+44 (0)1296 481 220 www.osmouk.com





FEEL THE DIFFERENCE!

Three new textures from Garador



Garador has taken garage door design a step further by introducing three new textures for its steel sectional doors.

Its traditional silkgrain has been relaunched with an ultra smooth surface thanks to the latest in material and paint technology, plus a brand new

sandgrain textured finish and timber effect finishes have also been introduced.

The sandgrain offers a slightly coarser surface while the steel timber effect texture gives a genuine soft wooden surface feel. All three designs offer great new looks as well as a very different feel.

"These new textures have been introduced into our ever popular steel Georgian, Linear Medium and Linear Large sectional doors and offer a fresh exciting alternative," said Garador's managing director Simon Hipgrave. "Some doors and colours lend themselves to certain finishes more than others, we've found



that shades such as Terra Brown, Anthracite Grey and White Aluminium show the sandgrain texture exceptionally well."

Garador's sectional doors are already recognised as the best engineered garage doors on the market and are ideal for short driveways where there is limited space in front of the garage. They offer exceptionally smooth operations, whether manual or by remote; and the new range of textures can only increase their popularity in the UK.

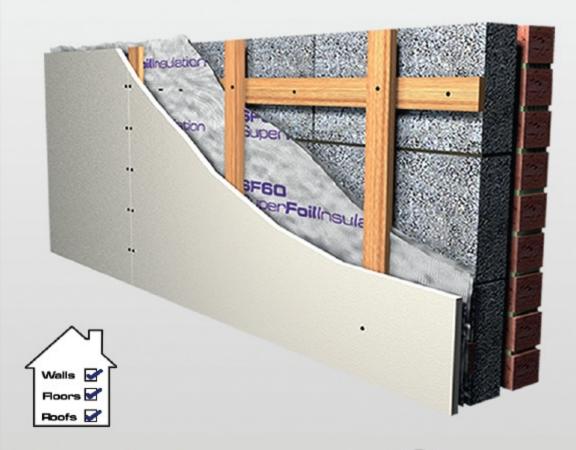
Also, check out Garador's brand new website and full range of new colourful brochures and support material, including an exciting new facility Build Your Own.

Full details of all the new developments at Garador can be found on the company's website at www.garador.co.uk or call 01935 443796

INSULATION • HEATING Classified 123

SuperFOIL Insulation

Planning for the new 2014 regs?



SF60 Premium Multi-Foil Solutions

01636 639 900 www.SuperFOIL.co.uk



BHFUnlimited

Insulation

Underfloor Heating

Heat Recovery Ventilation

Underfloor Heating Systems



Cost effective solutions

For Residential & Commercial Buildings

Large Stocks & Next Day Delivery

Price Match Guarantee!

Free Phone Quotes!

01636 639 901



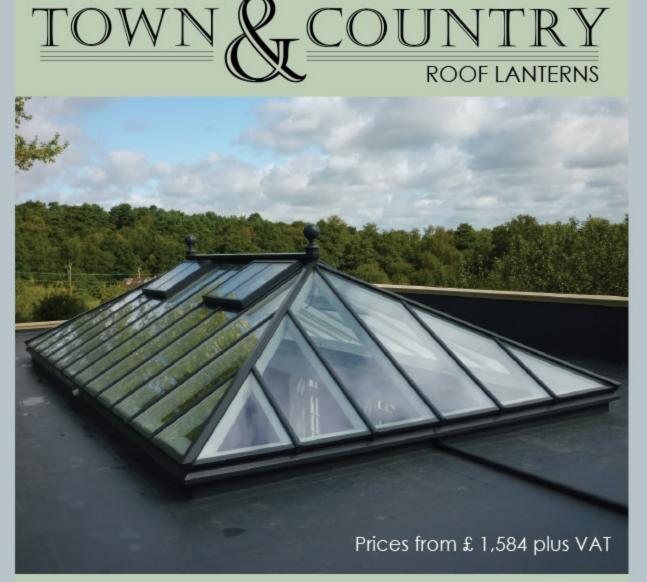
For competitive quotes email sales@bhfunlimited.co.uk





Tel: 01444 831200

www.sussexrange.co.uk



Beautifully Refined & Engineered. Manufactured in Norfolk.

- Contemporary and traditional designs.
- Hardwood framed with refined internal detailing.
- Maintenance free aluminium capped exterior.
- Self cleaning high performance double glazed units.
- Bespoke or standard sizes available.
- Wide range of colours.
- Supply only or fitting service.

To find out more or obtain a quotation call 020 7091 0621 or visit www.TownandCountryRoofLanterns.co.uk

100% solid wood kitchens



- No MDF, chipboard or ply
- Dovetail jointed drawers mortise and tenon joints for carcases
- Free design service, individual, hand drawn plans
- Non-standard sizes, at no extra cost, to suit your kitchens dimensions
- Fully assembled units; no annoying flat-pack assembly
- Straightforward, easy to understand costing prices include VAT & delivery
- Painting and priming of units now available

FREE!

Simply call us and quote: **BIM**

PANELAND FURNITURE LTD

Visit our website www.pineland.co.uk Email sales@pineland.co.uk or call our offices CLEOBURY MORTIMER, SHROPSHIRE 01299 271143 NORTHWICH, CHESHIRE 01606 41292

Self Build Insurance Warranties & Mortgages** Compare

We compare the market from leading self build and renovation insurance companies, structural waranty companies and mortgages

- Compare Site Insurance
- Mortgages & Remortgages
- New Builds, conversions and extensions
- **Compare structural warranties**

Phone NOW for FREE expert advice

01837 658955

www.versatileinsurance.co.uk

info@versatileinsurance.co.uk Bridge House, Okehampton, EX20 1DL





with every

quote!

*One free gift per household or business. Cannot be combined with any other promotions **Introducing Reckitt House Mortgages. Versatile Insurance Professionals Ltd is authorised and regulated by the Financial Conduct Authority. Reckitt House is a trading name of Davidsons IFA Ltd, which is authorised and regulated by the Financial Conduct Authority.

The UK's specialist in high quality resin bound permeable paving since 1997



The ideal alternative to tarmac, gravel and paving stones...

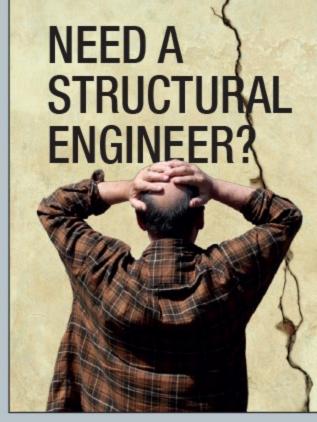
- SuDs compliant
- Environmentally friendly
- No planning permission needed
- Available nationwide
- 15 year guarantee against: loose stone; cracking; oil damage; UV degradation; colour change and frost damage.

E: sales@sureset.co.uk



W: sureset.co.uk T: 0800 612 2083





Findan Engineer, Com

FindanEngineer.com is a FREE service provided by The Institution of Structural Engineers to help you find a chartered structural engineer in your area.

You can get legal advice on structural problems, structural design surveys, subsidence, planning applications, alterations/extensions and much more. Visit the site or call 020 7235 4535 for more details.

Making your dream home happen

To advertise a product in this section please call Classified sales

0203 627 3246

FLIGHT DESIGN



Superb Energy Reduced Energy Costs













Passive Houses are highly insulated, comfortable, cold bridge free structures that require little heating, they usually have triple glazed windows, heat recovery ventilation (HRV) and high air-tightness levels. It doesn't cost extra to build a Passive House using our construction methods, as money saved on a complex heating system pays for better windows or extra insulation.

Specialists in:

- Passive House
- Sustainable Homes
- Affordable Buildings

01 604806169

info@mbctimberframe.co.uk www.mbctimberframe.co.uk



M O

Tel: 01675 44 36 45
Email:
build@timberinnovations.co.uk

www.timberinnovations.co.uk

wb timber innovations ltd, Old Station Road, Hampton in Arden, Solihull, B92 0HB

erecting tailor made timber frame & SIP

dwellings.









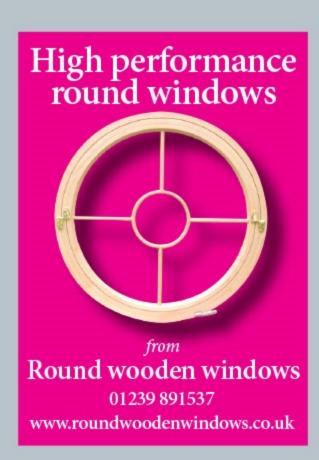


Contemporary & traditional easy-fit modular wall panelling 6 heights - 7 styles

> Dado Ht from stock less 10%

www.finepanel.co.uk 01892 544228





VAT REFUND SPECIALIST

CLAIM PREPARATION & ADVICE A personal and professional service.

EDWARD RUBIE T: 01622 880404 www.rubie.co.uk

Self-Builder & Quantity Surveyor, Member of the National Self Build Association.



Source great products

To find out about more great products for your project, why not sign up to our product of the month newsletter? Every month we round up the best new products for the self build and renovation sector and email them direct to your inbox.

Please register online at: www.self-build.co.uk



Buildit Making your dream home happen

The self-builder's guide to specifying and sourcing products



DJ Newman Joinery Ltd

We have been producing high-quality bespoke joinery for over 45 years from our modern factory in Cornwall using only the finest timbers from sustainable forests. Our craftsmen can manufacture anything from simple doors and windows to elegant staircases, all made with pride - modern joinery made in the traditional way.

Tel: 01726 890464 www.djnewmanjoinery.co.uk



EGERTON CERAMIC SINK FROM SHAWS OF DARWEN

Egerton, a British made double bowl, ceramic sink from Shaws of Darwen. With a unique patterned front and offset dividing wall The heavyweight Egerton is available in white or biscuit finishes with a durable, long lasting glaze and measures: 997x470x255mm.

Visit www.shawsofdarwen.com to view the complete range of ceramic sinks, taps and accessories.

Tel: 01254 775111 Fax: 01254 873462 www.shawsofdarwen.com



SAINT-GOBAIN WEBER

A private Victorian solid wall property in London has been treated with External Wall Insulation by Saint-Gobain Weber. The owner, a leading energy saving expert, says "Weber.therm EWI was an easy choice for me having used it extensively in my career and I am delighted with the end product and looking forward to a much warmer Winter this year!"

www.netweber.co.uk Tel: 08703 330 070



FROZEN DAMP-COURSE SYSTEM

Freezteg is a water-based product used to form a complete barrier against rising damp. It can be used on all types of stone or brickwork (any wall thickness), is easy to use, cost-effective and requires no specialized equipment. Can be applied DIY or by contractor. Thirty-year guarantee available.

FREEZTEQ

Freezteg Products Ltd Email: info@freezteq.co.uk Website: www.freezteq.co.uk



www.vexbox.com for a superior quality wall finish EVERYTIME



electrical accessory boxes. It is a single template which can be formed into 12 different types of extension box.

Varying from 5mm to 35 mm of extension, Vexbox has been designed for use where walls have been dry-lined and the cut outs for the accessory boxes have been put in the wrong place or, the boxes are at the incorrect depth.

Also suitable for refurbishment works where boxes have been set too deeply into walls, leaving no edge for the plasterer to work to.



LOFTZONE RAISED LOFT FLOOR

The minimum depth of loft insulation these days is 270mm (11") - which is higher than your joists. But squashing insulation stops it working, so you can't board directly on to the joists and you lose your storage space.

LoftZone is an easy DIY product that gives you back your storage space. Call us for special offers and free delivery.









DAVID JOYCE COB AND LIME SPECIALISTS

As seen on page 79

A small business based on the Devon/ Dorset border specialising in the renovation and creation of cob buildings. We work closely with our customers and take time to build unique structures from garden rooms to complete new homes. Cob is a natural and sustainable material which can create beautiful and contemporary living spaces. Hills Farm Cottage, Whitford Road, Kilmington, Axminster, Devon, EX13 7NS Tel. 0129735579

www.davidjoycecobandlime.com



Floors of Stone Ltd

We are the leading UK wholesaler of premium graded natural stone and porcelain tiles for walls and floors. With regular price checks we remain the cheapest, our large range of tiles start from as little as £12/ m2 (ex vat). Based in Leicestershire you can see before you buy or request free samples to be sent out to you, we always have a large quantity of stock available for immediate collection or delivery.

Tel: 01509 234000

Web: www.floorsofstone.com Email: enquiries@floorsofstone.com



Making your dream home happen

To advertise a product in this section please call Product Profile sales on:

0203 627 3246



Stove Experience

Stove experience specialises in the difficult! With access to the entire stove market, and our own "In house" engineering team, Stove Experience, rarely fails a challenge. As a USP, we let you choose the stove. Our vast knowledge base will guide you, and ensure your budget is best used.

Stove Experience, 1-3 Main Street Stane, Shotts, Lanarkshire, ML7 5EE

T. 01501 823006 E. eoin@stove-experience.co.uk W. www.stove-experience.co.uk



KLÖEBER WINDOWS AND DOORS

Klöeber are leading specialists in bifold doors and bespoke glazing solutions. Our folding sliding doors are available in beautifully engineered timber and thermally broken aluminium in bespoke and set sizes. Options include any RAL colour, full weather sealing and double or triple glazing options. Kloeber's timber folding sliding doors are Secured by Design.

Tel: 01487 740044 www.kloeber.co.uk



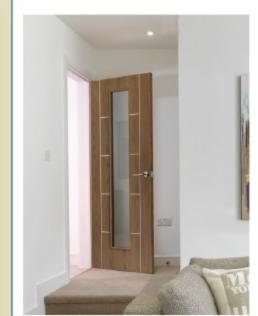


www.spadelamare.com

Spa De La Mare Ltd

Spa De La Mare Ltd are the world's leading manufacturers of fully tiled spas and swimspas with a choice of over 30 tile colours and endless designs creating a unique finish in the pools.

- · All full mosaiced and insulated
- 50% reduction in running costs
- Top quality Emaux de Briare porcelain mosaics 25 mm x 25 mm
- · Endless choice of colours and designs
- Tel: 01481 701 333 or visit Many standard shapes
 - · Variable lengths & widths



CONTRAST WITH COLOURS

JB Kind's Eco Colours door range has six new design additions for 2014.

Complementing today's neutral interiors this contemporary range of painted doors is both a style and budget pleaser. The impressive painting technology creates a flawless timber graining effect. From Eco Mocha's soft walnut colour to Eco Argento's ash grey, there are so many choices. FSC certified and supported by a flexible bespoke service and FD30 fire door options.

Tel: 01283 554197 www.jbkind.com



Central Vacuum Cleaners

Comprehensive choice of vacuum units ranging from compact units to twin motor commercial models.

Wide choice of accessories and hose lengths.

Simple and easy to install.

Free planning and technical support.

Next day delivery.

Tel: 01491 836 666 www.cvcdirect.co.uk





Pegasus whirlpool baths

Design your own bespoke whirlpool bath online with the latest technology, features and performance from the UK's premier manufacturer. Bespoke positioning of Pump, Jets and Controls, Chromotherapy lighting, Glass touch sensitive wall mounted control, 4th Generation total draining 'silverline' pipework. Not all whirlpool baths are built the same!

01633 244555 www.pegasuswhirlpoolbaths.co.uk



Heat Recovery Ventilation

Established company offering wide range of HRV units and ducting immediately available from stock.

Choice of several different heat recovery ventilation units including high efficiency Passivhaus certified units from Brink Climate Systems.

Stockists of the easy to install HB+ radial ducting system.

Tel: 01491 836 666 www.cvcdirect.co.uk





Eclipse Home Booster Tanks

An all-in-one automatic solution for increasing water pressure in properties where the existing mains supply is insufficient to meet demand. Easily installed, these compact units feature a quality pumping system integrated into the tank capable of producing 30-40 litres per minute at 3 Bar pressure. A variable speed version is available for larger properties.

Tel: 0845 130 3300 Fax: 01633 244881

www.pumpexpress.co.uk/eclipse sales@pumpexpress.co.uk



To advertise a product in this section please call Product Profile sales on:

0203 627 3246

Source great products

To find out about more great products for your project, why not sign up to our product of the month newsletter? Every month we round up the best new products for the self build and renovation sector and email them direct to your inbox.

Please register online at: www.self-build.co.uk



next month...

November issue on sale 24 September

READERS' HOMES ->

Meet Barbara Manson, who self built a stunning modern home for her retirement on a tiny budget of just £140,000





HEATING: STOVES

Want a stylish but practical way to heat your home? A characterful and functional woodburning stove could be the ideal solution





TIMBER FLOORING

Don't miss our buyer's guide to finding top quality wooden flooring

PLUS

BARN CONVERSIONS, RENOVATION OPPORTUNITIES, INTERNAL DOORS & FREE HEATING GUIDE

The Build It team

EDITORIAL

Editor Anna-Marie DeSouza
Deputy editor Chris Bates
Assistant editor
Ifeoluwa Adedeji
Art editor David Flint
Contributors Emily Brooks, Jane
Crittenden, Mike Dade, Mike Hardwick,
Duncan Hayes, Julian Owen
Contact 020 3627 3243

BUSINESS DEVELOPMENT

Business development director Sarah Wilcock 020 3627 3247

ADVERTISING SALES

Advertising manager
Nick Gillam 020 3627 3245
Account executives
Chantelle Lewis 020 3627 3251
Sophie Tomlinson 020 3627 3246

PUBLISHING

Managing director Calum Taylor
Finance director Katherine Taylor
Marketing director Claire Drakeford
Accounts Emily Blackwell
020 3627 3248
Distributed by Seymour

SUBSCRIPTIONS

Tel: 01442 820580 Email: buildit@webscribe.co.uk Address: Build It, c/o Webscribe, Old Silk Mill, Tring, HP23 5EF

Published by Castle Media Ltd Head office: Castle Media Ltd, Peasemore House, Newbury, Berkshire, RG20 7JH

Tel: 020 3627 3240 Fax: 0872 331 5207 www.self-build.co.uk All the content in *Build It* is governed by copyright and may not be reproduced without the editor's written permission. Every effort is made to feature only reputable companies and products, but readers should make their own enquiries. Information published in *Build It* is intended to provide general guidance only, and the publishers do not accept liability for any loss or damage arising from use of this information. Opinions made by contributors are not necessarily those of *Build It*. Although *Build It* welcomes contributed matter, including unsolicited text and photographs, it does not guarantee to return material.

focus on:

This month Build It speaks to Ruth Rosenau, Stoke-on-Trent city council cabinet member for regeneration, planning and transportation, about its award-winning custom build initiative, Mandate for Change





What were the primary aims of the Mandate for Change project?

The council's objective was to give people the chance to build their dream home. The housing initiative is a major part of our drive to make Stoke-on-Trent a great place to live and to create more high quality, individually-designed properties that will appeal to affluent buyers. The city needs to entice entrepreneurs and investors to not only bring their businesses here to boost our local economy, but to make it their home, too. So we identified two sites, Penkhull and Hanford, that were suitable for custom building. We were one of the first local authorities in England to support the government's policy to grow this market by releasing land exclusively for custom build.

What stage are the sites at now?

For the time being we are concentrating on delivering the scheme in Penkhull. We held a public auction for the first six sites in December 2013 and in fact all six plots were snapped up, which we were obviously delighted about. In total the land sold for \$591,000. Four of the plot owners have now secured planning permission and two of these are on site. The remaining two owners are awaiting consent.

Have any restrictions been imposed on how the plots can be developed?

We're hoping sustainability is something that people will plan for in their homes, however we didn't want to put too many limitations in place and in doing so stifle good design. The whole idea is to give people freedom to create the home of their dreams, as long as what they put forward falls within the realms of planning regulations. So theoretically you could see a Tudor mansion next to a contemporary 'glass box'. We do encourage people across the city to build sustainably and our staff is on hand to offer help and support.

What have you learned from the project?

This has given us clear evidence and backed up our view that there is a demand for this type of housing in the city. It has encouraged us to consider other sites and look at expanding the scheme in the future. We're leading on this as a local authority and are talking to other custom build developers with a view to launching more projects. We've also been getting a lot of interest from other councils who want to know what we are doing.

What challenges have you faced in establishing serviced plots?

The council worked tirelessly with Deloitte to seek an agreement with HMRC to ensure that we don't have to pay VAT on the work required to deliver serviced plots. This has made the site more affordable because we have not had to pass the VAT charge that we would have incurred on to the buyer.

Councils will, however, need to monitor developments in this area, as HMRC's response was based on the assumption that we would not make a net profit from Right to Build.

Has your Build It award win influenced the council's plans?

We were delighted to receive the award for Best Custom Build Development – it has given us the confidence to look at other sites and has reaffirmed that we're taking the right approach. It has also raised the profile of custom build as a viable housing option. It has even made people reconsider where they think Stoke city is at in market terms and as an investment potential.

We're now considering approaching the Department for Communities and Local Government (DCLG) to become a vanguard authority, to pioneer the Right to Build model. We want to push the boundaries of what it can achieve, and use our experience to help other councils implement more custom builds.

For more information visit stoke.gov.uk or builditawards.co.uk



Carpenter Oak & Woodland

Traditional & Contemporary Timber Frames





Head Office: 01225 743089 / Scotland Office: 01575 560393

www.carpenteroakandwoodland.com info@carpenteroakandwoodland.com

Carpenter Oak and Woodland produce award winning hand crafted timber frames for new build residential homes, extensions and conservation of listed buildings. Offering bespoke design, supply, installation and complete turnkey solutions.

Download our **free** guide to timber framing from our web site today:









When it comes to floor preparation look no further than our hard working compact floor grinder.

Great for glue removal and a diamond at grinding away dirt. Hire today and take your flooring prep to a new level.

Find your nearest branch at www.brandonhire.co.uk

WHY BUY? WHEN YOU CAN HIRE. BRANDONHire