

Build It

Making your dream home happen

OCTOBER 2013
www.self-build.co.uk
£4.15

SELF BUILD + RENOVATION + EXTENSION + CONVERSION

✦
Revealed:
**HOW TO SET A
BUDGET AND
STICK TO IT**

How to create a
light filled
family home

**Specialist
guides:
INSULATION
& GLAZING**

Planning secrets
7 simple steps to a
successful application

INSPIRING REAL LIFE PROJECTS +

- Do I need listed building consent?
- Win a fireplace worth £3,000
- Buyer's guide: staircases

ISSN 2052-5575



Extensions

**54 IDEAS THAT WILL
ADD SPACE & VALUE
TO YOUR PROPERTY**

**PRACTICAL ADVICE
WOODBURNING STOVES**

The stylish & efficient heating option

OPENSPACE



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

Extend your living space.

IDSystems provide a wide variety of innovative, award winning folding door and window systems that demonstrate the sheer versatility of glass.

Whatever your requirements IDSystems can provide a bespoke architecturally glazed, complete design solution for any domestic or commercial project.


IDSystems
GLASS INNOVATIONS



Welcome

Over the past year, we've followed the highs and lows of Nick Mann's self build project. He's remained relatively calm and kept his good sense of humour throughout. It's been inspirational to see his ultra-modern eco house develop from conception, and now he's completed it! It has a fantastic finish and there are just a few minor landscaping details left to work on. Don't miss the final installment of his self build journal over on [page 16](#). We will catch up with Nick and his family in the next few months to give you a guided tour around his new abode and see how the family has settled into life there.

If you're after some design ideas for your own new build, look no further than this month's diverse selection of real life stories. The Clarks ([page 48](#)) have built a lavish oak frame property, filled with characterful exposed beams and large aspects of glazing. Using similar materials, but on a smaller scheme, Neil Cotton has built a low-maintenance cottage in the heart of Cornwall. His tale is full of tips and ideas for those interested in creating their own eco house ([page 57](#)). My favourite project this month belongs to the McMillans, who have built a wheelchair accessible home with a Danish influence. Their project, on [page 31](#), goes to show that inclusive design can be achieved on budget without compromising style.

If you're looking to renovate a property, get some inspiration from Rebecca Sanderson ([page 22](#)) who took a very hands on approach to transforming a rundown 1950s dwelling into a luxury contemporary home. Her 'have a go' attitude means she really embraced the project and learnt new skills, such as lighting design and roofing, along the way. For a more focussed look at creating extra space, our hand-picked collection of extensions ([page 84](#)) will guide you through a multitude of design and material options.



Anna-Marie

ANNA-MARIE DESOUSA, EDITOR

16



31



MEET THE TEAM



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 course. In this issue he

looks at extension design ([page 84](#)) and the best ways to retrofit insulation on [page 80](#).

SOPHIE HOYLAND

is *Build It's* news & homes editor. She has her finger on the pulse when it comes to the latest self build products and interior design. This month Sophie looks at and advises on different design and fuel options ([page 66](#)).



MIKE HARDWICK

is a consultant and project management specialist. He has first-hand experience of self build and helps to deliver a course at Swindon's

NSBRC. Turn to [page 96](#) for the next installment of his project management series.

TIM DOHERTY

was the founding MD of the NSBRC and one of the founders of NaSBA. Each month he reports on issues including finance and budgeting. This issue he tackles the costs associated with electrics ([page 102](#)).



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

reveals how to make the most of your plot ([page 112](#)) and visits an infill site to consider its development potential ([page 115](#)).

OPINDER LIDDAR

is a director at lapd architects and specialises in self build and renovation. He's a member of NaSBA and also hosts self build workshops for the Build A Dream Self Build Association. He was also awarded the title of Best Self Build Architect at the 2012 *Build It* Awards.



ALAN TIERNEY

is a historic building consultant and conservation specialist. He runs Picketts Historic Building Conservation, offering hands on advice to

period property owners. Don't miss his series, on [page 92](#), which follows the process of renovating a run down home in the Peak District.

SUBSCRIBE TODAY

See [page 101](#) for this month's subscription offer or visit www.self-build.co.uk/subscribe



Make your **Dream** a **Reality**

WITH BI-FOLDING SLIDING DOORS



Available in **ALUMINIUM, TIMBER, ALI-CLAD & PVCu**

Buy direct from the UK's **ONLY** Specialist Manufacturer

Folding sliding doors can be installed in a huge range of situations, in fact folding sliding doors provide you with so much flexibility and choice that the solutions are endless.



25 YEAR GUARANTEE
All our doors are supplied
with a no quibble guarantee



ENERGY EFFICIENT
Double glazed, thermally
efficient, UK building
regulations compliant



SECURITY
Encapsulated running gear,
hardened steel locks,
internally glazed, UKAS tested



CHILD FRIENDLY
Finger safe gaskets
Easy operation



ENGINEERED
British made, laminated timber,
PVC, aluminium or aluminium
& timber clad options



The  **Folding Sliding**
Door Company

Call: **0845 644 6630**

www.foldingslidingdoors.com eMail: sales@foldingslidingdoors.com

Visit our showroom Mon-Fri 9am-7pm, Saturday by appointment only  
FSD Works, Hopbine Avenue, West Bowling, Bradford, West Yorkshire BD5 8ER

October 2013 issue

22



31



57



48

READERS' HOMES

Creating light & space

Find out how the Sandersons constructed a modern home out of a dilapidated 1950s shack

22

The ramp house

To make home life a little easier for their daughter, who has cerebral palsy, Ian and Thea McMillan have built a barrier-free, wheelchair-friendly dwelling

31

A lesson learnt

Julie Gocke had itchy feet for a new project, so she transformed her existing home into an open-plan abode

40

COVER STORY

Traditional values

Neil and Dawn Clark have combined up-to-date oak frame techniques with a traditional brick and flint exterior reminiscent of Norfolk properties

48

A Cornish cottage

Neil Cotton originally took on a self build project with the intention of selling it on for profit. But when he resolved an access issue, he saw the potential to create a stunning home for him and his wife

57

RENOVATION & BUILDING

Stoves FAQs

From woodburners to coal-fired models, Sophie Hoyland reveals all you need to know about specifying a stove

66

Choosing a chimney sweep

Find the right tradesman for the job at hand

71

Buying a staircase

It's one of the first things you'll see when you enter a home. Our guide will help you get the design right

73

COVER STORY

The glazing glossary

Choosing glass can be a minefield. Anna-Marie DeSouza uncovers the latest tech – from energy-saving to self cleaning – to help you make an informed decision

77

COVER STORY

Retrofitting insulation

If you've got a cold home and big heating bills, the best way to make it more efficient is to add insulation. Follow Chris Bates' guide to ensure you get the best results

80

COVER STORY

Inspiring extensions

Keen to increase your living space? Take a look at our favourite ways of adding valuable extra room

84



charnwood

Exceptional British made wood stoves

01983 537780 www.charnwood.com



40



66



84



73



77

EXPERT HELP

The period house project 92

In part three of our renovation journal, Alan Tierney takes a look at listed building consent and how it might affect the renovation of this terraced house

Health and safety 96

Mike Hardwick explains all you need to know about creating a safe construction site – from current regulations to choosing insurance

Costs: electrics & plumbing 102

Tim Doherty calculates the costs of drainage, pipework, lighting and heating systems for new build homes

COVER STORY Budget essentials 110

Before you begin your project, you need to sit down and work out how much every aspect of your project will cost to ensure you stay on budget

COVER STORY Make the most out of your plot 112

Get the best from your self build site by following expert Mike Dade's advice – from dealing with the planners to thinking outside of the box when it comes to design

104



REGULARS

News	9
Self build journal	16
Competitions	18
Letters	19
Materials: SIPs	89
Ask our experts	99
Subscribe today	101
Cost calculator	104
Self build mortgages	109
Plot watch	115
Land for sale	118
Next month	129
Focus on	130

apropos

ARCHITECTURE IN GLASS

FOR A COMPLIMENTARY BROCHURE OR A
DESIGN CONSULTATION CALL **0800 328 0033**

www.aproposuk.com



* subject to terms and conditions



ORANGERIES | CONSERVATORIES | ATRIUMS | POOL HOUSES | EXTENSIONS | SUMMER HOUSES | VERANDAS



RAYBURN

from **AGA**

All in one

Good Food • Hot Water • Warm Home

The heart of your self-build

- Cast iron range cooking with a range of boiler options
- Superior cooking performance
- Condensing A-rated boilers with over 92% efficiency

For details of your local retailer call **0845 762 6147**
or visit rayburn-web.co.uk



inspiration



GAVIN PHILLIPS

Well rounded

This contemporary eco house in rural Kent, designed by architect Richard Hawkes for himself and his family, has been built using innovative low-energy techniques.

The abode's dome-shaped framework is based on a medieval design known as timber vaulting. This method uses thin bricks to create a lightweight structure, creating an arch that's under 13cm thick. Soil and grass on top help weigh down the self-supporting frame and retain heat.

Since completion in 2009, Richard has installed a 4.5kW photovoltaic array to complement a 3.4kW solar thermal system, which was already in place. The pioneering project was the first in the UK to be retrospectively awarded Passivhaus certification. Other eco-friendly features include triple glazing, recycled newspaper insulation, rainwater harvesting and internal floors made from recycled glass bottles.

For more details call 01580 892739 or visit www.hawkesarchitecture.co.uk

PROJECT OF THE MONTH

Trish House, Kent

by Matthew Heywood Architects



Matthew Heywood designed this five bedroom house in direct response to the site and its location within the beautiful village of Yalding in Kent. The dwelling's slanted structure (an architectural feature known as raking columns) was incorporated into the scheme to mirror the irregular angles of tree branches and trunks in the nearby woodland. The dwelling is clad in black and white clapboard, which helps to blend the architecture with vernacular properties in this part of the UK.

For more details call 020 7352 7583 or visit www.matthewheywood.com

What's on?

**TIMBER FRAME
SELF BUILD**
30TH SEPT - 4TH OCT
£600
CAT, WALES
www.cat.org.uk

**BRICKLAYING
COURSE**
30TH SEPT - 4TH OCT
£325
SURREY
www.thebtc.co.uk

BEST OF BRITANNIA
3RD - 5TH OCT 2013
FREE
CLERKENWELL,
LONDON
www.bestofbritannia.com

**GRAND DESIGNS
LIVE**
4TH - 6TH OCT 2013
£15 IN ADVANCE
NEC, BIRMINGHAM
www.granddesignslive.com

**ROOF TILING
COURSE**
4TH - 8TH OCT 2013
£450
SURREY
www.thebtc.co.uk

**LIGHTING
TRAINING COURSE**
8TH OCT 2013
£250
BRE WATFORD
www.bre.co.uk

SOLAR POWER UK
8TH - 10TH OCT 2013
FREE
NEC, BIRMINGHAM
<http://uksolarenergyevents.com>

**RHS SHADES OF
AUTUMN SHOW**
8TH - 9TH OCT 2013
£5
LONDON
www.rhs.org.uk

**IMPROVE YOUR
HOME SHOW**
12TH - 13TH OCT 2013
£6
KINGS HALL, BELFAST
www.yourhome.ie

**THE BIG GREEN
HOME SHOW**
25TH - 27TH OCT 2013
FREE
NSBRC, SWINDON
www.nsbrc.co.uk

ANTIQUES FAIR
31ST OCT - 3RD NOV
£15
NEC, BIRMINGHAM
www.antiquesforeveryone.co.uk

**ANTIQUES &
COLLECTABLES FAIR**
2ND NOV 2013
FREE
DEVON
www.antiques-atlas.com

Register your self build interest

You may remember our interview with Councillor Debbie Pickford in the August 2013 issue, discussing the potential launch of a new self build project in Cherwell, Bristol. The scheme is now live and set to be the first large-scale development of its kind in the UK. It will provide thousands of different types of plots, such as self build, self finish and kit home opportunities. If you live in Oxfordshire and want to find out more about getting your hands on a site, register your interest at www.gravenhill.org.uk

Self build hurdles

According to the National Self Build Association (NaSBA), the biggest challenge faced by would-be self builders is finding a suitable plot of land. A survey of 2,000 people revealed that most believe it's more difficult to track down a site than achieve planning permission or secure finance. If you're looking for somewhere to build your dream home, check out our listings page on 118, which details more than 100 sites for sale.

41% of people surveyed by NaSBA say finding land is the biggest self build struggle

RHI announcement

Details of the Renewable Heat Incentive have been announced in a bid to meet the government's ambition of having 12% of heating coming from renewable sources in the UK. The scheme will be open to applications in spring 2013 and covers single domestic dwellings, including self builds, where eligible technology has been installed since 15th July 2009 (provided it meets the criteria). Financial support will be paid at a set rate per unit of renewable heat produced (kWh) for seven years to the owner of the system. The tariffs work out as 7.3p per kWh for air source heat pumps, 12.2p for biomass boilers, 18.8p for ground source heat pumps and 19.2p for solar thermal. **For more details visit www.energysavingtrust.org.uk**

industry news

Is the planning system getting simpler?

I had high hopes for the Localism Act of 2011. It arrived with the promise of changing the planning system to reduce bureaucracy and hand more decision making powers to local residents. So, as the weighty tomes of government planning policy statements (PPS) were replaced with skinny guidance offered in the form of the National Planning Policy Framework (NPPF), many communities huddled together to produce neighbourhood development plans (NDP) where local residents would be asked their opinion and advise on development. One of the first areas to pilot the process was in a town close to me, but already the cracks are starting to show.

My interest in the NDP process was in identifying areas for self build housing. Anything from infill sites to the provision of serviced building plots. I dropped in on a few of the meetings and was impressed at how the community approached the task with gusto. Everyone from local councillors and interested residents contributed. However, it's fascinating to see how their views have been received.

One of the unintended consequences of promoting neighbourhood plans is that developers start to panic and start firing off planning applications before the NDPs can be formally adopted. Although the wishes of residents are known from the preliminary consultations, local authorities are not obliged to recognise these concerns yet. Where I live, a housing and supermarket development are being railroaded through without any consideration of the views expressed in these nascent neighbourhood plans. The bottom line still seems to be that if a Local Authority decides that the social and economic requirement for a new development overrides the wishes of local residents, then they allow it.

This is not good and will have the effect of alienating local involvement because it will be seen as a futile exercise. It's a similar thing with the NPPF. From recent applications, I have yet to see a positive outcome from a policy that promotes a "presumption in favour of sustainable development". What's more, my limited experience so far seems to be that it is being used as one more layer to support refusal for self build in areas outside existing development boundaries.

So, a question to *Build It* readers: Have any of you had a positive outcome from quoting the NPPF as a reason to approve your planning application? Share your experiences by emailing us at buildit@castlemedia.co.uk

MIKE HARDWICK

is a self build consultant and project management specialist. He has first hand experience of the process involved, and helps to deliver a three day self build course at the National Self Build and Renovation Centre in Swindon (www.nsbrc.co.uk)



JEFFERSON SMITH

FLINT WALLING

5TH - 6TH NOV 2013
£260
WEALD & DOWNLAND MUSEUM
www.wealddown.co.uk

RENEWABLE UK EXHIBITION

5TH - 7TH NOV 2013
£94.80
NEC, BIRMINGHAM
www.renewableuk.com

SPIRIT OF CHRISTMAS FAIR

5TH - 10TH NOV 2013
£18
OLYMPIA, LONDON
www.spiritofchristmasfair.co.uk

NEW HOMEOWNERS

16TH NOV 2013
£110
BRISTOL
www.spab.org.uk

IDEAL HOME SHOW AT CHRISTMAS

13TH - 17TH NOV 2013
£12 IN ADVANCE
EARLS COURT
www.idealhomeshowatchristmas.co.uk

LUX LIVE

20TH & 21ST NOV 2013
FREE
EARLS COURT
www.luxlive.co.uk

Stand out from the crowd



The *Build It* Awards 2013 in association with BuildStore are now open for entries!

The *Build It* Awards are the most sought after accolade within the self build industry. They recognise excellence across the board in self build products, services, suppliers and projects. The winners will be announced at a glittering Awards Ceremony at the industry's National Self Build & Renovation Centre on 21st November.

Enter today for your chance to stand out from the crowd.

**Download an entry form at
www.builditawards.co.uk**



in association with 
BuildStore

spend✓save



Handmade by skilled craftsman, the freestanding Brask Usk tub is made of cast iron, making it extremely strong and durable. Prices start from £3,210, www.drummonds-uk.com

£2,410



The Montefresco single-ended slipper bath is available in a range of Albion's metallic finishes, such as Burnished, or in a colour of your choice from the Dulux Trade range. It's made of hardwearing iso-enamel £2,410, www.albionbathco.com

product news

Great shopping ideas for your custom home project



INDOOR WEATHER MAN

The Energy Saving Trust suggests you can save £70 a year by installing a room thermostat. Vaillant's VRC470f monitors the outdoor climate to intelligently adapt your Vaillant boiler's output to maintain the desired indoor room temperature

VRC470f, £252, www.vaillant.com



LOG STORE

Rather than hiding your timber away in a shed, make it a stunning centrepiece alongside your stove. Wall-mounted log holder, £117, www.euroheat.co.uk



3-IN-1 COOKER

Deliver all your heating, hot water and cooking from one appliance. The Klover Smart 120 wood pellet central heating cooker uses biomass fuel, so it will be eligible for Renewable Heat Incentive payments when the scheme launches next year £6,353, www.stovesonline.co.uk

BRIGHT OPENING

After colourful interiors? Origin has introduced over 150 different shades to its door collection. From £1,320 to £1,680 per liner metre, www.bifoldingdoors.co.uk



3 of the best EXTERIOR PAINTS



1 Hot Mustard from Sandtex's 10 year exterior gloss range. From £17.99 per 750ml pack, www.diy.com



2 Sage from Ronseal's woodland colours collection £9.99 per 750ml, www.ronseal.co.uk



3 Holiday Blues from the Dulux Weathershield quick dry exterior gloss collection £16.29 per 750ml, www.dulux.co.uk

AN IDEAS & INSPIRATION EVENT ON A **GRAND SCALE**

GRAND DESIGNS BIRMINGHAM

4 – 6 OCTOBER • NEC



INTERIORS
KITCHENS
BATHROOMS
GARDENS
BUILD
TECHNOLOGY



4 – 6 OCTOBER 2013 • NEC • BIRMINGHAM

CLAIM A FREE FRIDAY TICKET*
QUOTE 'BUILDT13'

CALL OR BOOK ONLINE

0844 854 1348

www.granddesignslive.com

Miele

VELUX

*Free tickets valid for Friday 4th October only, maximum two per household, subject to limited availability, print at home tickets only. Organised by Media 10 Ltd. Grand Designs is a trademark of FremantleMedia Limited. Licensed by FremantleMedia Limited. www.fremantlemedia.com

A Media 10 Event



interiors notebook

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



Shopping list

1 Celebrating its 60th anniversary, Laura Ashley has created a Heritage collection inspired by its archive designs **Pelham** wallpaper, £30 per roll, www.laurashley.com

2 The Vesper, £499, is both a striking ceiling light and an extractor hood that can be mechanically lowered to eliminate unpleasant cooking smells www.rangemaster.co.uk

3 John Lewis has launched its design icons range, making cutting-edge homewares more accessible **Flos Arco** floor lamp, £1,615, www.johnlewis.com

4 These Devonstone tiles have a uniform pattern so it doesn't matter which way round you lay them – you'll still get a continuous look £22 per m², www.britishceramictile.com

5 The Bellini solid oak stool, £199, is a great space-saving piece of furniture. Pull out the legs to create a bench for two www.fashionforhome.co.uk

NICK MANN'S**self build journal**

In the final part of his build diary, Nick Mann discusses snagging, landscaping and enjoying life in his stunning new eco home

NAMES Nick & Caroline Mann
OCCUPATIONS Owners of Habitat Aid
LOCATION Somerset
TYPE OF BUILD Eco home
CONSTRUCTION METHOD Blockwork
PLOT SIZE 1.5 acres
HOUSE SIZE 340m² (3,659 ft²)
PREDICTED BUDGET £500,000

I'm increasingly thinking the build will end with a whimper rather than a bang. We're grinding our way through the architects' snagging list, but sometimes I feel we are going backwards. I guess we're down to about a couple of pages of snags, if you include the building control guy's issues. Some we can't do anything about as we're waiting for stuff to be delivered, which is frustrating for all.

are mentally and physically exhausted. Although we have 'finished', I won't believe we have until we've done at least the hard landscaping. The house won't feel complete until the garden is planted.

We've got a lot of earth to move and I have a dry stone wall to build before we can think about external steps, railings and paths. Dry stone walling is very therapeutic, but not the fastest exercise in the world. It's even slower than hedgelaying; they reckon a skilled professional can only knock up around 1.2m of wall in a day. As for me – an unskilled DIYer – make that under 1m. My retaining wall is going to take time. It will be worth it though; like much of the landscape we're creating, it will have a practical function, look good, and benefit wildlife, too.

At least I have some lovely stone to work with, as we have a big pile salvaged from the old house. We dumped most of it around the back to form the foundation for the west

facing patio, but I've squirrelled away a nice stash. We also used some for the garage and basement utility's stone walls, which have been pointed to mimic one of the gable ends of the cottage. Combined with the recycled tiles, the old/new contrast seems to work really well.

Life in the house

In the meantime we are trying to forget about all the work yet to be done and to enjoy the house. The wildflower roof looks great. The kidney vetch and oxeye daisies are in flower and the bees and butterflies have started to appear. We've run a course for garden designers in the basement, which was much admired, and hosted a lunch party for our son George's 21st birthday. It's a fabulous house for entertaining; with the



The wildflower meadow

Most of the snagging is decorating related. It's enormously frustrating to have troops of decorators marching in and out of the house and screwing up the same things, leaving little piles of white flakes everywhere. I wish we could at least have one person working on the build who was tidy! There's still a pile of detritus sitting in the front garden that no-one seems very keen to move.

Outdoor space

The bulk of what we have to do now is related to landscaping. The architects reckon most of their clients are so knackered by the build process that inertia overwhelms any garden plans. I'm determined to press on, even if we

Eco
FRIENDLY



Front elevation

French windows open onto both terraces people can wash in and out, and the space is fabulous for setting furniture out and seating multitudes at trestle tables. We might even get around to putting up awnings over the two courtyards.

As the summer finally sprung into life the interiors have remained cool. The architects call it 'passive ventilation' – i.e. opening windows. Together with the combination of the roof, overhangs to stop solar gain and the thermal mass of the walls it means the house has been a lovely temperature. The timber frame top box, where our bedroom and office are, has been markedly hotter. We're investigating reflective film for the glass or louvres.

It's an easy house to live in, too. My aged mum is very happy to house sit and look after the dogs when we're away as she feels comfortable and self-contained, although it's actually a big place. It feels like a holiday villa; spacious, big views, clean uncluttered interiors. The children love it, and when they're not here we just close the door to their bedrooms and the house feels as if it was built for just the two of us. These are the marks of good design.

Reflections
We've been surprised at how difficult the self build has been in practical terms. We underestimated the stress of the whole process. We haven't gone hugely over budget or over time, but we've still had some pretty bad moments. Life has pretty much been on hold for the last two years.

Regarding construction, thank goodness we avoided too much cutting edge technology; plenty has gone wrong without it. Building practice seems to be lagging behind modern techniques and materials, which has produced some worrying moments for us and the contractors. I suppose it's because not enough contemporary designs are being realised. I'm really pleased we have ended up with something looking so modern though, and it does feel good to have made a sympathetic addition to the landscape I love.

Bugbears

Most of the difficulties of the last year have been created when someone tried to cut a corner or economise, and ended up with unforeseen problems or a poor finish. I've also found myself complaining constantly about the mess. I guess we were so sensitive to it because we had to live with it, and building sites are hardly the cleanest of places anyway. It was intrusive enough living

with a bunch of builders in what sometimes felt like a junkyard.

Making changes

I don't think we would have changed any of the key decisions. The architects listened to our budget and brief and interpreted our initial ideas in a sympathetic, aesthetically pleasing and functional way – just how I like my landscaping. As the build progressed I think we managed to walk the tightrope between cost and compromise, which I imagine is something that can often go wrong.

The structure of the project seemed to work well, too. We used the architects to administer the main contract and argue (sorry, "converse"!) with the builders about cost, and employing sub-contractors directly here and there when necessary. Of course we've had good and bad guys on site, and that's been something we've been able to manage – at least to a degree – as we've been here.

We've learnt a lot from our self build experience, but I hope it's knowledge we'll never use again. It was a once in a lifetime journey.



Dry stone wall



WIN!

An Infinity 880FL built-in chimney fire and Balmoral suite

With the winter months fast approaching and nights getting colder, there's nothing better than cosying up in front of the fire. That's why *Build It* has teamed up with Charlton & Jenrick to offer one lucky reader the chance to win an Infinity 880FL built-in class 1 chimney gas fire plus a Balmoral suite, worth £3,000.

The Infinity 880FL gas fire complements a contemporary style surround. It looks great in a more traditional stone surround, too, such as the Balmoral suite with a rustic brick-effect firebox lining (right).

One very practical and unique feature is that a flue liner adaptor (if required) can be attached to the firebox via the inspection hatches provided in the outer casing. Fixings are attached from inside, meaning easy installation for your Gas Safe registered tradesman. Servicing and chimney catchment area inspections can also be carried out from the front in a simple and straightforward manner.

The fuel bed uses highly detailed ceramic logs designed to give a realistic flame effect. The appliance has a 6.6kW input, which means no additional ventilation is required, and provides a heat output of 6.8kW. The Infinity 880FL is plentiful, clean and economical to run – being up to 81% efficient. It's also convenient to use, as the fire can be operated from the comfort of your sofa thanks to the thermostatic remote control. It allows you to set the temperature you require in the room and the fire will regulate itself to achieve this.

**For more details call
0845 5195 991 or visit
www.charltonandjenrick.co.uk**



HOW TO ENTER

Enter instantly by following the instructions online at **www.self-build.co.uk/competitions**

Terms and conditions

One reader will win an Infinity 880FL built-in chimney gas fire plus a Balmoral suite and rustic brick effect firebox lining, worth £3,000. The prize includes delivery but not installation. No cash alternative will be offered. Entry is only open to consumers who are aged 18 years or over and who are resident in mainland UK. Castle Media and other companies involved in the competition may use your details to let you know about other products and services we think may be of interest to you. Occasionally we make names and addresses known to vetted companies. Please state clearly on your entry if you would NOT like your details passed on by ticking the checkbox on the online entry form. Castle Media will use your information for administration and analysis. Please state clearly on your entry if you would NOT like to be contacted by ticking the checkbox on the online entry form. All winners will be picked at random. Names and counties of winners from all the competitions in this issue are available by sending a SAE to: Winners October 2013, Build It, Castle Media, 4th Floor, Earls Court Centre, Warwick Road, SW5 9TA. The competition closes on 1 October 2013. If you enter after the advertised closing date you will not be entered into the competition. Please note the image is for illustrative purposes only and may not be the actual prize.

your views:



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

Who owns the land?

The star letter wins an Einhell rotary hammer, worth £79.99

Can our plot qualify for Brownfield status?



I live in a farmhouse on a 1.5 acre site in a place described by the planners as a rural area beyond the green belt. The previous owners had consent for a large number of commercial greenhouses and permission to sell produce to the public on site. This venture failed and was replaced by a small herd of goats, which would be used for milking. The same 30m x 70m plot was used for grazing. This continued until the burden and ties became too much for them in their old age.

When I bought the farmhouse I knocked it down and self built a Scandia Hus. Now that my children are young adults and looking to get on the property ladder I would like to repeat what I did on the farmland and provide modern housing for them. Do you think the former activities on the site could qualify for brownfield status so that we could build more dwellings on the plot?

David Mardlin, by letter

Planning expert Mike Dade's reply: *The definition of agriculture, for planning purposes, includes horticulture – so it does cover the most recent uses of your plot. Agricultural land and buildings are excluded from the definition of brownfield or previously used land. In the countryside, brownfield status does not signify you can build; it's merely that brownfield sites generally take precedence over greenfield. Here, the local policy designation is rural area beyond the green belt. As a rule, new houses in rural areas, regardless of whether it's green belt, are only allowed in limited circumstances, such as replacements, conversions, homes needed to serve rural businesses and houses of truly exceptional design.*

Accordingly, it looks highly unlikely that more dwellings could be built on the plot. You should, though, look carefully at the council's policy for this rural area and verify what it says. If there's doubt, you could seek pre-application advice to establish in principle whether new housing would be allowed.

Beautiful abode

I had to write in and say how much I loved reading Catherine Oldfield's self build story in the September 2013 issue. Not only is the barn an absolute stunner, but the project is truly inspiring. It's amazing what Catherine has managed to achieve on such a small site. The fact that she had her sister by her side throughout the scheme to help her achieve her self build goal is truly heart-warming.

Jessica Kirby, by email



Long-awaited RHI

I remember two years ago reading (perhaps in *Build It*) about the government's renewable heat incentive (RHI). Having just installed a ground source heat pump in my self build, I was keen to hear all about how I could make some money back from the investment. Little did I know that it would take this long for the rates to be announced, and even now they're not confirmed or in place – we still have to wait for state aid or parliamentary approval.

What's more, as someone who has already done the installation, I may not be able to submit my application from when the scheme first opens next spring. I'm likely to have to wait longer. However, at least the government seems to be keeping its promise of financially rewarding those who are attempting to live in greener, more sustainable homes.

Graham Rigby, by email

Editor's reply: *I understand your frustrations Graham, however at least the government is taking some positive steps. For more details about the RHI check out our online feature at www.self-build.co.uk/renewable-heat-incentive-tariffs-set*

WIN! AN EINHELL ROTARY HAMMER WORTH £79.99

Next month's star letter writer will win a RT-RH20 rotary hammer from Einhell, worth £79.99. The hardy 600W power tool offers drilling depths of up to 20mm in concrete. It includes a variety of features - such as pre-selection settings, reverse switch right and left rotation and a soft grip handle for a comfortable hold.

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 buildit@castlemedia.co.uk. We reserve the right to edit letters.

“**ONLINE ORDERING IS EASY AND THE NEXT DAY DELIVERY NEVER LETS ME DOWN.**

...Within building maintenance, time is at a premium, so it's good to know that the goods will arrive when you need them.

Tony Duffy

Trustscore for IronmongeryDirect is 9.3 of 10, based on over 2000 customer reviews.

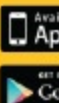
**UK'S
BIGGEST RANGE
NEXT DAY DELIVERY
MINIMUM 5 YEAR
GUARANTEE
FREE 'NO QUIBBLE'
RETURNS**

**CALL TODAY FOR YOUR
FREE CATALOGUE**

 **0808 168 28 28**

 **IronmongeryDirect.com**

 **DOWNLOAD OUR
FREE APP FROM
YOUR APP STORE**

 **Available on the
App Store
GET IT ON
Google play**

**OR TEXT RBA9
to 62244 FREE!**
With name, address and email.



IronmongeryDirect

MASTERS OF OUR TRADE

DOOR FURNITURE • WINDOW & JOINERY HARDWARE • SLIDING DOOR HARDWARE • HINGES • DOOR CLOSERS • FIRE CONTROL • SIGNS
LOCKS, LATCHES & SECURITY • CABINET FURNITURE • SHELVING & STORAGE • BOLTS & STOPS • SEALANTS & ADHESIVES • SCREWS & FIXINGS

Readers' homes

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT



31



22



57



48



40

22 **CREATING LIGHT & SPACE**

The Sandersons have transformed a run down 1950s house into a stunning contemporary abode

31 **THE RAMP HOUSE**

Access was proving difficult for Ian and Thea McMillan's daughter. So the couple bought a plot and built their family a barrier-free, wheelchair friendly home

40 **A LESSON LEARNT**

Julie Gocke couldn't find the perfect house to buy, so she turned her attention to her existing one. She's given it a complete overhaul by redefining the internal layout

48 **TRADITIONAL VALUES**

Neil and Dawn Clark turned to package builders Oakwrights to create a beautiful new home that's packed with character

57 **A CORNISH COTTAGE**

Explore Neil and Jackie Cotton's self build. Their light-filled contemporary abode, made from timber and block, is efficient and low-maintenance

MORE ONLINE >>

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

CREATING *light & space*

The **Sandersons** took a hands on approach to their renovation project and almost single-handedly transformed a rundown 1950s dwelling into a stylish and contemporary country home

WORDS **ANNA-MARIE DESOUZA**
PHOTOS **MIKE BLACK**



THE SANDERSON FILE

NAMES Richard & Rebecca Sanderson

OCCUPATIONS Retired farmers

LOCATION Lancaster

TYPE OF BUILD Renovation & extension

STYLE Contemporary

CONSTRUCTION METHOD Stone and timber frame

PLOT SIZE 0.4 acres

HOUSE SIZE 350m² (3,767ft²)

LAND COST £535,000 in 2008

BUILD COST £250,000

TOTAL COST £785,000

COST PER M² £714 (£66 per ft²)

BUILDING WORK COMMENCED Oct 2008

BUILDING WORK TOOK 18 months



When Richard and Rebecca Sanderson retired from farming in 2007, the couple immediately sought a new project to keep them busy. "Farming is such a hands on profession that when we retired we knew we would need something to do," says Rebecca. "Our renovation was our new full time job, and I absolutely loved the work."

The couple started looking for plots and opportunities in the Lancaster area. They searched the internet and visited local estate agents to try and find something to spark their interest. After a few weeks they came across a dilapidated 1950s property in a rural location. "The house itself wasn't attractive, but the plot was just fantastic," says Rebecca. "Developing it presented a great opportunity

for us – whatever we did to it would be a huge improvement, and I was positive the planners would feel the same. I instantly started to picture how I could change the layout and design."

The Sandersons put in an offer on the house with the condition that they would only buy it if they could obtain planning consent to create a new access road to the plot. "The vendor was the owner of the neighbouring property, too, and the route to the house was originally only through his land," says Rebecca. "We had to make arrangements with him to locate a suitable course for a new track and make a pre-purchase planning application. This was all pretty straightforward; we got approval, so we went ahead with the acquisition."



Design decisions

Rebecca started sketching what she wanted the house to look like and devising layout ideas for each room, specifying that all the internal zones faced either south or west to get the best views of the surrounding countryside. “The estate agent that sold us the property had a design department, so I took my drawings there. The resident architectural technologist looked over them for me and tweaked the details and came up with an idea for the exterior,” says Rebecca.

The plan was to remodel the existing property and build two full-height extensions, which would essentially double the size of the initial dwelling. The new five-bedroom home would be contemporary in style and feature a slate roof, stone cladding and sections of insulating render. A key design element, both inside and out, would be the large expanses of double-height glazing – which would show off the views and fill the house with natural light.

Originally the couple wanted to build the new additions using structural insulated panels (SIPs). They had researched the system and knew it would create a thermally efficient and airtight envelope. “We contacted a few firms trying to get quotes and advice, but to no avail,” says Rebecca. “I don’t know why we struggled to get interest; maybe the companies felt our job was too small to bother with. Anyway, we had to change our plan and started looking at timber frame instead. We came across Lakeland Timber Frame, who were instantly helpful. We were in touch with a number of similar companies, but we went with Lakeland for their service and price.”





Above & left: The large kitchen was sourced from Ikea and the couple fitted it themselves. A composite quartz worktop was installed to provide a high quality finish. Far left: The staircase is one of the ground floor's key features. It was fabricated by an agricultural metalworks

WE LEARNED...

LOOK AT your project as a learning experience. Building a home is like taking a course; there will be research and homework you need to do, you'll get practical experience and at the end you'll come away well equipped with the relevant skills

ONE OF THE conditions of our planning permission was that we face the house in a stone that's commonly used on vernacular buildings. It means the house has a slightly less contemporary feel than if we had used my original choice, but it's fine. We didn't oppose the condition as the rest of the permission process had gone so smoothly. It's important to see the bigger picture and not sweat the small stuff

WE WERE ALL set for a SIPs build, but it wasn't to be. We have ended up with timber frame, and the finish and insulation it has given us is just as good as SIPs would have provided. But you need to keep an open mind. Just because your original plans need to change doesn't mean you won't get the home you want

While Richard and Rebecca were waiting for planning consent for the main house, they started work on the garage, which was constructed (in blockwork) under permitted development. "We thought it was a good idea to do this before the main project began as it would give us somewhere to store all our furniture and site tools," says Rebecca. "By the time it was finished we had our approval and we could start building our new home."

The first step was to completely gut the original structure, leaving just the four external walls. "We had a builder, Peter, who helped us, but other than that we did most of the work ourselves – apart from the heating system, electrics and external rendering," says Rebecca. "We had a local contractor dig trenches and then we put in the footings and poured the concrete for the new foundations."

The stunning views through the home's many windows, coupled with features such as the lighting scheme and the staircase, pack the interiors with interest and character



Unfortunately the self-levelling product we used found its way into some drains that we were unaware of. We ended up having to dig them all out, but this was probably the only problem we had on the entire build."

With Rebecca project managing the scheme, the couple opted to live in the house throughout the works. "It wasn't always easy and certainly wouldn't be to everyone's taste, but I am glad we did. We had to access the upstairs via a ladder for around a year. It took us around 18 months to do the whole thing, but time didn't matter to us, we had no deadlines," she says.

Fabric first

With the drainage issues resolved, the team from Lakeland were able to erect the frames, which was done very quickly. "Once they had finished the roof structure, we got to work covering it. We mixed and matched old tiles from the original garage with Burlington slates – a local Cumbrian material that is used a lot in this area. Peter showed us how to lay the tiles and then we worked on the roof together," says Rebecca. "The tiles come in dozens of different sizes so you start with big ones at the eaves, going smaller towards the ridge. It is very time consuming to lay reclaimed slates as you can only batten one row at a time and you have to make sure you have enough of that size to complete a row. I spent hours sizing and measuring every slate and stacking them so Pete and Richard would know they had enough.

"The frame is an open panel system. We insulated it inside with Kingspan and we half-filled the four inch cavity between the stonework with the same material. For the existing walls of the original house we had a specialist company come and fix four-inch thick external insulation and then render on top of it."

In addition to the main fabric, insulation has been applied throughout the loft – in the old and new sections – and triple-glazed



windows installed. "The units are from Internorm. We discovered them at a local building show. We selected these particular units because we wanted to get the lowest possible U-value due to the large areas of glazing," says Rebecca.

The house is heated with an oil-fired boiler that was salvaged from the original dwelling. "It wasn't old, maybe four years at most, so we thought we may as well use it. The plumber re-sited it and we have the tank in the garden," says Rebecca. "There is underfloor heating downstairs and radiators upstairs, and the mix works well. We also have a woodburning stove. It's a focal point really – the house is so well insulated that we don't often use it. There are no specific architectural features inside, so we have used different elements to provide interest."



The house also has mechanical ventilation with heat recovery (MHVR), but it's something that the couple feel they could easily have done without. "We don't use it! We thought that if we insulated and sealed the house we would need it to prevent condensation," says Rebecca. "If it was a pure new build it may have been worth the installation cost. But the old part of the house is probably not as airtight as a new property would be."

Building character

In the hallway, the main detail is the staircase, which was bespoke made by a local firm that specialises in agricultural metalwork. "We contacted them with the measurements and they designed and

closer look

Design elements of this house...

Rebecca bought a book on lighting design and used what she learned from it to create a scheme for their home.

"Using layers of lights has helped us inject extra character into the interiors," she says. Layering involves combining ambient, accent and task lighting to create a balanced and visually attractive space.

The ambient aspect uniformly illuminates the room for general use, typically using ceiling-mounted fittings. To complement this, accent lighting can be used to highlight elements such as artwork or interesting architectural features. Types of accent fixtures include directional luminaires, tracks and downlights. Task lighting is used to provide supplemental illumination for specific activities such as reading. These fixtures may be part of the general system or as localised lighting including portable desktop, table and floor lamps.



Layered lighting

fabricated it for us. A local joiner made the timber treads and put it all together," says Rebecca. Leading up the stairs there are lights recessed into tall rectangular alcoves in the walls. "I bought a book on lighting design and got the idea from there. It has worked really nicely and adds interest to the blank canvas. We have used lighting to create different effects throughout the house."

Richard and Rebecca's favourite aspect of their home is the large open plan kitchen, dining and living room. It boasts fantastic views, which have been captured thanks to the orientation of the property.

"The kitchen was from Ikea. We've bought one from there previously and the units are a really reasonable price. We had a composite quartz worktop installed so it looks more high-end," says Rebecca. "We fitted the kitchen ourselves – we had done this before."

The original 1950s dwelling



Education & enjoyment

"We've completed loads of projects in the past, which stood us in good stead this time," says Rebecca. "We have renovated our way up the property ladder. This build has made me realise that I'd like to create something from scratch one day. We love living here but it's probably not going to be our forever home – it's much bigger than we need. But we adore the position and everything about its design and finish."

"Although it is very satisfying to see the end result, what Richard and I actually really enjoyed was the creative process and learning different construction techniques. I think farmers are similar to builders as 50% of your job is maintenance, so it's very hands on. It's not much of a stretch going from that to house building. I would do it again any day, I loved it."



TOTAL BUILD COST BREAKDOWN

Elements	Cost %	Cost m ²	Total cost*
New access track	3%	£20	£6,855
Garage	3%	£22	£7,705
Foundations & floor slab	4%	£30	£10,500
Timber frame	12%	£87	£30,535
Windows & front door	15%	£112	£39,120
Electrics	6%	£40	£14,110
Plumbing & heating	5%	£36	£12,510
Bathrooms	4%	£26	£9,030
Kitchen	4%	£31	£11,000
Labour	6%	£43	£14,985
Tool hire	1%	£5	£1,675
MVHR	2%	£12	£4,110
Legal & insurance	3%	£18	£6,295
Scaffolding	2%	£13	£4,500
Stairs	3%	£21	£7,500
Stove	2%	£12	£4,145
Rendering	4%	£29	£10,235
Internal doors	1%	£7	£2,390
Floor finishes	4%	£26	£9,050
Building materials	10%	£71	£25,000
Landscaping	7%	£52	£18,205
Misc	1%	£2	£545
Grand total			£250,000

Useful contacts

FOUNDATIONS Brian Kirkby 01524 221486 **TIMBER FRAME** Lakeland Timber Frame 01524 782596 www.lakelandtimberframe.co.uk **STONE CLADDING** Fairhurst Stone 01524 271160 www.fairhurst-stone.co.uk **ANHYDRITE SCREED & CONCRETE** Bardon www.aggregate.com **ELECTRICS** Harrison & Cross 01729 823423 www.harrison-and-cross.co.uk **PLUMBING** Peter Lawson 07947 582391 **UNDERFLOOR HEATING** Nu Heat 0800 731 1976 www.nu-heat.co.uk **KITCHEN** Ikea www.ikea.co.uk **TILES** Tile Mart 01772 258998 www.tilemart.co.uk **BUILDERS SUPPLIES** Myers Group 01484 535311 www.myersgroup.co.uk **INTERIOR DOORS** C&W Berry 01772 431216 www.cwberry.com **WINDOWS**

Internorm www.internorm.com/uk **STOVE** Stoves Online 0845 226 5754 www.stovesonline.co.uk **STEEL AND STAIRS** Hunter Fabrications 015242 62600 **LIGHTING** Kes Lighting 02476 317 022 www.keslighting.co.uk **Oldfield** 01756 799155 www.oldfieldlighting.co.uk **DESIGNER** Greg Gilding 01524 68822 www.fisherwrathall.co.uk **BUILDER** Peter Fletcher 07821 130810 **MVHR** 0845 467 9197 www.centralvacuums.co.uk **INSULATION** A&A Insulation 07971 092947 www.aandainsulationservices.com **SCAFFOLDING** Ash Scaffolding 01524 422420 **RENDERING** C & M Winstanley 01257 271722 www.candmwinstanley.com





klöeber®



Bespoke glazing solutions in timber aluminium & composite

Kloeber's advanced glazing solutions are available in bespoke or set sizes, with low U values and double or triple glazing options. 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. Our timber bifold doors are the only timber folding sliding doors with Secured by Design accreditation.

Why not visit one of our extensive showrooms?

telephone
01487 740044

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

LAKELAND TIMBER FRAME



Lakeland Timber Frame offer a flexible, personal service for professionals and individuals for self-build projects.

We combine high quality craftsmanship and attention to detail with the latest developments in technology to provide timber framed homes and buildings for the twenty first century.

Contact us to find out how we can offer you practical, value for money timber frame construction solutions to suit your project and your budget.

Lakeland



Nationwide service • Free estimates

Tel: 01524 782596

Email: info@lakelandtimberframe.co.uk

Eurostove



*the heart of
your home*

Eurostove are exclusive UK importers and distributors of WESTFIRE, SAEY and ORANIER woodburners and multifuel stoves. As well as a selection of other quality brands of wood boilers and cookers, Eurostove also manufacture MENDIP stoves.

The range offers a wide choice of distinctive styles from traditional to contemporary to warm the heart of any home. To find out more including your nearest dealer, visit our website or call to speak to an advisor.

01934 750500 | www.eurostove.co.uk

Call 0808 178 3040
www.swishwindows.co.uk

PVC-U windows don't just have to be white and square. Modern PVC-U windows from Swish can be custom-designed to enhance any property.

Available in a wide range of styles, shapes and sizes as well as beautiful colours and wood effects, our energy-efficient windows, doors and conservatories are installed by our nationwide network of expert local installers.

The ramp house

As **Ian and Thea McMillan** are both architects, they were in the perfect position to design and create a home to suit the needs of their family. And, thanks to a caring local community, the house was completed on schedule

WORDS **EMMA LEASK**
PHOTOS **DAVID BARBOUR**





They say that necessity is the mother of invention, and that was certainly the case for the McMillan family. When architects Ian and Thea – and daughters Bee and Greta, who has cerebral palsy – were struggling with the inaccessibility of their two-storey Victorian house, it sparked a desire to build a pioneering barrier-free and wheelchair-friendly home that would transform family life forever.

They wanted to stay local to where they already lived, but finding a plot in Edinburgh's seaside suburb and conservation area of Portobello wasn't going to be easy. However, as fate had it, Thea got chatting to local mechanic Arthur Harris, who offered to sell the couple a plot next to his workshop. After a site visit, the deal was done in a day. "It meant everything to us to stay in



Portobello where Greta is known and loved," says Thea. "She has lived here all her life. The children in her class know her and the fact she uses a wheelchair is not a big thing. If we had to move to a new community, we'd lose that."

The triangular-shaped site meant designing an entirely bespoke house. Despite a tight 215m² plot, the couple rejected the obvious solution of installing an elevator. "A lift would create an immediate inequality where Greta uses that and we use the stairs," says Thea. "The house should be for everyone – inclusive architecture – so we built our home around a ramp, enabling Greta to play with her friends at home just like any other eight-year-old."

The design was inspired by the sociability of Dutch architecture. The home is open plan and has several interesting levels that all spiral around the ramp. "For a child who cannot move around independently, the connectivity of the spaces becomes all the more important," says Thea. "In terms of energy efficiency, the

Below: The ramp is made from reclaimed timber from an old Glasgow dance hall. In the end it worked out a more cost effective material option than laminate flooring. The installation was a huge labour of love with friends enlisted to help build it

"The children and adults that visit always ask if we can put ramps in their houses, too"

THE McMILLAN FILE

NAMES Ian & Thea McMillan

OCCUPATIONS Architects

LOCATION Portobello, Edinburgh

TYPE OF BUILD New build

STYLE Contemporary

CONSTRUCTION METHOD

Steel frame

PLOT SIZE 215m²

HOUSE SIZE 145m² (1,561 ft²)

LAND COST £140,000

BOUGHT January 2010

BUILD COST £247,000

COST PER M² £1,703 (£158 per ft²)

TOTAL COST £387,000

VAT RECLAIM £2,000

BUILDING WORK COMMENCED

February 2012

BUILDING WORK TOOK 40 weeks

CURRENT VALUE £420,000



concept was to make the house as airtight as possible and to have a highly efficient thermal envelope. It costs the same to run as our Victorian terrace, which was half the size.”

Budgets & finance

The initial budget was £225,000, but rose to £247,000. “The most challenging part of the build was getting the costs to stack up before we started, which took a lot of time,” says Ian.

Financing the scheme meant getting a self build mortgage of £200,000 plus using equity from the sale of their previous home and a loan from family. After receiving just two offers they went with the Ecology Building Society. “They were keen on a 60/40 equity split, so we had to use our finances up front to get the project off the ground,” says Ian. “The building society was flexible in allowing releases based upon valuations as opposed to set stages, which did make draw

The house has a very Scottish theme. It features Caithness flagstone paving off-cuts from the streets of Edinburgh and red cedar shingles from Inverness





downs easier. It meant we could align them with the builder's invoices.

"Ecology asked us to get insurance. However as we had a main contractor we ended up being covered twice. I think it would have been a good idea if we were project managing all the trades ourselves, but in this case our insurance was totally useless in my view."

Consent for the scheme took three months to come through. The McMillans felt the key to getting the planners on side was to have several pre-application discussions before submission. Being a conservation area, some local people objected to the scheme, stating that the design was too contemporary – they suggested it should be mock Georgian. "This type of view is against planning policy and government advice, where there is positive encouragement for development within conservation areas. New homes should help to create sustainable communities and meet modern lifestyles as opposed to being fixed moments in time," says Ian. "My advice is to be confident in what you want to build."

Being architects, the couple spent a long time planning all aspects of the house. Passionate about designing spaces that are not only accessible to all, but richer because of it, the couple were inspired to start their own practice – Chambers McMillan. "Housing design shouldn't be restricted to being just for the able bodied or a wheelchair user – the boundary needs to become more blurred," says Thea. "In Denmark every change in level has steps and a ramp combined and it works for everyone including bikes, buggies and wheelchairs. Why shouldn't everywhere be accessible to all?"

It's a view that seems to have struck a chord. Despite 16 objections (which meant going to committee) including one from the Portobello Community Council, the couple were touched to discover that 48 locals – some they didn't even know – wrote letters of support for the application, arguing that Greta should have a wheelchair accessible house so she could remain in the community.

Permission was granted with a few conditions, such as obtaining archaeology and contamination reports. "In relation to the archaeology, we did agree with planning to have a 'watching brief' and we recorded a report of the existing buildings ourselves, which the planners approved," says Ian. "The site contamination proved trickier as it was brownfield. Having an engineer to test for the various sub-surface gases (often present in such sites) would cost the same as fitting a gas membrane under the whole house, so we just put in the membrane."

Work on site

After tendering to five firms, the couple hired a main contractor, John Dennis Construction. "We used a traditional JCT contract with bills of quantities. It keeps things transparent," says Ian. "We managed the demolitions and services as pre-contract works. The utility connections took forever, but were finally resolved after we wrote a letter of complaint to the supplier's CEO."

The build went smoothly. Laying the foundations was stress free, with the only minor issue being an existing road drain, which the



WE LEARNED...

SIZE OF WINDOWS is vital. During a cost savings exercise we initially started to omit glazed aspects. The actual savings generated was fairly low, but the impact of less natural light was dramatic. We had lots of roof windows as well, so in order to cut back spending we got our engineer to calculate the required glass thicknesses, a blacksmith to do the frames and a glazer to produce the infill units. We saved 50% of the cost this way

BUILDING CONTROL can be flexible. The ramp runs through the house with a fall of 1:8. We used the European standard as opposed to the UK (1:12), which we couldn't fit into the plan. Building control accepted it as we have a 'compliant' staircase as well

WE USED off-cuts of Caithness paving stone, which we got direct from the quarry. We specified 40mm, 60mm and 80mm thicknesses (the lengths are random), which meant we could course them for a bricklayer as opposed to a stonemason. It worked out very economically, and we used this on the ground floor elevation where you can touch and feel it

OVER 30% of the house is circulation space. As we've incorporated it into the open plan zone, it doesn't feel like a mass of corridors – so it makes our home seem much bigger than it is. We also created 'long views' through the whole house, again making it appear larger because you can see the entire extent of the space

WE SPECIFIED a sample section of our polished concrete floor to be constructed and approved, however the time scale got very tight as the product we were going to use wasn't available right away. The subcontractor also missed the curing time, which meant we didn't get the colour or finish we expected. Control samples for bespoke items are important and should be included in the contract. These should be done well ahead of the program to allow for any issues to be resolved

Unwilling to block off the view to the back courtyard, the couple designed the study as part of the open plan kitchen and living area with a bespoke desk to divide the space



foundations had to bridge over. "The contractor was experienced so no part seemed particularly difficult," says Ian. "The stone cladding on the ground floor took a long time as a bricklayer did the work of a stonemason, however he did a fabulous job."

The steel frame structure has been finished using local materials. Caithness flagstone off-cuts from Edinburgh were used to face the ground level, while red cedar shingles from Inverness surround the first floor. Continuing the Scottish theme, the striking tower is clad in copper, akin to that used on traditional whisky distilleries, and its shape was inspired by the brick kilns in Portobello.

The front of the house stands right on the street, so to maximise outside space a recessed entrance has been created. Next to this is a Danish-influenced breakfast area with a sliding glass door that opens directly onto the road.

The essential element

The three storey tower, a reflecting pool, bright red feature walls and furniture design classics from Eames, Jacobsen and Poulsen throughout, mean the house certainly doesn't look like a stereotypical wheelchair-friendly abode. The only hint is the boardwalk style ramp meandering through the home, which adds a nautical feel. "The most difficult part of the process was designing and fitting the 28m-long feature into the scheme," says Ian. It inclines through the kitchen, living zone and study before moving round to the bedrooms and physio area. It's the main circulation route, although there is a small staircase tucked away near the front door.

The study presides over the living room rather like a stage, with a specially-designed desk and bookshelf to divide the spaces. The





ramp ends at the wet room, which has a 2m-wide sliding door and walls clad with limestone. Across the landing is the girls' bedroom with a high level play deck for Bee. The crowning glory of the house is the crow's nest room in the copper clad tower. It boasts sea views and is where Ian and Thea relax in the evening.

As well as changing Greta's life, the rest of the family discovered moving around a house via a ramp is a lot of fun. "Bee hangs out with her 11-year-old friends sitting on the window sill and ramp railings. Little children enjoy scooting up and down in ride on cars and when we had a party our friends were dotted halfway up the ramp chatting," says Thea. For the McMillans, the fact that people experience a different – and positive – way of moving around their home is the entire point. "The wider impact of an inclusive house like this is that people understand that accessibility does not need to be about constrictions," adds Thea.

The ramp itself, taking up almost a third of the floor space – is a thing of beauty. Made from 28mm thick maple, its past life was as a dance floor in Glasgow. "It's 50 years old, and I like the idea that perhaps my parents once waltzed on it," says Ian. "It was a huge labour of love and in the end it worked out more cost effective than installing new laminate flooring."

After the house was complete, the couple started landscaping, with a budget of £3,000. "We had some initial concepts, but these changed," says Thea. "The garden was so small we flooded most of it to make a reflecting pool and broke it up into different levels and interesting spaces."

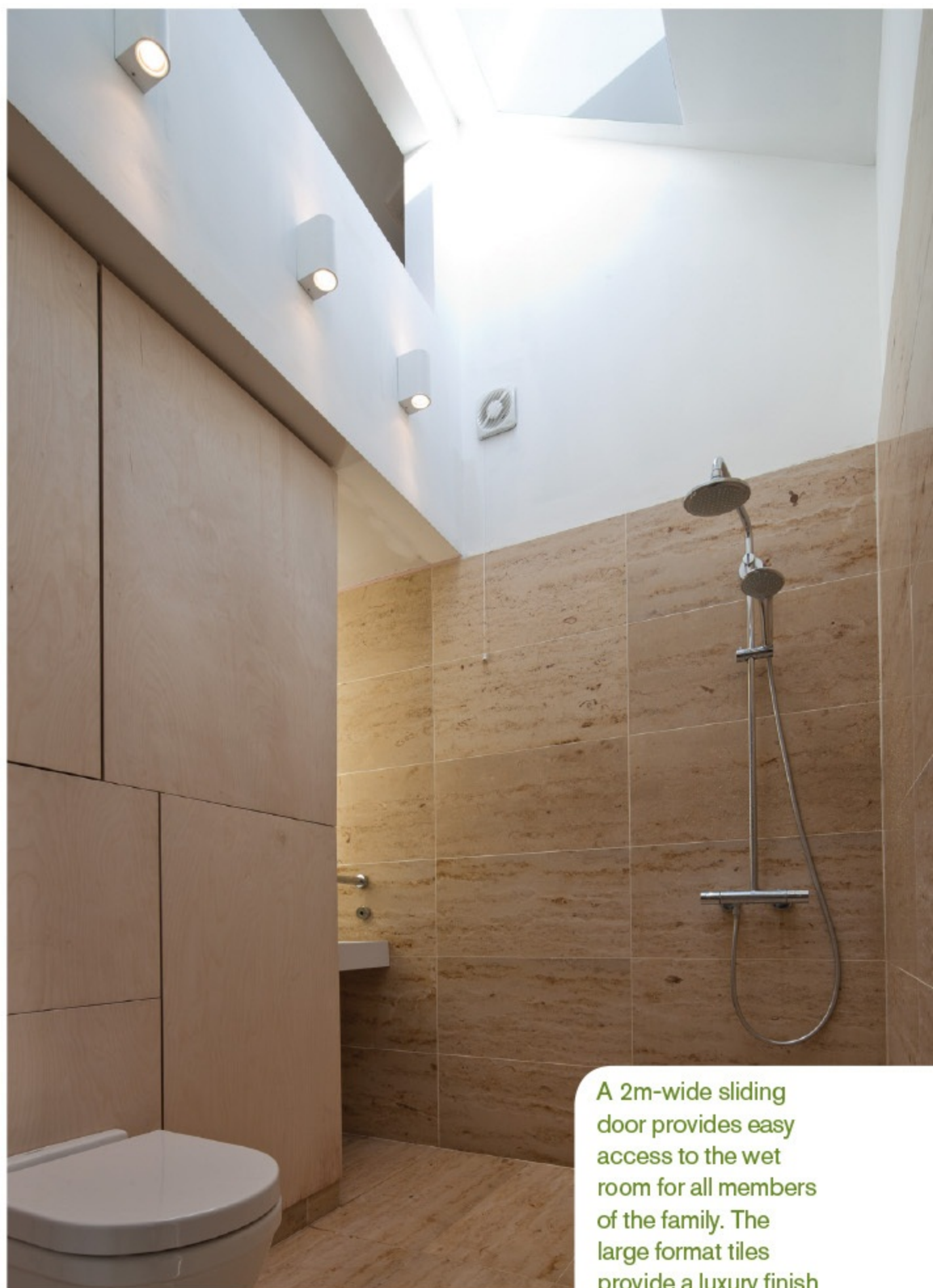
In general, the family enjoyed self building. "The process does bond you closer," says Thea. "Having a proper contract, bills of

quantity and main contractor made the process very streamlined. Unlike on television, not all self builds need run over on time and budget! We completed two weeks ahead of target and used 3% of the 5% contingency. We'd definitely build for ourselves again on a brownfield site. Being architects, it's great to work on a small tricky plot that's full of character that really challenges your design skills. It would be great to go totally carbon neutral next time."

Caring community

For financial reasons, the couple had to finish the interiors themselves. Faced with the enormity of the task, Ian put out a plea for help via Facebook to the Portobello Dads Network. The couple were blown away by the generosity of the local community, when just hours later 40 local dads – some they'd never met – turned up at the house to help. "It was very touching and made it feel like a real community build," says Ian.

The result speaks for itself and the property has won three architectural awards. Most importantly, however, the house has proved a huge success for the entire family. "It gives us great joy seeing Greta enjoying the spaces of our home inclusively," says Thea. "People can't believe it's a wheelchair accessible house – it looks too contemporary, and not at all institutional or medical. Children and adults that visit us always ask if we can put ramps in all of their houses, too." At a final build cost of just £247,000 the McMillans have also proved that designing inclusively can be cost effective. It's clear that Ian and Thea's manifestation of 'architecture for all' should be supported and applauded.

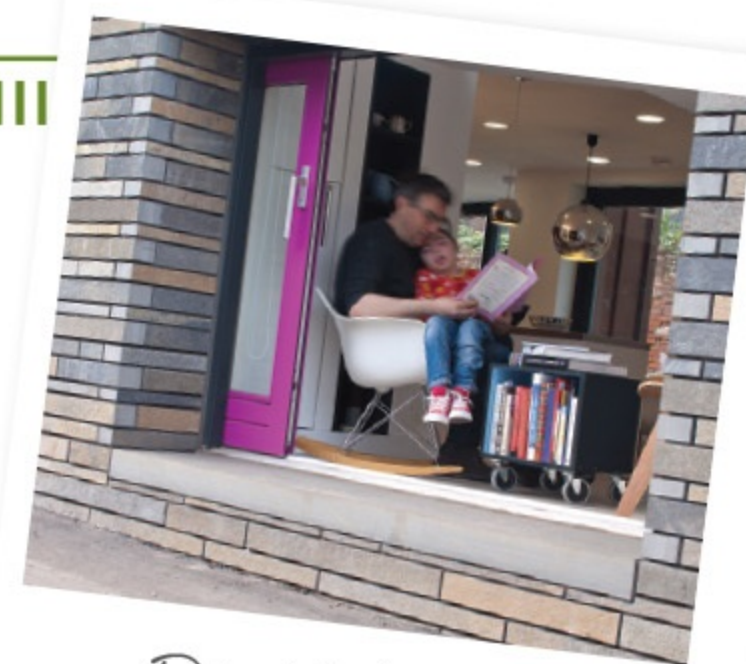


A 2m-wide sliding door provides easy access to the wet room for all members of the family. The large format tiles provide a luxury finish

closer look

Design elements of this house...

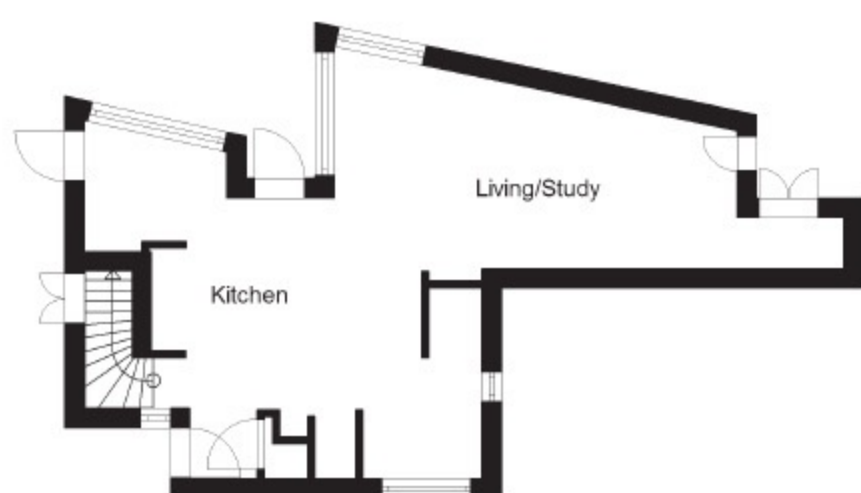
The facade of the house stands right on the street, so the couple 'stole back' outdoor space by designing a recessed entrance with a small fountain. Next to this is a Danish-influenced breakfast area with a sliding glass door, which opens directly onto the path. "The Danes have planning regulations about how much transparency a house should have to the street front, and allowing people to interact is considered very important. I think it's vital for a building to engage with the street and that we don't all live in submarines in a city," says Ian. Thea agrees: "It's nice to have a space I can sit outside with my morning coffee and chat to people passing by."



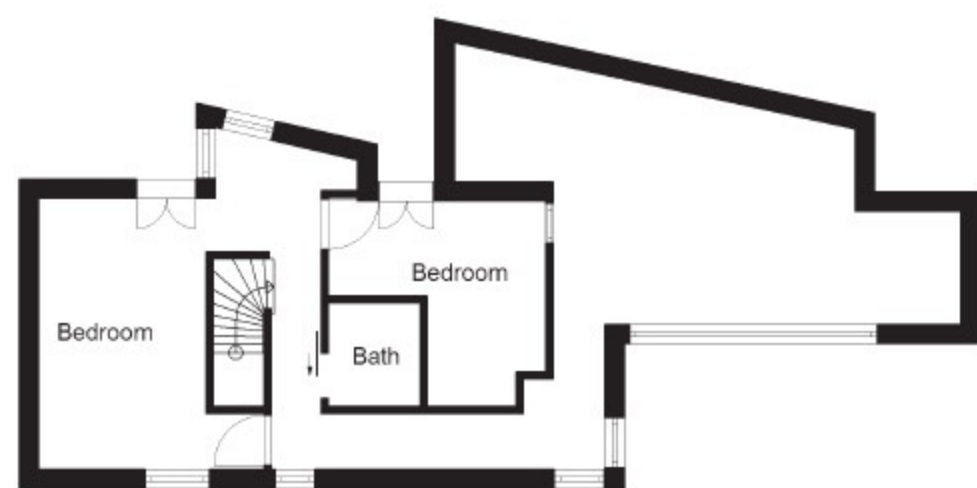
Danish living



Floor plans



Ground floor



First floor



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

Elements	Cost %	Cost m ²	Total cost
Preliminaries	14%	£241	£35,000
Foundations	9%	£145	£21,000
External walls & windows	46%	£779	£113,000
Roof structure & covering	12%	£200	£29,000
Internal walls	4%	£62	£9,000
Floor, wall & ceiling finishes	3%	£45	£6,500
Joinery & fittings	4%	£66	£9,500
Plumbing & heating (inc. bathroom & kitchen)	6%	£103	£15,000
Electrics	3%	£52	£7,500
Decorating	<1%	£10	£1,500
Grand total			£247,000

Useful contacts

ARCHITECT Chambers McMillan 0131 669 5766 www.chambersmcmillan.com
STRUCTURAL ENGINEER Harley Haddow 0131 226 3331 www.harleyhaddow.com
QUANTITY SURVEYORS MacLeod and Aitken 01224 313 900 www.mcleod-aitken.com
BUILDERS & DOOR FRAMES John Dennis Construction 0131 663 3275 www.jdenniss.com
ELECTRICIANS Cablecom 0845 270 2316 www.cablecom-ltd.com
LANDSCAPE DESIGNERS Chambers McMillan 0131 669 5766 www.chambersmcmillan.com
DOOR SUPPLIERS ADW Cumbernauld 01236 780 022 www.adwlimited.co.uk
FLOORING Hargreaves Reclaimed Flooring 01324 832 200 www.hargreavesreclaimedflooring.com
GUTTERING Marley Flowline 01622 858 888 www.marleyplumbinganddrainage.com
HEATING INSULATION Earthwool www.earthwool.co.uk
KITCHEN UNITS IKEA www.ikea.com

LIGHTING XAL www.xal.com
WINDOWS ADW (Rationell) 01236 780 022 www.adwlimited.co.uk
JURA LIMESTONE Solnhofen Stone Group, Germany +49 421 163 2300 www.solnhofenstone.com
STAINLESS STEEL WORKTOPS RCK Fabrications 01875 898 022 www.rckfabrications.com
METALWORK Icon Fabrications 0131 654 9424 www.icon-fab.com
OVERSIZED SLIDING DOORS Folding Future 01234 880 975 www.foldingfuture.co.uk
CAITHNESS STONE A+D Sutherland 01847 841 239 www.caithnessflagstone.co.uk
TIMBER SHINGLES Russwood 01540 673 648 www.russwood.co.uk
PLUMBING Melville and Whitson 0131 660 1480 www.melvilleandwhitson.com
FIRE ENGINEERING Jeremy Gardner 0131 226 1661 www.jgafire.com
ACCESSIBILITY People Friendly Design 0131 225 1829 www.peoplefriendly.com



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 former school is now three separate properties. Julie occupies the middle section, which used to be the school hall. She has retained the external character but revamped the interior twice

A lesson learnt

When **Julie Gokce's** search for a renovation project proved fruitless, she turned her attention back to her existing home – a school conversion ripe for an internal overhaul

WORDS **HEATHER DIXON** PHOTOS **COLIN POOLE**



Every so often Julie Gokce gets itchy feet for a building project. The first time it happened, she purchased and renovated a former school.

The second time she bought and remodelled a property to let. The third time she decided to move house. However, when she couldn't find anything she liked better than her own unusual home, she decided to start all over again and renovate it for a second time.

"My first plan was simply to update the kitchen, but then I thought it would be a good idea to open up the room to create a bigger living area," says Julie. "Before I knew it I was planning a huge revamp of the entire house."

Never one to do anything by halves, she decided to strip the entire building back to a shell, dismantling everything she had created first time round until there was nothing left except for a very large and open two-storey space. "I got a bit carried away," says Julie. "The first renovation was very traditional with lots of chintz and old fashioned furniture. This time around I wanted to do something radically different and very modern."

When Julie bought the property 25 years ago it was an old school that had been converted into three homes. Hers was the middle house and comprised the former hall and washrooms, along with part of the outdoor playground. It still bore the hallmarks of the school paint colours, there was no staircase and the original hall floorboards were grimy and blackened. "It was more school than home," says Julie.

For the earlier renovation she lived in the property, moving from one part of the building to another as she gradually worked through it, coming home from her day job to spend every evening turning the big open space into a comfortable two-storey home. In that first phase, which took eight months and was finished just in time to receive 28 guests for Christmas, Julie had the walls sandblasted inside, the roof repaired, the

Upgrading the kitchen inspired Julie to improve the rest of her property, too. The monochrome units and worktop, from Norwood Interiors, match the zone's contemporary finish



floor stripped and varnished, stud walls built and a new galley kitchen and bathroom installed. A traditional straight staircase was also fitted, leading directly onto a galleried landing.

"It stayed like that for years," says Julie. "It was only when I decided to move and couldn't find anything I liked that I decided to revamp the kitchen instead. Then things started to snowball. I asked the builder to take out the kitchen wall and when I saw what a difference it made to the space I told him to rip out the rest!"

Julie reworked her plans and before long the stud walls were all knocked down, the ceilings ripped out and the property was back to where she had started all those years before. "The only area that didn't change much was the sitting room," she says. "I just modernised the fireplace and re-decorated."

Growing plans

This time Julie moved into rented accommodation for five months while the bulk of the building work was completed. She managed the

THE GOKCE FILE

NAME Julie Gokce
OCCUPATIONS Sales director
LOCATION Queensbury, West Yorkshire
TYPE OF BUILD Renovation
STYLE Victorian school building
HOUSE SIZE 232m² (2,497ft²)
PROPERTY COST £90,000
BOUGHT 1989
RENOVATION COST £98,500
COST PER M² £425 (£39 Per ft²)
BUILDING WORK TOOK Six months
CURRENT VALUE £350,000



Julie tried to save the original school floorboards, but unfortunately they were too badly damaged during the renovation to use. So she decided to lay a new floor over the top instead



A traditional staircase and galleried landing was replaced with a space-saving spiral, which leads to the four bedrooms and a main bathroom (below)

project herself, using her skills within the industry as an interior designer to plan every aspect.

"The building isn't listed and it's not in a conservation area, so I didn't need planning permission," she says. "All the work was internal. In many ways it was quite straightforward. Having done it once before I was very familiar with the building and had learnt most of the things I needed to know first time round."

The redesign included the installation of a family bathroom and two en suites, plus a downstairs cloakroom. The adjoining garage was turned into a utility and study with French doors leading out onto the paved area at the back of the property. Instead of a galley kitchen, Julie designed an open plan dining, sitting and culinary zone, which is now the hub of the home. She replaced the traditional staircase with a stylish spiral access, which was one of the last fittings to be installed. The landing and first floor bedrooms were also redesigned to make better use of the space.

Julie wanted to create more height in the bedrooms and lowered the floor by several inches – without compromising the sense of space on the ground floor. "The second renovation presented some unexpected challenges," she says. "Since the first project, there has been new legislation relating to the electrics, so they all had to be upgraded to meet current standards."

The dated drainage system also meant there was insufficient fall in the soil pipe. It meant there wasn't enough available head height to have the door into the downstairs cloakroom located directly underneath the staircase. As a result, Julie had to move the opening to the other side of the room, directly off the dining area, which, she says, is one of two major regrets. The second was losing the original school floor, which was so damaged during the building work that it had to be over-laid with laminate floorboards.



Updates and fittings

All the old wooden windows, which had been patched up in the first renovation, were replaced with PVCu ones. The original boiler was retained, but new modern radiators have been installed. The thick walls are now fitted with insulated plasterboard and new internal doors were installed throughout.

Julie is still adding the finishing touches. She is planning to pave the former school yard with jet black slate and – if she stays – she will swap the black granite kitchen worktops for her initial choice of white. “I changed my mind and played safe at the last minute and have regretted it ever since,” she says. “Whether I change it and stay here, or look for another project is still a matter for debate, but if I

WE LEARNED...

RENOVATING A HOUSE TWICE

means you learn from the mistakes you made the first time round. I ordered all the products and managed the time scales during the second renovation so that I knew what was happening at all times. I managed to save money by shopping around, drawing up my own designs and keeping everything simple, straightforward and well organised

IF YOU ARE CONVERTING a non-residential building into a place to live you may be able to reclaim the VAT or pay a reduced rate on some of the building materials and conversion services you use. The works must be carried out in the UK – including the Isle of Man, but not the Channel Islands – and the property must not be intended for business purposes



Julie's bedroom features original beams that, to some extent, dictated the layout of the room. The floor level was lowered to allow more height on the first floor

do move it would have to be something very special to take me away from this place."

One of the secrets of Julie's two-part success story rests with her own experience and knowledge of the building industry and the money that has saved her. She didn't appoint an architect or structural engineer. Instead, she drew up her own designs and used the same team of tradespeople from the original renovation.

"I love the whole process of transforming a building from something dated into a bright, modern and efficient home," says

Julie. "It's a great opportunity to be creative. I like being able to source the products and materials, to hunt for the best bargains, and pull it all together. It's incredibly hard work and I sometimes wonder how it all slots into place when I work full time as well. But if I had brought in a project manager it would have cost a fortune. I did everything I could on my own to save money and keep costs down. The only things that I didn't do was all the labouring and building work – but I would probably have done that as well if I knew how!"

closer look

Design elements of this house...

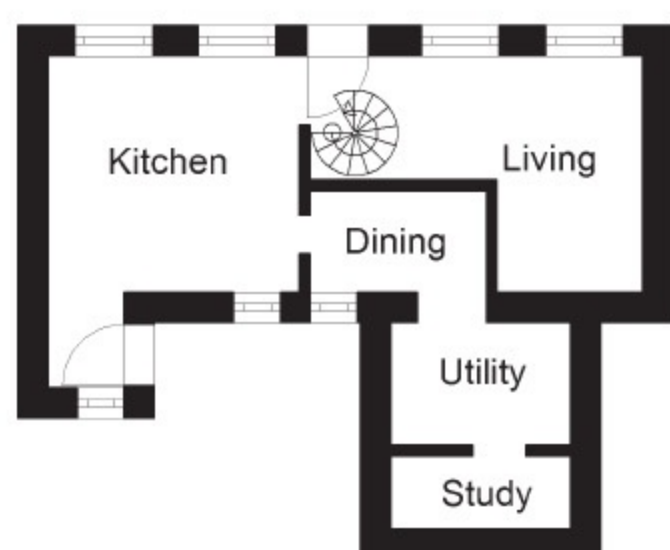
Julie Gokce is sales director at Norwood Interiors. Her professional experience, along with the knowledge gained while doing two renovations, has given her a keen eye for detail and design. Moving house or extending isn't the only solution for families in need of more space. Julie was able to see past the constraints of her existing home and visualise the possibilities for its internal layout. A couple of small boxy rooms could be easily opened up and joined together to provide the space and room she desired.



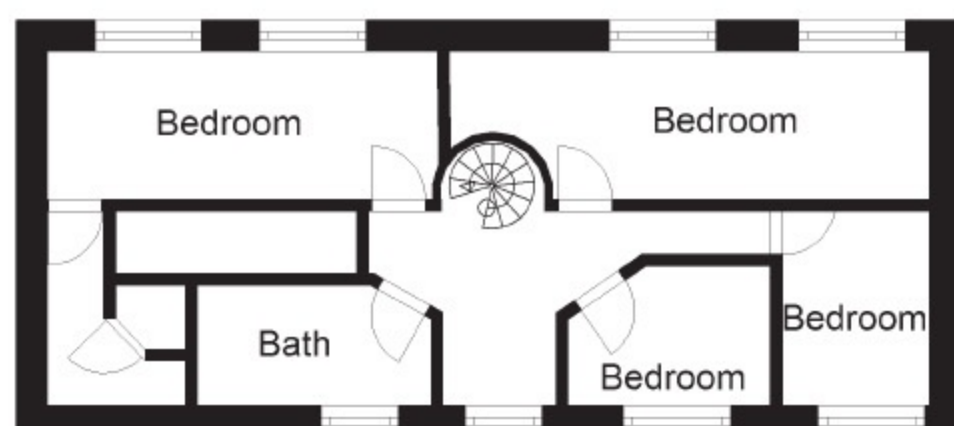
Changing the layout



Floor plans



Ground floor



First floor



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

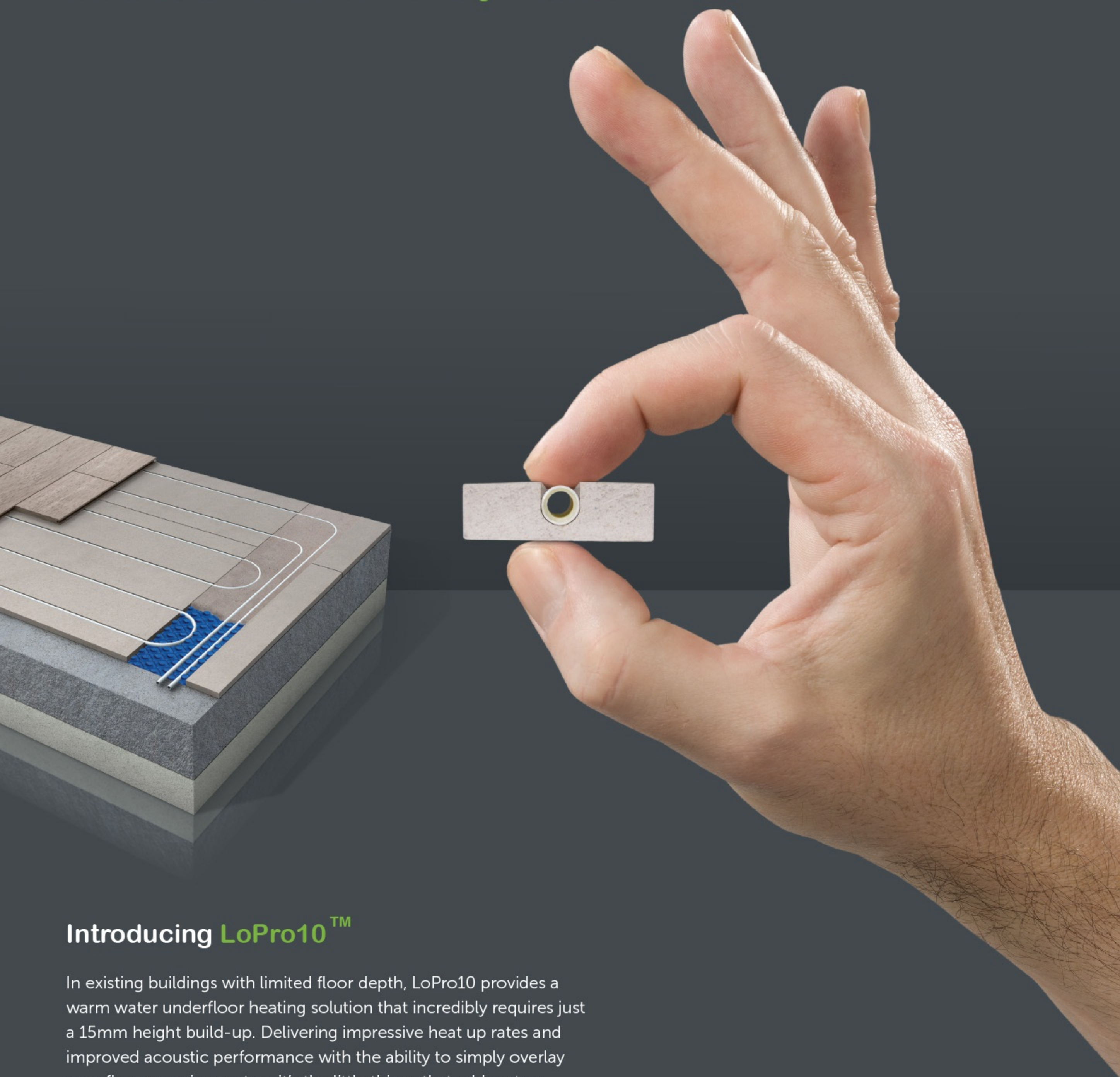
Elements	Cost %	Cost m ²	Total cost*
Garage conversion	3%	£13	£3,000
Staircase	7%	£28	£6,500
Windows	7%	£28	£6,500
Floors	5%	£19	£4,500
Plumbing & heating	3%	£11	£2,500
Bathroom	30%	£129	£30,000
Kitchen	20%	£86	£20,000
External works	2%	£9	£2,000
Labour	23%	£101	£23,500
Grand total			£98,500

Useful contacts



INTERIORS Norwood Interiors 0113 388 5200 www.norwood-interiors.co.uk
BUILDERS Ross Hammond Builders 07887 867977 **PLUMBING** Charlie Wyrell 07976 738527 **LIGHTING AND FURNITURE** Dwell www.dwell.co.uk
LAMINATE FLOORING Howarth Timber 0844 801 3036 www.howarth-timber.co.uk **WINDOWS** New Style Carousel 01274 522817 www.carouselwindows.co.uk **STAIRCASE** Parkgate Interiors 0845 890 3031 www.parkgateinteriors.co.uk

The low profile retrofit underfloor heating solution where less is definitely more.



Introducing LoPro10™

In existing buildings with limited floor depth, LoPro10 provides a warm water underfloor heating solution that incredibly requires just a 15mm height build-up. Delivering impressive heat up rates and improved acoustic performance with the ability to simply overlay your floor covering on top, it's the little things that add up to a lot with LoPro10. You have to hand it to us, where once a limited floor depth meant underfloor heating wasn't an option, it is now with LoPro10.

Nu-Heat
UNDERFLOOR & RENEWABLES

Online
www.nu-heat.co.uk

Freephone
0800 731 1976

Follow us
@nuheatuk

See our videos
/nuheatuk

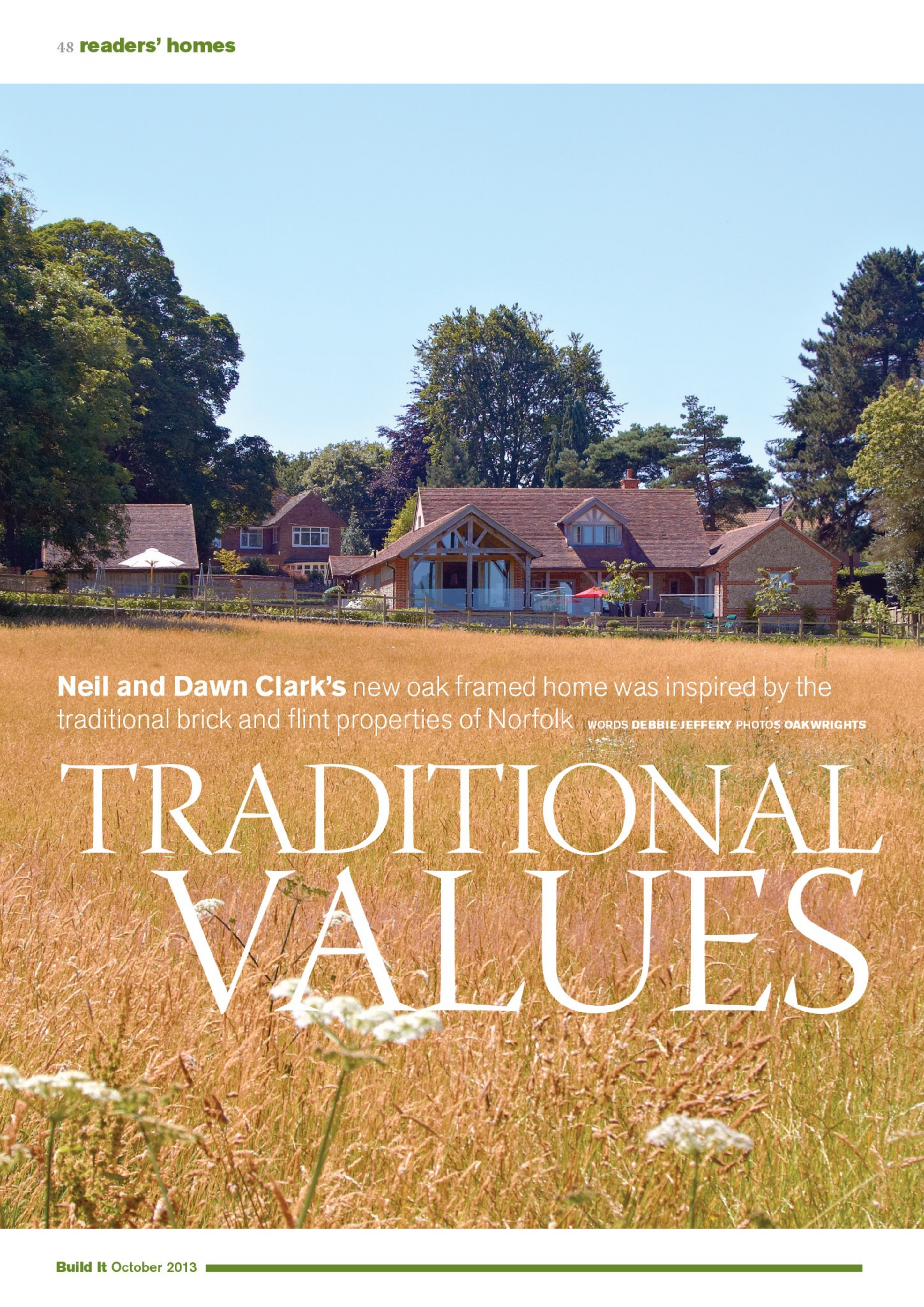
Trusted by the trade.

UNDERFLOOR HEATING

HEAT PUMPS

SOLAR THERMAL

RAINWATER HARVESTING



Neil and Dawn Clark's new oak framed home was inspired by the traditional brick and flint properties of Norfolk

WORDS **DEBBIE JEFFERY** PHOTOS **OAKWRIGHTS**

TRADITIONAL VALUES



When it comes to giving old buildings a new lease of life, Neil and Dawn Clark have gathered a wealth of hard-won experience renovating everything from a lacklustre bungalow to a derelict schoolhouse. However, the couple waited until they reached retirement before taking on the ultimate challenge of building an entire house from scratch.

"We decided to move from Surrey to Norfolk to live closer to Dawn's brother. We love the area and the gentle pace of life," says Neil. "To our surprise and delight our two daughters decided to follow us here and now live nearby, which meant we no longer needed so many guest bedrooms and could downsize from our old high-maintenance house to something more manageable."



The couple began searching for a more modest home, and in 2008 they viewed a dilapidated bungalow standing on a stunning plot within a conservation area on the outskirts of the market town of Aylsham.

The council had already granted outline planning permission to extend the property but the Clarks were not keen on the design. Instead they approached the council to discuss redeveloping the site with a brand new house. "We loved the fact that the plot is just a short walk from the town centre, so we sold our converted schoolhouse in order to buy the bungalow and then set about designing a replacement house," says Dawn. "A new build made far more sense as it would be exempt from VAT, which would be a huge benefit for us financially."

Design decisions

Years of buying and renovating properties meant that the Clarks already had a firm idea of what type of home they preferred. A characterful oak frame was top of their wish list. They also wanted a traditional brick and flint exterior inspired by the local vernacular.

"I'm a bit of a frustrated architect, so I sat down with a pencil and sketched out our ideas," says Neil. "Then we invited the professional who had worked with us on the schoolhouse to produce a more detailed design to submit to the planning authority. We thought



this stage would be easy, because we felt that our proposal was far more attractive than the previous application, but at first the planners wanted the whole house to be built in red brick."

After numerous discussions, the Clarks and their architect convinced the local authority to agree to traditional brick and flint external walls, with plain clay tiles for the roof. Further negotiations with Broadland District Council followed until planning consent was finally granted in July 2009 – five months after the application was first submitted.

"It wasn't a simple process and at one stage we almost gave up completely," says Neil. "We had to make several cosmetic changes and move the position of the house to accommodate a large sycamore, which was covered by a tree preservation order."

A fabulous oak-and-glass gable end allows natural light to flood into the kitchen. Two sets of French doors give access to the courtyard garden



The architect's drawings were given to Oakwrights, who were responsible for crafting and erecting the all-important frame for the Clark's new home. "We'd researched various oak frame specialists and weren't impressed by the quality of some of their work," says Dawn. "When we visited Oakwrights' show house in Herefordshire we knew we'd found the right people because the attention to detail was really superb. We paid our deposit and placed the order for our frame before we'd even received final planning consent. We wanted to make sure we could secure a place in Oakwrights' schedule. It was a bit of a risk, but we also wanted to get started as soon as possible to avoid the worst of the winter weather."

Plain sailing on site

In early August 2009, two weeks after planning permission was granted, the bungalow was demolished and the site was cleared before foundations could be dug and the base laid. The Clarks' structural engineer recommended a block and beam suspended ground floor system, which accommodates the sloping nature of the site, instead of pouring a solid mass of reinforced concrete.



THE CLARK FILE

NAMES Neil & Dawn Clark

OCCUPATIONS Retired marketing director & retired nurse

LOCATION Aylsham, Norfolk

TYPE OF BUILD New build

STYLE Traditional

CONSTRUCTION METHOD Oak frame

PLOT SIZE 0.75 acres

HOUSE SIZE 300m² (3,229 ft²)

LAND COST £285,000

BOUGHT June 2010

BUILD COST £917,400

TOTAL COST £1,202,400

COST PER M² £3,058 (£284 per ft²)

BUILDING WORK COMMENCED
August 2009

BUILDING WORK TOOK 60 weeks

CURRENT VALUE £1.5 million



Strengthened beams are laid across or between walls and are infilled with aircrete blocks, creating a completely dry construction system.

Oakwrights then delivered and erected the frame in late October. Using carpenters' marks carved into the timbers, an age-old way to ensure that the complex jigsaw of oak is put together correctly, the frame was easily raised on site and fixed in place with traditional timber pegs. The crane and lorries arrived and were parked on a specially made hardstanding area, with the foreman instructing his team about the sequence of the frame erection. Overall the process took just one week to complete and ran extremely smoothly.

Once the frame was constructed it was wrapped with a large scaffold frame and covered with a lid that protected it from the elements and ensured no delays were caused due to poor weather. "The scaffolding was erected by our main builder and stayed up for



Marble flooring was laid in the kitchen, dining and family room. It's a good conductor of heat, making it the perfect match for the underfloor heating

WE LEARNED...

CONSIDER the oak frame in your interior design decisions. For instance, kitchen cabinets need to fit between the posts. Think about lighting the frame to show it off to its best advantage, too

MAKE SURE you take floor coverings into account when calculating your heating requirements. Our solid oak floorboards are not a good heat conductor compared to the stone we laid in the kitchen

THINK about how you'll want to use the house in the future and choose a flexible layout. We have a lovely master bedroom upstairs, but could easily live just on the ground floor if we ever need to when we get older and less able

NATURAL LIGHT will improve how your interiors look. We have incorporated large glazed aspects throughout the house, which makes the rooms seem larger. The brightness that floods in highlights architectural features, such as the beams



“Our previous renovation project meant we already knew some good local contacts, but nothing can really prepare you for your first self build”



Above left: The sitting room is a quiet retreat that links the single-storey guest bedroom and kitchen wings. Right: A luxurious vaulted master bedroom, dressing room and en suite has been created on the first floor



about nine months," says Neil. "It wasn't a cheap option, but it meant that the trades could work inside in the dry, which was a real bonus – especially when it came to the flintwork," he says.

The facing walls, built with whole local flints, were laid in non-hydraulic lime mortar. They were built outside the cavity blockwork, and needed to be laid in stages to make sure that they would not sag or bow under their own weight. The result is an extremely thick exterior wall with an authentic traditional appearance.

"Using ready-made flint blocks would have been like buying a fake handbag, because we would always have known they weren't the genuine article," says Neil, who employed the same firm of family builders that had renovated their old schoolhouse.

"Coopers has a team of really excellent tradesmen – something that can be difficult to find nowadays," says Neil. "Using a main contractor was probably a more expensive route than managing the trades ourselves. However, for us it was worth the additional cost to have peace of mind."

The Clarks had originally estimated that the project would cost around £650,000 but it soon became apparent that this would be exceeded. "We kept upgrading the specification and went for Idigbo hardwood window frames instead of softwood, with marble flooring in the kitchen instead of ceramic tiles, and pickled flamed granite on the terrace instead of standard paving. We knew that this house would probably be the last one we live in and so we wanted to get it right," says Neil.

Thinking ahead

With future requirements in mind, the layout has been created on predominantly one level. An open plan kitchen/dining/family room measuring five metres wide opens through glazed doors onto a

sheltered loggia, and has proved to be the heart of the house. When Dawn and Neil's friends and family come to visit everyone gathers in this space, where exposed oak timbers create a framework that brings instant charm and character to the interior.

"Dawn will be cooking tea and the grandchildren will be watching TV in the family room, or doing a jigsaw on the floor," says Neil. "I think a separate sitting room in a house of this size is important, and ours offers a quiet place where you can retreat if you need to. I also designed myself a small study at the top of the stairs by altering the position of the staircase to make a large landing area outside the master bedroom."

Two bedrooms for visiting grandchildren, a further guest bedroom with ensuite bath/shower and a family bathroom make up the other single-storey wing of the house, which was conventionally built in blockwork without an oak frame. Only the central section of the house is two storeys, forming an impressive vaulted first floor master bedroom with its own dressing area and ensuite. Flexibility was the key to the design, and the Clarks will be able to live entirely on the ground floor should they need to in the future.

"We put most of our belongings into storage and rented a converted barn to live in for 12 months during the build, but unfortunately we couldn't extend the lease so we ended up moving again and renting a little house about 35 minutes' drive away from the site," says Dawn. "Living in these different places confirmed that we'd made the right choice for our new house, and we couldn't wait to finally move in."

The couple visited their site two or three times each week to liaise with the builders and discuss the various options available to them. Neil and Dawn were responsible for sourcing their own clay roof tiles, the kitchen flooring, sanitaryware and granite for the terracing.

"We used a kitchen company we've worked with before. They were great at designing a practical room that took the position of the oak posts and beams into account," says Neil.

The house was completed in September 2010 and the Clarks could finally begin to enjoy life in their new home. "Our previous

renovation project meant we already knew some good local contactors, but nothing can really prepare you for your first self build," says Neil. "It's been hard work but very satisfying, and everything has been designed exactly as we wanted. There really is nothing at all that we'd change."

closer look

Design elements of this house...

Dawn and Neil used a mixture of Ashbury restoration and multi handmade clay tiles from Lifestiles for their roof, which creates the appearance of an already weathered, subtly textured roof that is well suited to its conservation setting. The multi, with its blend of subtle reds, browns and oranges, and the restoration, with a darker, more mature appearance, emulate the traditional colour patterns of old handmade tiles. Variations caused by traditional firing methods ensure no two tiles are the same colour or shape. Plain clay versions were traditionally known as 'peg tiles' because of the softwood pegs that were driven through two square holes in the top edge of the tiles, attaching them to the laths or battens.



Selecting roof tiles



Floor plans



Ground floor



First floor



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

Elements	Cost %	Cost m ²	Total cost*
Preliminaries	18%	£538	£161,300
Oak frame	8%	£241	£72,400
Garage, floor, wall, ceiling finishes, plumbing & heating	30%	£919	£275,650
Roof & tiles	10%	£319	£95,650
Internal finishes inc. sanitaryware & kitchen	14%	£433	£130,000
Landscaping	12%	£367	£110,000
Fees	8%	£241	£72,400
Grand total			£917,400

Useful contacts



OAK FRAME Oakwrights 01432 353353 www.oakwrights.co.uk
ARCHITECT David Gipson 01263 720691 **BUILDER** AJ Cooper 01263 761260 **BUILDING REGULATIONS ARCHITECT** 01531 634180 www.dwhittakerarchitect.co.uk **STRUCTURAL ENGINEER** Hipwell Consulting 01603 511265 **PLUMBING** Burgh Plumbing & Heating 01263 731042
SANITARYWARE Albion 01255 831605 www.albionbathco.com **AIR SOURCE HEAT PUMP** Worcester Bosch 0844 892 3000 www.worcester-bosch.co.uk
KITCHEN & WARDROBES English Hardwood Designs 01524 735077
LIGHTING DESIGN The Norwich Architectural Lighting Company 01603 418821 www.lighteastanglia.co.uk **MARBLE FLOORING** Ashfield Group 01502 528877 www.ashfieldgroup.com **GARDEN DESIGN** The Thurman Consultancy 01825 722752 **BIODISC SEWAGE TREATMENT** Klargestar 01296 633000 www.klargester.com **CLAY ROOF TILES** Lifestiles 01787 237057 www.lifestiles.co.uk **OVEN AGA** 020 7330 8888 www.aga.co.uk **WOODBURNER** Chesney's 020 7627 1410 www.chesneys.co.uk

VISION AND INTELLIGENCE IN OAK FRAMING

HERE AT OAKWRIGHTS WE HAVE DEVELOPED AN UNRIVALLED COMBINATION OF TRADITIONAL CRAFT SKILLS AND CUTTING EDGE TECHNOLOGY, CREATING WHAT WE CALL '**THE INTELLIGENT OAK FRAME**'. THIS MEANS THAT WHEN YOU COMMISSION OAKWRIGHTS TO BUILD YOUR HOME, YOU CAN RELAX IN THE KNOWLEDGE THAT YOU WILL HAVE THE BEST DESIGNED, FINEST FINISHED AND MOST PRECISE OAK FRAME POSSIBLE.

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®

THE INTELLIGENT OAK FRAME

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



Extend your home... with beautiful Origin bi-fold doors.



Award Winning Bi-fold Doors
'Best Glazed Product'



Thinking of adding more space to your home? Precision-engineered with exceptional attention to detail, our multi award-winning designs bring more light, more style and more possibilities to any extension.

Origin... because no-one gives you more ways to love your home.



Call **01494 416894** or email **info@origin-global.com**
Visit **www.origin-global.com**

 Bifolding Doors Origin
 @OriginBifolds



A Cornish cottage

A beautiful countryside plot, complete with a dilapidated wooden shack, turned out to be the perfect place for **Neil and Jackie Cotton** to self build their dream eco home

WORDS **RICHARD WEBBER**

PHOTOS **COLIN POOLE**

Coping with the capricious British weather is just one of the challenges that self builders face. Someone who knows that better than most is Neil Cotton. Three weeks into constructing his four-bedroom eco home, the heavens opened and torrential rain left a quagmire in its wake.

Neil and his team of builders had cleared access into the site, close to the Cornish village of St Agnes, crossing a field in the process.

Tonnes of topsoil had been removed, the site levelled and footings dug before Mother Nature vented her anger, setting the project back several weeks.

"It was one of those freak storms that you experience every 10 years or so. The road nearby flooded and water poured down my driveway, turning the site into a huge mud pit. It was a mess and very frustrating," says Neil. "Thankfully, we managed to laugh our way through that challenging period."

Neil accepts unexpected setbacks are par for the course when undertaking major projects, having renovated before. This, however, was his first self build. Hankering after the chance to construct a home from scratch, he realised his dream after taking early retirement.

"My wife Jackie thought I'd be bored in retirement without something to keep me busy. So this seemed like the perfect time," he says.



The old wooden shed

To ensure the entrance and hallway don't become dumping grounds for coats and shoes, the Cottons built bespoke storage to hide away the clutter



Project planning

The plot, in a hamlet amid lush Cornish countryside, was bought at auction for £122,000. A dilapidated 1960s wooden shack stood on the land. "It was scary because it only had a certificate of lawfulness for residential use. So there were no guarantees that planning for a new build would be straightforward," says Neil.

His intention for the development altered as the project progressed. "I originally planned on selling the property, because the site's access wasn't ideal. You had to use the neighbour's driveway and go round the side of his garage so there wasn't much room for vehicles," says Neil. However, he resolved the problem by purchasing a strip of his neighbour's field for £25,000, which afforded him the chance to build a new entrance south of his property. "That was the moment I switched my thinking towards building something more interesting that Jackie and I could live in," he says.

Obtaining planning permission was a protracted affair. The plot's conservation area status meant much of the design had to be conventional. "The house had to have a Cornish cottage shape – a long, narrow structure with vertical windows and a simple pitched roof," says Neil. "But I wanted something a bit more unique, incorporating plenty of glass. It felt like a battle at times. I didn't think the planners were very forward-thinking and I had to compromise in the end."

The couple worked closely with architect Paul Connell to come up with the approved design for a three bedroom, block and timber frame house with plenty of glazing and a covered outdoor verandah.

Building from scratch

Once work got underway, Neil – who's self-taught – not only project managed but built much of the property himself. "For the groundworks, I hired a local man with a solid reputation. Typically, it was him, his digger driver and me," says Neil. "After preparing the ground and building concrete foundations, I hired three builders to complete the rest of the house. They were recommended by my



THE COTTON FILE

NAMES Neil & Jackie Cotton

OCCUPATIONS Retired college lecturer & adult social care worker

LOCATION Towan Cross, Cornwall

TYPE OF BUILD Self build

STYLE Modern eco house

CONSTRUCTION METHOD

Block & timber frame

PLOT SIZE 0.6 acres

HOUSE SIZE 225m² (2,422ft²)

LAND COST £173,900

VAT RECLAIM £15,000

BUILD COST £267,700

COST PER M² £1,190 (£111 per ft²)

TOTAL COST £441,600

BUILDING WORK COMMENCED
APRIL 2009

BUILDING WORK TOOK
35 months

CURRENT VALUE
£550,000



Open plan living was a major requirement when Neil and Jackie began designing their new home. They wanted a layout that would flow together seamlessly



architect. That helped because they'd worked on his style of property before and understood his quirky ways. It was a happy team."

Utility supplies nearby meant hooking up to services was relatively straightforward. However, there wasn't a connection to mains sewers. Instead, a septic tank and soakaway had to be installed and a pumping station was required to drive waste towards the soakaway drains.

In line with the planner's requirements, the lower half of the Cottons' home is of Thermalite blocks. They were used inside and out to provide good insulation and painted to finish. The upper half of the house is a tanalised timber frame, which is clad in Canadian cedar. The frame includes a membrane, Bitroc – a breathable vapour barrier which insulates and modulates temperature differences across the frame – and a layer of natural insulation.

Inside, the timber is covered with 13mm oriented strand board (OSB). "It's an efficient and easy-to-fit covering that produces a strong structure and can be plasterboarded over. It's sturdy and you can hang anything from it," says Neil. He installed five

tonnes of Warmcel – a recycled newspaper-based insulation – alongside a foam insulation on the lower half of the building.

"The Warmcel is placed in a machine outside and blown through a flexible five-inch pipe to wherever it's needed in the house. It works beautifully but can be untidy, especially if you accidentally let go of the pipe. That happened to me and paper went everywhere, making a bit of a mess," says Neil.

For heating, the Cottons chose a £3,000 Italian Ecoteck stove⁶ that burns hardwood pellets. "We don't have access to a gas supply and didn't fancy bottled sources or an oil system. I was thinking about a traditional woodburning stove, but then I discovered pellet-burning versions," says Neil. "The pellets cost £250 per tonne but we use less than two tonnes a year."

While deciding which model to buy, Neil was advised to invest in a thermal store for his hot water tank, which can be heated from a stove or solar panels. "It's a sealed system so the water can be used to heat radiators and it stores twice the amount of energy capacity as a conventional tank," he says.



Natural materials

Neil loves wood and, where possible, he's used the material not just in the house's structure but internally for practical and aesthetic reasons. Engineered bamboo flooring runs throughout the property. "It looks impressive, is tough and fits together immaculately. It's almost unaffected by humidity so doesn't swell or shrink and it's relatively inexpensive at only £18 per m²," he says.

Downstairs, the planks are nailed directly to battens but, as Neil admits, a mistake was unfortunately made upstairs. "We put OSB board across the floors because it provided a firm surface, particularly useful when plastering walls and painting ceilings because you don't have to walk between joists. I fixed the bamboo by nailing through the board into the joists. Unfortunately, the OSB board creaks slightly," he says. "It would be a big job now to put it right. When self building, you learn from your mistakes: thankfully, that's the only one we made."

When selecting windows, Neil – who abhors plastic – chose double-glazed, argon-filled units. They're aluminium-clad composite frames with an internal timber finish from Danish company Rationel. "The aluminium and wood makes a nice combination and doesn't require much maintenance," he says.

The high-quality windows help ensure the Cottons have an air-tight exterior while a 'leaky' interior encourages airflow. "Inside,

WE LEARNED...

TAKE TIME to work out the internal layout of your new home and consider your future when doing so; it's surprising how requirements can change. In hindsight, I should have built a bigger office because Jackie recently got a new job and now works from home. She needs to share the home office and it's not really big enough for two

HAVE A CLEAR VISION of what your role will be during the build. Think about how much you want to be involved and ensure your contractors are aware of who they need to report to right from the beginning

AT THE PLANNING STAGE ensure you're clear about what you want to achieve, but be flexible, too. Planners have constraints coming at them from different directions. Don't be put off by any negative comments, though, and keep going for what you believe in



Opposite page: The house is heated by an Ecoteck wood pellet stove, which makes a stunning focal point in the living room. Below: Neil installed composite windows which provide the characterful warmth of wood internally and strength and durability of metal externally

open plan design, one-inch gaps under doors and opening internal windows between the sun room and the two main bedrooms all help the air to circulate," says Neil.

On reflection

Now the house is finished, Neil and his wife Jackie enjoy nothing more than sitting on their south-facing swing chair under the glass-roofed verandah sipping a glass of wine while admiring their garden.

"Originally, there was little exterior space so, as well as the strip of land I purchased, I also bought the neighbour's field in front of the

house for an additional £26,900. Now I have a reasonably-sized outdoor area that's been planted out with hedging and we're growing a wild meadow," says Neil.

Although he was already an accomplished amateur builder, Neil feels that he's gained more confidence because of the project and, in theory, wouldn't hesitate doing it again. "The only thing would be whether I'd have the physical energy," he says. "I'm 66 and would have to delegate even more of the work to other tradespeople, which would frustrate me. Still, I don't need to think about that because, thankfully, we love our house."

closer look

Design elements of this house...

Much of Cornwall is designated as a radon affected area. Radon is a gas that comes from miniscule amounts of uranium present in the earth.



Airtech radon gas test kit

It is the largest source of natural radiation in the UK and accounts for around 50% of all the radiation to which we are exposed. If ventilation is poor or excessively large amounts of radon gas are present, this can build up to high concentrations. If left unchecked, it can pose serious health risks.

If a property is found to be above the action level of 200Bq/m³, Public Health England (PHE) suggests that remedial work is undertaken to reduce the amount. The solution depends upon the levels recorded and property construction. Neil had to contain the gas by inserting a trap inside the hardcore below the concrete slab before the whole area was covered in a thick DPM. The gas permeates into the trap, which resembles a little sump, and a standard four-inch pipe takes the gas away from the property. For details visit www.ukradon.org.uk



TOTAL BUILD COST BREAKDOWN

Elements	Cost %	Cost m ²	Total cost*
Preliminary works	13%	£156	£35,200
Transport & equipment	4%	£44	£10,000
External walls	6%	£68	£15,200
Roof	6%	£77	£17,200
Windows	9%	£102	£23,000
Internal walls & insulation	3%	£41	£9,300
Flooring, ceilings & doors	4%	£44	£9,900
Electrics	3%	£32	£7,100
Plumbing & heating	6%	£77	£17,400
Kitchen & bathrooms	3%	£31	£7,000
Decorating	>1%	£12	£2,600
Solar PV panels	>1%	£6	£1,300
Landscaping	8%	£94	£21,100
Fees	34%	£406	£91,400
Grand total			£267,700

Useful contacts



ARCHITECT Paul Connell Architectural Services 01736 332202
STRUCTURAL ENGINEER Derek Gray Associates 01872 552641
www.derekgray.co.uk **MINING SEARCH** Henderson Mines Research
 01326 564025 www.minsw.co.uk **GROUNDWORKS/SEWERAGE**
Ben Lockley 07834 728793 **PLUMBING** Heat Tech SW 07816 903040
WARMCEL INSULATION Pioneer EBC 01209 891500 www.pioneerebc.co.uk **INSULATION & LINDAB RAINWATER GOODS** Sheffield
Insulations 0114 285 6300 www.sheffins.co.uk **RATIONEL WINDOWS**
Camel Glass 01208 814581 www.camelglass.co.uk **SELF BUILD**
INSURANCE Buildstore 0845 223 4888 www.buildstore.co.uk
DOORS Magnet Trade (Truro) 01872 240483 www.magnettrade.co.uk
MECHANICAL AIR/HEAT RECOVERY VENTILATION Villavent 01993
 778481 www.villavent.co.uk **PELLET STOVE/THERMAL STORE** Tundra
Wood Heating Systems 0800 334 5900 www.tundrawoodboilers.co.uk
BAMBOO FLOORING Bamboo Flooring Company 0116 274 1050 www.bambooflooringcompany.com **RADON GAS TEST KIT** Airtech 01823 690292
www.airtechenvironmental.co.uk



Suppliers of high performance doors and windows

Rational AURAPLUS® is a prize winning range of energy efficient timber outward opening windows and doors with external aluminium cladding. Rational AURAPLUS is particularly suitable for Passiv Haus and all other types of low-energy buildings. The design is slim and modern, ensuring max. incidence of daylight.



- Wer Values up to +31 kWh/m²
- Uw is available down to 0.73 W/m²k

Full Technical and design support for Rational products **01227 379 984**

Passivlux Ltd, 6 The Stour Centre, 22-24 Stour St, Canterbury, Kent, CT1 2NZ.
 e: technical@passivlux.com

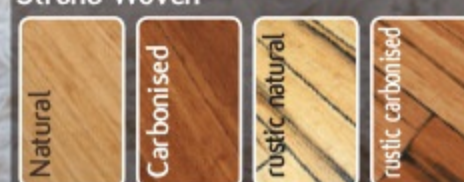
www.passivlux.com



The beauty of bamboo

Bamboo creates a beautiful and hardwearing floor and, in terms of durability, it outperforms most hardwood floors, including oak. It is more environmentally friendly than wood.

Strand Woven



Horizontal



Vertical



**STRAND WOVEN
 TWICE AS HARD
 AS WOOD**

UNICLIC
 EU Patent 0843763 B1 - U.S. Patent nr. 6,006,481

Bona
 Passion for wood floors
 Coatings now available

For a brochure/sample call **0116 274 1050**

e: mail@bambooflooringcompany.com

w: www.bambooflooringcompany.com



Maple Timber Systems

Long standing experience in delivering high specification, low and zero-carbon homes

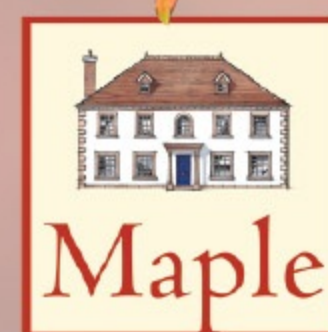
Bespoke service, tailored to clients' needs

Expert advice on design, Planning, Building Regs, Code for Sustainable Homes etc; including SAP calculations

Low running costs

Call us: 01995 679444 or visit our website:
www.mapletimbersystems.com

Maple Timber Systems Ltd, Tarnacre Hall Business Park,
 Tarnacre Lane, Preston, PR3 0SZ





Escala Waterfall Basin Mixer
Was £149 **Save £100**



Odessa 600 Door
Unit & Basin
Was £299 **Save £170**



Brent Suite Pack
Was £408 **Save £259**
includes toilet seat



P-Shape Shower Bath 1700
Was £499 **Save £250**
Left hand shown, includes screen & towel rail

victoria plumb

BIGGEST
EVER BATHROOM
SALE UP TO **60% OFF**



QUALITY BATHROOMS, NOT COSTLY SHOWROOMS

NEXT DAY DELIVERY ☒ INTEREST FREE CREDIT ☒ BUY NOW PAY LATER ☒

victoriaplumb.com 0844 804 48 48



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.

Renovation & building

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT



66 STOVES FAQ

If you're thinking about investing in a stove, you need to know everything about the appliance before you install it – from preparing your chimney to the various fuel options

73 BUYING A STAIRCASE

Your steps will have both a visual and a practical impact on your new home. Follow Chris Bates' guide to choosing the perfect style and materials

77 THE GLAZING GLOSSARY

Specify the right glass to transform your home's comfort levels and energy efficiency

80 RETROFITTING INSULATION

Transform your cold and draughty house into a warm and comfortable abode by fitting insulation

84 INSPIRING EXTENSIONS

If you're looking for ways to increase your living space, don't miss our favourite selection of extensions – from basements to loft conversions

PLUS:
HOW TO HIRE A CHIMNEY SWEEP & SPECIFYING STRUCTURAL INSULATED PANELS >>



Above: The 7943 woodburning stove from Morso, £2,617, features an extra large glazed section so that flames can be viewed from anywhere in the room, regardless of height

A stove not only heats a room or supplies hot water for a home but it can provide a focal point that can transform a space, too. Whether you're building a cosy country cottage or an urban abode, there will be something to suit every style of home. So what do you need to know when looking to install one? We reveal all the answers below.

What are the different fuel options?

Wood: Dreaming of cosy days at home during winter? Nothing creates that feeling better than the smell and sound of logs burning. The wood for a stove must be seasoned for at least two years, as it burns more efficiently than if it's new or wet. Timber is the closest thing there is to a carbon neutral fuel source because the

Below: The FPi5W is a mid-sized 5kW rectangular inset woodburning stove designed to fit 20" fireplace openings. It costs £1,024 from Charlton & Jenrick



Stoves

FAQs

Sophie Hoyland chats to industry experts to find out the answers to all your questions on how to select and install a stove



Above left: Fitted with an autopilot function for maximum efficiency, the Hwam Figaro woodburning stove from Euroheat, £3,574, offers a large combustion chamber that allows you to load logs up to 450mm in length. Above right: The Lismore from Stanley, £2,099, is a contemporary boiler stove with an impressive total heat output of 12kW and room heat output of 5kW. It's capable of powering up to 10 radiators



emissions released as it burns have effectively been offset by what was absorbed during the tree's lifespan.

Multi-fuel: This type of stove can burn wood, coal or peat, as well as smokeless fuels for smoke control areas. Coal can be a dirty material to handle and your chimney will need regular sweeping.

Gas: There are two types to choose from – mains natural gas or liquid propane gas (LPG). Mains supply is readily available in most areas of the UK and it's relatively cheap. What's more, storage isn't required, stoves that run from it are easy to keep clean and flame effects can be very realistic. LPG is useful if you live in a remote area that doesn't benefit from mains connection. But, it's often expensive and bottles or tanks must be stored safely and refilled regularly.

Electric: This type doesn't need a flue and it can be fitted anywhere in the home where there is access to an electrical socket. Although the flame isn't real, some can look very genuine.

Maximum heat output is lower than other fuel options.

Oil: Ideal for remote homes with no access to mains gas and it can produce a high heat output. An oil burning stove is designed for continuous use, which can make this an expensive fuel option due to rising oil prices in the UK.

What size should I buy?

It's essential that you invest in a correctly sized stove to ensure the appliance doesn't over fire or under run, which can damage it and the flue. This means working out the heat requirement for its intended location. "To calculate the heating demand of a particular space, you need to work out the volume of the room in cubic metres and divide that number by 14," says Tony Ingram at Morso UK. For example: L6m x W5m x H2.4m = 72m³. Divide by 14 = 5.14.

"If going by the calculations above, the stove you install should have a rated heat output of 5kW," says Tony.



Can a stove be hooked up to my boiler?

Some models can be linked to a back boiler to heat water for your whole house. You can also buy wood boilers as part of a biomass central heating system. "If you have an open hot water system with a header tank in the loft then it is a relatively easy addition to make, with a sensor switching the boiler off when the stove is in use," says Peter Mintoft at Charlton & Jenrick. "If you have a pressurised sealed hot water system then the options narrow. Speak to a HETAS engineer for more advice."

Do I live in a smoke control area?

Introduced after the smogs of the 1950s and 1960s, the Clean Air Act 1993 was formed to control emissions of smoke, dust and fumes. This resulted in smoke control areas being established in many towns and cities throughout the UK. "Check with your local authority before purchasing a woodburning stove to ascertain whether your property falls within a smoke control area," says Tony at Morso. "If your home is within the restricted zone and you want to install a solid fuel appliance you can only fit one that has been approved by Defra as an exempt product."

What prep work is required before installation?

Hire a HETAS engineer to do a site inspection before you buy your appliance. They will check the area where the stove is to be installed and

offer advice on the hearth, surround, frame and mantel options. They can also provide guidance on Building Regulations and flueing systems.

Most stoves will require a flue or chimney. If you're opening up an existing one it will need to be swept by a qualified chimney sweep to ensure it's clean and free from blockages. Depending on the fuel you use it will need to be cleaned at least once a year, possibly twice. For more details turn to page 71.

If you don't have a chimney, the stove can be installed with an insulated stainless steel chimney system, which can be located on an external wall or anywhere within the property itself.

Who can install a stove?

Building Regulations Approved Document J states that all stoves must be fitted by a suitably qualified engineer, such as an OFTEC, HETAS or Gas Safe registered tradesman, who is authorised to commission and sign off on the installation. One of the criteria that you have to adhere to is to sit your solid fuel stove on a hearth made from a non-combustible material extending a minimum of 150mm out from the stove at the sides and 300mm in front. For details visit www.planningportal.gov.uk

How often should I clean a stove?

As long as you are using dry and seasoned timber a woodburner shouldn't need too much cleaning. "Wood burns best on a bed of ash so

allow this to build up to depth of around two inches," says Cedric Wells at Charnwood. "If the glass does blacken up, try burning the stove hotter to clear any residue or use a soft, damp and non-abrasive cloth when the stove is cold to wipe it clean. In contrast, coal burns best on an open grate so the ash pan should be emptied daily to allow air to circulate around the stove."

Left: Dimplex's Langbrook, £699.99, is a multi-fuel stove suitable for burning wood and most approved manufactured smokeless fuels. It features an effective airwash system to ensure the door glass remains clear



Gas and electric stoves are great for low maintenance households. Just wipe down occasionally with a damp and non-abrasive cloth to keep them looking free from dust and in top condition. Oil stoves only need to be cleaned when they're serviced (see below for details.)

How often does a stove need servicing?

For wood and coal its best to have your stove thoroughly checked once a year. "You might need to replace door seals, cracked glass or brick," says Cedric Wells at Charnwood.

Above: The ESSE 500 gas stove, £1,235, is flueless, giving you the option to fit it almost anywhere you want in the home without being restricted by a flue or chimney. Below: The Beaumont electric stove from Chesney's, £1,500, is available in a range of painted finishes to suit any room setting



CLOSER LOOK: FREESTANDING WOODBURNING STOVE

When Lucy De'Burgh and Dale Shoulders bought an end-of-terrace cottage, built in 1875, they knew a lot of work was required in order to restore it to its former glory. "It was in desperate need of updating," says Lucy. "We felt it was important to renovate to a high standard in keeping with the period of the property."

The project took the couple approximately five months to complete. Work included plastering the majority of the walls and ceilings, installing a new bathroom and kitchen, fitting new flooring and completely rewiring all the electrics.

In addition, Lucy and Dale removed two large inherited 1950s gas fires and replaced one with a Stovax Stockton 5 woodburning stove, £619.65, and the other with a Victorian-style coal fire. "Having always grown up in a house with a woodburner, I missed the warmth, character and efficient heating a stove provides," says Lucy. "We chose Stovax because they have an excellent reputation and they're a local manufacturer. We were after a traditional looking appliance."

Work involved removing the two fireplaces to reveal the original openings. Two hearths were built using traditional finishes of slate and quarry tiles. The chimney breasts were then replastered with lime used in the area surrounding the stove to stop it from cracking. A chimney sweep lined both chimneys and a local installer fitted the woodburning stove and fire.



Below: The Klover wood pellet central heating insert stove has a heat output of 15kW and costs £4,400 from Stoves Online



An oil-fired boiler should be serviced every 12 months, unless you're using it over long periods, in which case every six months is the norm. If your stove is a wick burner, an engineer will remove the assembly and carbon deposits, clean the chamber, refit the burner assembly and reset oil levels. Any inline filters should be replaced that are not part of the stove. Vaporized burners are more simple. The engineer will remove the catalyser, clean the burner

pot and chamber and clear carbon deposits from the oil feed tube.

Gas and electric are practically maintenance free. Always check with your manufacturer before buying.

How much does a stove cost?

Prices vary depending on size, style and fuel

options. An electric stove can start from as little as £100. "You're probably looking at around £750 to £900 for a small woodburning stove that needs no flue liner. Top end stoves can cost thousands of pounds and a completely new flue system can often work out as a similar amount," says Peter Mintoft at Charlton & Jenrick.

What new technology should I look out for?

Clean burn airwash is standard on most woodburning and coal stoves. "The air is drawn into the firebox and circulated in such a way that the glass stays clean when burning," says Cedric Wells at Charnwood. "It ensures the stove burns the fuel more efficiently with fewer emissions."

Rather than having to fiddle around with numerous air controls and levers to adjust the air intake, look out for a single air control feature. "This introduces air into the stove in just the right amounts. It is a simple case of pulling out the control to burn the fuel harder and pushing it in to slow it down," says Cedric.

For safety, make sure you invest in a woodburner or solid fuel stove with cool-to-touch handles. "These make reloading the fuel much easier," says Cedric. It's also a great safety feature if you have young children running round.

What type should I buy?

There is no shortage of stove styles available on today's current market: options now include pedestal, wall-mounted or suspended versions as well as cassette models that sit flush with the wall. You can find 360° stoves designed to act as a real show-stopper centrepiece in a home and models with huge glass doors to maximise the flame viewing potential regardless of where you are in the room its installed.

You also don't need to stick with traditional black casings. Many brands now offer their stoves in various paint colours. Chesney's Beaumont electric stoves are now available in a choice of 10 different shades – ranging from a bright yellow and light blue through to baby pink and grey.

CONTACTS

Aarrow 01297 35700 www.aarrowfires.com **AGA** 0845 712 5207 www.agaliving.com **Arada** 01297 35700 www.arada.uk.com **Armstrong Chimneys** 01923 711766 www.armstrongchimneys.co.uk **Austroflam** www.austroflam.com **Carron** 0808 129 2224 www.carron.uk.net **Charlton & Jenrick** 0845 519 5991 www.charltonandjenrick.co.uk **Charnwood** 01983 537777 www.charnwood.com **Chesneys** 020 7627 1410 www.chesneys.co.uk **Clearview** 01584 878100 www.clearviewstoves.com **Dimplex** www.dimplex.co.uk **Dunsley Heat** 01484 682635 www.dunsleyheat.co.uk **Esse** 01282 813235 www.esse.com **Euroheat** 01885 491112 www.euroheat.co.uk **Eurostove** 01934 750500 www.eurostove.co.uk **Flamewave Fires** 01303 268564 www.flamewavefires.co.uk **HETAS** 01242 681270 www.hetas.co.uk **Jotul** www.jotul.com **Landyvent** 01527 857814 www.landyvent.co.uk **Morso** www.morso.co.uk **Solid Fuel Association** 01773 835400 www.solidfuel.co.uk **Stanley** 01978 290865 www.waterfordstanley.com **Stovax** 01392 474000 www.stovax.com **Stove Industry Association** 01789 415640 www.stoveindustryalliance.com **Stoves Online** 0845 226 5754 www.stovesonline.co.uk **Yeoman Stoves** 01392 474500 (Solid fuel) 01392 261900 (gas and electric) www.yeomanstoves.co.uk

Charlton & Jenrick^{LTD}

Best of British fires, fireplaces & stoves



www.charltonandjenrick.co.uk

0845 5195 991 sales@charltonandjenrick.co.uk

fireline

INFINITY

MATCHLESS

PARAGON

Katell

KLOVER



Smart 120: A fully automated wood pellet cooker that will do all your heating, cooking and hot water. Eligible for the full RHI grant. Available through a network of trained local dealers.

www.stovesonline.co.uk

0845 226 5754



olsen
DOORS & WINDOWS

Door & window systems in:
All timber • Aluminium clad • All aluminium
Double glazed • Triple glazed

t: 01777 874510 • f: 01777 874519
enquiries@olsenuk.com • www.olsenuk.com
Showrooms in Newark • London • Swindon

SAHTAS®

*Above everything else.
Natural and stylish*



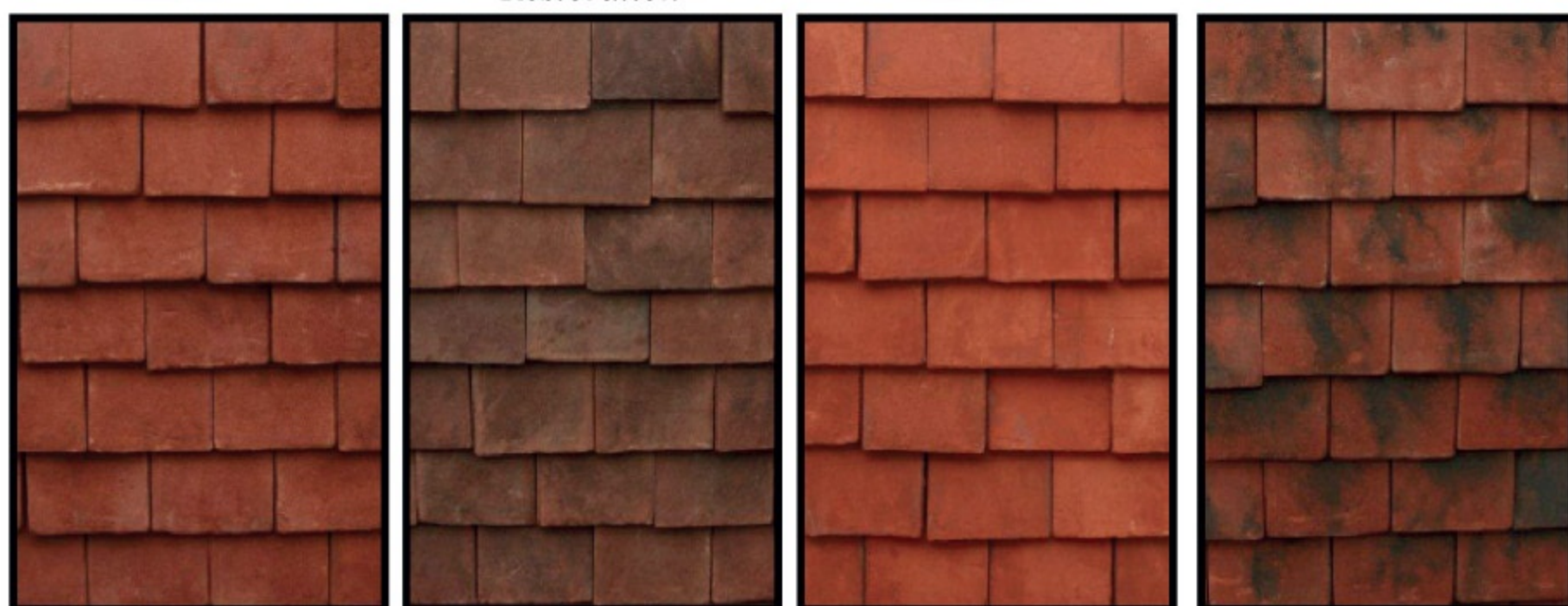
BROOKHURST HANDMADE ROOF TILES



Multi

Restoration

Classic



Red

Brown

Orange

Wentworth

TRADITIONAL HANDMADE ROOF TILES



Multi

Restoration

County

Buff

Sahtas has sold
over 50 million
clay roof tiles
over the UK!

- The perfect hand-made clay roof tile
- Aesthetically unique in a choice of colours and blends with a complementary range of accessories and specials
- ISO quality assured to CERAM® durability standards
- 30 Year Manufacturers Guarantee
- National stocklist network
- Our New competitively priced Hand Made Brookhurst range are now available

CHOOSING

Enjoying a warm, cozy fire requires a clean, safe chimney. Employ a qualified sweep to get your fireplace in top condition this winter

a chimney sweep

With the cold weather fast approaching, now is the best time to get your chimney inspected to ensure a safe heating system.

How do I find a chimney sweep?

The Institute of Chimney Sweeps (ICS) lists fully trained and insured sweeps. Check its website at www.instituteofchimneysweeps.com to find a suitable professional in your local area. Always ask to see identification to ensure the sweep has been trained to a competent standard. Also, never pay for the job before you receive the certificate confirming that the work has been done to the correct standard.

Many sweeps will also be able to fit woodburning and multi-fuel stoves and service them after installation. Your local building control officer will need to sign off the work.

How often should a chimney be cleaned?

At least once a year if you're using solid fuel and twice if you're burning wood. Cleaning is essential to avoid carbon monoxide poisoning. Before the sweep arrives, move furniture and homewares away from the fireplace to avoid dirt and debris getting into it. The sweep should bring their own sheets to cover flooring and big pieces of furniture to prevent dirt getting everywhere.

Can I sweep a chimney myself?

It's not a good idea for a DIYer to sweep their own chimney unless they have been trained correctly. Bear in mind that in the event of fire or accidents from an active chimney, insurance companies won't pay out unless you can provide a valid sweeping certificate from a recognised association. If you do want to get involved, jobs such as cowl replacement and re-pointing are much more achievable.

If the flue liner needs replacing, what type should I have installed?

To keep your heating and the flue in good condition it's essential that the liner fitted is suitable for the fuel you're burning. Gas and oil flues use what is known as Class 2. Solid fuels, such as wood and coal, use a Class 1 and will be a higher grade (thicker) than Class 2 so that they can withstand higher temperatures.

DANIEL KEMP

is senior chimney sweep and founder of The Institute of Chimney Sweeps (ICS) – the UK's largest chimney sweeping organisation. All members receive ongoing training in all aspects of flues and appliances. Many offer repair work in addition to regular sweeping.



Does a chimney need to be cleaned before it's closed off?

It's advisable as soot can aid in the build up of condensation and cause damp. Once blocked, fit a guard to the chimney pot to prevent rainwater leaking, birds nesting or leaves falling down the stack. This fixture will allow ventilation and keep your chimney dry.

If I want to open up a chimney, what preparation do I need to do?

A sweep will need access to the chimney to be able to clean it. They won't have the tools or time to knock through walls. If your fireplace has been blocked up, employ a builder to do the work before your chimney sweep does the inspection.

How much does a basic sweep cost?

Prices vary depending the location. The London area, for instance, is by far the most expensive, so you'll end up paying anything from £50 up to £100. In other regions you can get a chimney swept for as little as £30. Remember that price is no guarantee of the quality or the effectiveness of the sweep. Generally quotes in a particular area will only vary slightly. If you ask for three estimates you should get a good idea of what's a fair price.



LAURA ASHLEY

What work will a chimney sweep do?

They should be well-versed in the construction and workings of a flue and be able to advise on the condition of the stack, undertake pressure tests (sometimes known as a sound test), replace cowls, re-point brickwork and install new pots.

COTTAGE CRAFT SPIRALS



Specialist staircase manufacturers in high quality, hand built, bespoke spiral, helical, straight and combination stairs in cast aluminium and/or timber

Cottage Craft Spirals • T 01663 750716 • sales@castspiralstairs.com
www.castspiralstairs.com

Tilleys London Castings • T 020 8341 5975 • tilleyslondon@btconnect.com
www.tilleyslondoncastings.co.uk

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

TAYLOR LANE

TIMBER FRAME

Taylor Lane has worked with the self builder since it was established in 1982, helping them to achieve their dream home.

With over 30 years timber frame experience behind us, we feel more than qualified to offer you our knowledge and expertise when you decide to take on your own self build project.

Why not contact us for a free quotation and see how we can help you?

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



Your staircase may not be your first priority when it comes to designing your home, but it pays to spend time thinking through its design. After all, not only is it one of the first things you'll see when you walk through the front door, but it's also a critical access point that will determine how well your property's internal spaces flow. So what's involved in choosing the right staircase for your home?

Planning the layout

It's easy to get wrapped up in details early on in the design process, but the first things you need to decide on are where the staircase will be located and how it should function.

It's common to start your flight (the run of steps between consecutive storeys) within easy reach of the front door, which has obvious advantages in terms of access to the upper storey. The down side to this, especially if you've chosen a straight flight, is that it can limit the width of both the stair and your hallway/landing (unless you've gone for an open plan layout). What's more, Building Regulations specify you must leave 400mm of clear access between the bottom of a flight and the nearest door swing. For safety reasons, avoid fitting any doors at the top of the stairs that open out towards the landing.

In tight spaces, it's tempting to restrict the steps' breadth as much as possible, but be sure to give yourself at least 800mm for comfort. On the other hand, if you're building a luxury property you'll be at liberty to choose a more elaborate setup. A grand staircase, located opposite the front door and sweeping up to a galleried landing, might suit the proportions of your home, for instance.

A typical flight will have 12 or 13 steps, with a consistent riser depth (the height of the individual steps) that ensures the stair matches up perfectly with your home's floor levels. For example, if the total rise to be covered is 2.6m, a run of 13 steps with a riser depth of 200mm would bridge the gap perfectly.

Armed with that information, you and your designer can set about determining the tread size (the going) so that the staircase fits within the footprint allocated to it. The exact specification needs to conform to the



BUYING *a staircase*

Whatever size of home you're building, the staircase will play a major role in setting the tone for your interiors. Here's how you can choose a design that suits your needs

Building Regs – check out the panel on page 75 for more details.

Types of flight

Straight stairs are the default choice for many projects. With no changes of direction to add to the complexity of the flight's design, they're a quick and cost-effective option – especially if you opt for a standard or kit staircase. While they can seem to dominate a hallway, plain versions do afford an obvious below-stairs spot for storage. What's more, modern open-tread versions offer a complete revamp on traditional styles (for more on this, see 'Materials & design tweaks').

But straight flights aren't for everyone. If you're a self builder, you'll have the luxury of picking from all manner of floorplan configurations to suit your lifestyle. The internal layout you settle on will play a key role in

informing where your staircase should begin and end as well as how it will run between storeys.

One way to alter the setup is to add a few winders (steps where the tread tapers in at one edge to change the angle of the flight) to the arrangement. Typically, this might be done at the bottom of the staircase to make a quarter-turn (90°) for stylistic or functional reasons. Tapered treads are sometimes used in place of a more conventional half-turn staircase (also known as doglegs), which use an intermediate landing to change direction through 180°. Switching to winders to make the turn is a more efficient use of space, reducing the overall footprint of the staircase.

Geometrical flights are a stylish alternative to conventional stairs. Whether gently curved or tightly spiraled, they offer an elegant

Above: Build It reader Geoff Tunnard designed this stunning timber-and-metal staircase for his own home. The bamboo treads appear to be floating, but are supported by a central stringer of grey-painted steel tubing

PHOTO: ANDREW WALL



Above: The Vu balustrade range from ID Modern Stairparts combines clean, straight lines with an elliptical cut-out for a stylish break with traditional designs. Right: This flight, part of an attic conversion project by Econoloft, runs directly above the house's original staircase – thus providing easy access while avoiding gobbling up too much space on the floor below. Bottom right: This staircase has been given a Tudor-style overhaul, with oak spindles, paneling and a curved 'curtail' step from Neville Johnson. Prices start from £2,000

arrangement that can add instant character to your interiors. Spiral versions, which wind round a central supporting pole, are a common choice where space is limited, as they take up a relatively small footprint both at the foot and top of the stair. So they're often specified for loft conversions or leading up to mezzanines. If you want to use them as a main access, you'll need to specify an ultra-wide version – perhaps up to 2,500mm diameter.

A helical staircase, which can assume an eccentric or elliptical plan, typically offers more scope for use as principal access. It will make a stunning statement, too, but it won't come cheap and you'll need a lot of space to accommodate it.

If you're after an ultra-contemporary look, consider a cantilevered stair. With this style, the treads (which can be open or closed) are supported by a single string, which can be integrated into a loadbearing

wall for a minimalist look. Modern techniques mean that even curved and spiral stairs can now be cantilevered. Steelwork is usually built into the treads for stability, resulting in a staircase that appears to defy gravity, floating over the living space on one side. Such a bold statement merits a high-quality finish, so consider opting for treads in elegant or exotic timbers, polished concrete or toughened glass.

Materials & design tweaks

There's much more to choosing a staircase than the basic configuration. The materials you



choose for this highly architectural feature will set the tone for the rest of your interiors. Modern stairs are available to suit pretty much any aesthetic, and your design choices can even help to support the functionality of your arrangement.

Timber is the go-to option for many self builders, and with good reason. Softwood versions (usually pine) are solidly built and highly affordable, especially when purchased as easy-to-install kits. Style-wise, they're easy to customise. A vast selection of balustrade options is available, for

instance, in all manner of materials and colours. For the treads, you can go for hardwearing floor paints or stains for a contemporary vibe, or choose carpet or stair runners for a luxurious feel underfoot.

But there's plenty of scope for alternative materials, from oak, teak and other hardwoods through to cast iron, steel, glass and even concrete. Combining materials can be particularly effective – the natural grain of timber, for example, can make a bold modern statement set against a glass or steel balustrade.

Once you've decided on materials, you can move onto the final touches that will make a big difference to the overall look of your staircase and its impact on your interiors. Would the sides of your flight look best boxed-in for a traditional effect (a closed string), for example, or do you prefer the more contemporary feel of an open-string design?

Think, too, about whether you need your staircase to allow natural light to filter into a dark hallway or dimly-lit storey. Features such as open treads (where the risers are omitted) and glazed balustrades can allow you to 'borrow' brightness from floors above. The effect can be spectacular if you've incorporated light sources at strategic points in the flight. Popular options include a window at the half-turn, full-height glazing on the landing or even a double-height ceiling with rooflights above.



Costs explained

With so many styles and materials available, the price of your new staircase will really depend on how much you're willing to spend.

Kit stairs are the most affordable choice, with prices starting from as little as £329 at Byng Joinery, but the design options are limited. The next step up is an off-the-shelf straight flight and matching balustrade in softwood, which you can pick up for as little as £900. Throwing in enough winders for a quarter-turn shouldn't up the price by more than £200 to £300, while switching to hardwood or steel balusters and handrails will add about £200 per linear metre.

However, unless you've planned on a budget self build from the start, you'll probably want to specify a made-to-measure staircase that matches the character and finish of the rest of your home. Built-to-order softwood flights start from around £1,400, with designs in European oak beginning at around £10,000. But if you want a truly bespoke arrangement that will become an integral part of your home's design, you can expect to pay anything from £20,000 to £30,000 or even more for unusual designs.

It's a big investment, but one that will give you a unique architectural feature that's bound to add value to your home – so it's worth setting a realistic budget for the staircase right at the start of your project.



Above left: This modular staircase in floating glass and stainless steel was bespoke-designed by Saxum. The triple-layer toughened glass treads (sandblasted to be anti-slip) provide a pleasing contrast to the 15mm thick balustrade, and both are coated with Ritec to prevent finger marks. A similar design would start from around £35,000. Above right: This cantilevered American white oak staircase features a half-stepped landing, structural glass balustrade and elliptical handrail. Diffused LED lighting is concealed within the treads for a warm glow that adds character and improves safety. From around £16,500 for a similar design, StairKraft. Bottom left: The Scandinavian range from Cottage Craft Spirals is suitable for both traditional and modern homes, combining timber and metal to stunning effect. Expect to pay from around £1,800 for a version with a metal handrail, or from £5,000 with a timber handrail

WHAT THE BUILDING REGS SAY

The design and construction of any new staircase is governed by part K of the Building Regulations, which sets out rules on aspects such as the height and depth of treads. Here are the major considerations:

- Your staircase must have a pitch of no more than 42°
- Each step must have a rise (height between adjoining treads) of 150mm to 220mm, and a going (the horizontal measurement from the nose of one tread to the nose of the next) of 220mm to 300mm
- As a rule of thumb, a 'safe' staircase can be achieved if the relationship between the dimensions of the rise and going is that twice the rise plus the going (2R + G) equals 550mm to 700mm
- Treads should be level, and the rise and going of each step should be consistent throughout the entire flight
- At the access point between levels (ie landings and hallways), you must provide at least 2m of clear headroom between the floor and ceiling. This can be reduced slightly for loft conversions
- There must be no gaps in the staircase big enough to allow a perfect 100mm sphere to pass through, including in the balustrade
- Open risers are permissible if the adjacent treads overlap by a minimum of 16mm and there are no gaps that a 100mm sphere can pass through
- Handrails must be located 900mm to 1,100mm from the pitch line of the floor

CONTACTS

Bisca 01439 771702 www.bisca.co.uk **Byng Joinery** 01527 876348 www.byngjoinery.co.uk
Cottage Craft Spirals 01663 750716 www.castspiralstairs.com **Econoloft** 0800 269765 www.econoloft.co.uk **ID Modern Stairparts** www.idstairparts.co.uk **Jeld-Wen** www.jeld-wen.co.uk **Meer End** 01676 534226 www.meer-end.co.uk **Neville Johnson** 0161 873 8333 www.nevillejohnson.co.uk **Richard Burbidge** 01691 678300 www.richardburbidge.com **Saxum** 01803 866893 www.saxum.co.uk **StairKraft** 01709 512252 www.stairkraft.co.uk



A clear view on *energy* efficiency

However much window glass you are planning for your project, you can make your home more energy efficient by specifying PLANITHERM.

PLANITHERM is an advanced coating offering an optimal balance of solar gain and retained internal heat.

Don't compromise...



...insist on



PLANITHERM[®]
Clearly *the most* energy efficient window glass

A brand of

SAINT-GOBAIN
GLASS

Discover more and find an installer at www.planitherm.com

The glazing glossary

The glass industry is proficient at bringing new innovations to the market for self builders and renovators. But what are the various glazing options and how do they work? **Anna-Marie DeSouza** explains



When buying windows, in addition to choosing a frame type, you will need to consider what sort of glazing you want to use. Based on various factors – including orientation, climate and building design you may even want to select various types of glass for different windows throughout your home. However, when it comes to picking the right product, jargon can make it a confusing process. Our guide to some of the most innovative options available will help to make things more clear.

Double or triple glazing

The windows you install need to comply with Building Regulations relating to heat loss. This is measured as a U-value, which indicates the effectiveness of a material as an insulator. For windows, the U-value must not exceed $2.0 \text{ W/m}^2\text{K}$.

Traditional windows with a single pane of glass have a U-value of approximately $5.0 \text{ W/m}^2\text{K}$ or more, while contemporary double glazing comes in at around $1.6 \text{ W/m}^2\text{K}$. These units are made from two skins of glass with a cavity in between

that's traditionally filled with air (although modern windows are commonly gas filled).

Triple glazing works in a similar way, although – as the name suggests – it has three panes and two air gaps. These units can achieve low U-values of $0.8 \text{ W/m}^2\text{K}$ or even less and are

often used on ultra-low energy Passivhaus dwellings.

Gas fills

Further improvements to the effectiveness of glazing can be achieved by swapping the air trapped between the panes for gas. Argon

Above: This Planitherm window is triple-glazed, gas-filled and has a low-E coating



Architect Nigel Begg wanted to create a low energy, insulated home. He specified all his windows and doors from Olsen – the low-E coated units are all double-glazed and filled with Argon, they cost £15,000

INNOVARE GLASS

Innovare is a flush-fitting structural glazing system where the external panel of the window or door glass is stepped and bonded to the exterior of the framework. This makes the windows appear frameless from the outside. This new framing system can be configured for all types of windows and doors as well as sliding and bi-fold units



Below: Windows of a certain height and/or less than 800mm from the ground need to utilise safety glass. This home's glazing features laminated units from Kloeber

and Krypton are the common choices and have a great degree of thermal resistance due to their density.

Although Argon-filled windows cost around 5% more than air-filled units, they can improve double glazing's U-value by over 30%. The introduction of the gas reduces the heat conductance between panes, helping to keep your house warm during the winter and cool in the summer. In modern homes with

large expanses of glass, the energy saving to be gained from Argon-filled windows can be significant.

Krypton is also an excellent insulator as it's a poor heat conductor. It's more efficient than Argon, but comes with a hefty price tag. Krypton's density means it's effective even when used in narrow cavities, so it is ideal for use in period restorations where the profile of double glazing needs to be minimal. For example,

units with a cavity of 10mm filled with Krypton will have a similar U-value to a 12mm Argon-filled window, or a 16mm air-filled one.

In addition to energy saving, the density of both gases mentioned will also improve acoustic performance.

Low-E coatings

Low-emissivity or low-E glass is a thermally insulating product. It usually forms the inner pane of a window and has a transparent metallic coating that reflects heat from radiators and fires back into the room, rather than allowing it to escape. At the same time it allows energy and light from the sun (passive solar gain) to pass through the glass, warming your home. This is especially beneficial in the winter as the warmth retained means your heating system won't have to work as hard to maintain a comfortable temperature.

Couple low-E with a triple glazed and gas filled unit, and this is probably the most efficient window spec available. Units manufactured with low-E coatings typically cost about 10% to 15% more than regular windows, but they reduce energy loss by as much as 30% to 50%.

Acoustic glass

Noise pollution can be a serious issue, particularly for those living in busy or urban areas. In fact, too much background noise can be damaging to health – it's been shown to disrupt



sleep and increase stress levels. A comfortable noise level, measured in decibels (dB), is around 35dB during the day and 30dB at night.

Acoustic glass cuts out excess sound and is particularly effective for homes near to high streets, motorways, train stations and airports. This type of glazing comprises a special interlayer that acts as a dampening core to prevent sound frequencies vibrating from one pane to the other in double or triple glazed units. This absorbs and weakens sound, acting as a barrier to noise.

This function can be combined with other features, such as a low-E or self cleaning coating, to create a multipurpose unit.

Self cleaning

If washing your windows is a chore you could do without, consider specifying a self cleaning finish. A transparent coating, which is applied to the outside of a window pane, uses natural resources to efficiently remove dirt and grime.

Exposing the coating to UV rays (ie sunlight) triggers the decomposition of organic dirt and prevents it from adhering to the surface. The finish is also 'hydrophilic'; meaning it attracts water and forces it across the glass in sheets, without forming droplets. This helps to rinse away any dirty residues.

It is suitable for most types of exterior glazing including windows, doors and conservatory roofs. It can be paired with other features, such as gas filling.

Solar control

Solar control glass can be specified for any situation where excessive heat from solar gain is likely to be an issue, such as in conservatories or in homes with large glazed expanses. This type of glass has a low g-value, meaning it insulates against a build up of solar gain.



The glass is protected with a microscopically thin metallic coating on one side, which reflects heat from the sun back out of a room or building.

It's available as clear glass, or you can specify a tinted finish (most commonly blue or neutral in colour) that will help to minimise glare from direct sunlight.

Safety glass

Safety glass can be either toughened or laminated depending on where and how it is being used. If it breaks, it does so safely. According to Building Regs, safety glazing should be used in the following areas:

- Any glazed area within a window

below 800mm from floor level

- Any glazed area within a window that is 300mm or less from a door and up to 1,500mm from floor level
- Within any glazed door up to 1,500mm from floor level

Toughened safety glass has undergone a heat treatment process to increase its overall strength. Generally it is five times stronger than standard glass. If it does break, it will break into tiny pieces that have dull, safe edges.

Laminated products comprise two (or more) pieces of glass held together by plastic films. In the event of breakage or impact, these films hold the shattered glass in place.

This type of glazing can be combined with many other functions, so you could have acoustic safety glass, for example.

Above: Living by the Cornish coast, Andy Righelato wanted to specify good quality, thermally efficient windows to combat the weather conditions. He selected triple-glazed AuraPlus units from Rationel to meet this requirement. The balustrade on the first floor balcony is laminated for safety

EXPERT TIP

"Look out for electro chromic glass," says Rebecca Clayton from IQ Glass. "There is a coating on the internal face of the unit and when you pass a charge (via a switch) through it all the metal ions in that coating are attracted to that face, which changes the light transmission. It's transparent and goes a dark blue colour. It's an alternative to shading or blinds, and can stop over-heating."

CONTACTS

Glass & Glazing Federation 020 7939 9101 www.ggf.org.uk **IQ Glass** 01923 218348 www.iqglassuk.com **Kloeber** 01487 740044 www.kloeber.co.uk **NorDan** www.nordanuk.com **Olsen** 01777 874510 www.olsenuk.com **Planitherm** 01977 666196 www.planitherm.com **Rationel** 01869 248181 www.rationel.co.uk

Retrofitting insulation

Tired of constant fuel price hikes? Upgrading your home's insulation could be the quickest, most affordable route to lower energy bills, says **Chris Bates**



Above: Available in thickness of 100mm, 170mm and 200mm, Space loft roll features pre-cut perforations at 400mm and 600mm to match common joist configurations

According to the National Insulation Association, up to 19 million cavity walls, lofts and solid walls in the UK still aren't insulated to modern standards. It's a staggering statistic, and one that the government is attempting to address through measures such as its flagship Green Deal loan scheme.

The kicker is that upgrading insulation is almost always the quickest and most affordable way to deliver a home with low running costs and a comfortable living environment. What's more, savvy housebuyers keen to avoid the dreaded thud of ever-heftier winter fuel bills are

setting their sights on green homes, attracted by the many lifestyle benefits they offer. A recent report from the Department of Energy and Climate Change suggests that jumping a couple of bands up the Energy Performance Certificate (EPC) ladder could add more than £16,000 to the sale price of an average property.

If you're looking to upgrade a house that's lagging behind in the insulation stakes, then the walls and roof are the first places to address, as improvements here will see the biggest returns on your investment. Read on for the key facts you need to know.

Cavity walls

The concept behind cavity wall insulation (CWI) is pretty easy to get to grips with. Basically, it involves filling part of or the entire void between an inner skin of blockwork and an outer leaf of brick with insulation. Homes built after 2000 should already be packed with a healthy dose of CWI, as dictated by the Building Regulations. Some houses constructed post 1980 may also have CWI. But with older properties built after 1930, there's a good chance the void is either empty or poorly filled.

Once you've got an installer on board and have established that your home is suitable for CWI (see panel, right, to help you decide), the retrofit process is pretty straightforward. A technician will drill small holes at regular intervals in the outside face of all your external walls. Your chosen insulation is blown into the cavity, filling it completely, and the holes are patched to match your brickwork.

Exactly which product is used will come down to recommendations from your installer. Mineral wool is the most popular option as it's the quickest to install – a typical house with easily-accessible walls can be treated in as little as a couple of hours. But it's not always the default choice. For example, if your home has stone-built walls, rough internal surfaces or narrow cavities, polystyrene beads may be a more appropriate solution.

For a typical three bedroom house, installing CWI should cost around £450 to £500. According to the Energy



IS CAVITY WALL INSULATION RIGHT FOR ME?

Before you book in your installer, it's important to check that your home is suitable for cavity insulation. This checklist will help you decide the best way to approach your project:

- **Do I have cavity walls?** Look at the pattern of the brickwork – if everything is laid in a 'stretcher' bond (the long side of the brick is on display), then the chances are you have cavity walls. Check the depth of your walls by a door or window – anything less than 300mm means you probably don't have a cavity
- **Is there enough of a cavity?** This is best determined with a survey. You'll need at least a 50mm gap to accept conventional CWI, such as Rockwool. So-called 'micro-bead' insulation can be used in cavities of around 40mm to 49mm, but you may be better off with solid wall treatments
- **Has a CWI treatment already been applied?** Your local authority may have a record of whether your walls have previously been filled, or a registered installer can carry out a boroscope inspection. Top-ups are possible where insulation has 'slumped' but you'll usually need to use the same material
- **Are my walls in good condition?** Poorly maintained walls may allow moisture to penetrate the external leaf and cross the cavity via the new insulation, which would lead to damp, so you may need to make good beforehand
- **What are the prevailing weather conditions?** Driving rain, which is common in coastal locations, is known to penetrate facing brickwork. With an unfilled cavity, the water drains away at ground level. If the gap is filled, the insulation can form a bridge for moisture penetration, so CWI may not be suitable

Saving Trust (EST), this upgrade alone could net you £140 per year through reduced heating bills – so you should see payback within four years. What's more, provided you use an installer registered with the Cavity Insulation Guarantee Agency (CIGA), your CWI treatment will be guaranteed against defects for 25 years (on the property, not just the homeowner).



Solid walls

Most homes built before 1930 feature solid masonry walls, made up of a single leaf of brick or stonework and often formatted in attractive English or Flemish bond. They usually have a profile of around 230mm as this is the length of a single header brick, but stone walls can vary significantly in thickness.

These solid structures lose even more heat than un-insulated cavity walls, so

upgrading them can give significant benefits in terms of comfort level and reduced energy bills. This can be achieved by adding a layer of either external wall insulation (EWI) or internal wall insulation (IWI). Which option is best for your property will depend on a number of factors, including costs and payback times, planning restrictions and how you use your home.

EWI is usually supplied as rigid boards, which are mechanically fixed to the brickwork and can be finished with a variety of claddings. Render is the cheapest option but you might prefer tiles, timber or brick slips.

Clearly, this kind of project can significantly alter the appearance of your home. Nevertheless, the work is often seen as permitted development, unless the property is listed or situated in a designated area. Check with your local authority's planning department before proceeding.

DID YOU KNOW?

Solid wall insulation can also be used on properties featuring irregular or narrow cavities, timber frame homes, or those featuring non-standard construction, such as pre-cast concrete panels



EWI will add around 50mm to 100mm to the depth of your walls, so drainpipes and gutters will need to be brought forward and other external fittings re-mounted. The work will take a few days but isn't particularly disruptive, so you can happily live in the property throughout the installation.

It costs around £9,000 to £13,000 to insulate a typical three-bedroom home with EWI, so it's not cheap – but if you need to update the property's external appearance anyway, you can rationalise much of that outlay. Savings on energy bills will come in at around £490 per year, so the work should pay for itself within 10 years.

There are two main routes to insulating solid walls internally. The traditional approach is to batten out internal stud walls and fill the resulting cavity with mineral wool, before applying the finish. The benefit of this approach is that it will give you good fixing points for heavy items, such as kitchen cabinets. The downside is that you'll need to fit around 120mm of mineral wool to achieve a good U-value, so you'll lose a good deal of floorspace.

The main alternative is to go for insulation-backed plasterboard, which can be attached directly to the solid wall with adhesive or wet plaster (plus a few

Above: Kingspan's Eco-Versal rigid foam insulation has been used to line the internal walls of this former mill, while freestanding stud walling is erected on the inside of the envelope to provide space to run services and a fixing point for heavy fittings. Left: A National Insulation Association-registered contractor drills through the external brickwork of an un-insulated home, before treating it with blown beads



Insulating solid walls externally (in this case with rockwool batts) is a great way to improve a home's overall thermal performance at the same time as updating its appearance

Below: Ecoroll from Thermafleece is a natural sheepswool insulation, suitable for use in walls, floors and roofs

mechanical fixings). This will be around 60mm to 100mm thick.

Both options will involve significant upheaval, as skirting boards, radiators, lights and other fixtures will need to be temporarily removed – but you can minimise the impact by approaching the

job room-by-room. Or you could switch to thermal lining. Available in rolls and applied like wallpaper, it's just 10mm thick and can be used on both walls and ceilings with minimal disruption – but it won't offer nearly as big an improvement in thermal performance.

At around £5,500 to £8,500 for a three-bedroom home, WI is a cheaper option than external treatments, but it won't provide quite the same jump in performance. The EST suggests bill savings of around £460 per year.

Lofts

Most homes already have a degree of loft insulation at joist level (a 'cold roof' setup) but unless your property was built in the last 10 years it's not likely to meet the government's recommended

thickness of 270mm of mineral wool (or alternatives, such as Thermafleece's sheepswool). So even if you think you've got things covered, you may still be wasting heat and money.

The majority of older houses don't have joists deep enough to accept a 270mm thickness of insulation, so best practice is to fit a base layer plus a topping that runs perpendicular to the direction of the joists. You'll also need to insulate the loft hatch, as well as any pipes or water tanks located in the attic.

Loft insulation is usually sold in rolls, with mineral wool, rock fibre and sheepswool all popular choices. If you're doing the job on a DIY basis it can cost as little as £50 for materials. Prices start from around £200 for professional installation. Upgrading from zero loft insulation to 270mm can save around £145 on heating bills, so it really is one of the most cost-effective ways to reduce your energy usage.

DID YOU KNOW?

You can also use blown or poured products to upgrade your loft. One popular 'fit-and-forget' option is Warmcel's loose fibre insulation. Made of recycled newspaper and matching the performance of mineral wool, it's one of the greenest products on the market – and it can even be used on stud walls

The alternative is to switch to a 'warm roof', where insulation is packed into the roof structure, usually between the rafters as well as over or beneath them. Traditional mineral wool batts, rigid insulation and space-saving multifoils can all be used for this type of project.

Costs are much higher, especially if the roof tiles need to be lifted and re-laid, and you'll definitely need to use a professional installer to avoid problems with condensation. As a result, this kind of upgrade is usually only undertaken as part of a wider loft conversion or extension aiming to create living space.

SHOULD I INSULATE MY FLOORS?

As we've seen, your first port of call for insulation upgrades should be lofts and walls as they'll have the biggest impact when it comes to reducing your heating bills. But with Building Regs getting ever tighter, more renovators are looking to the floor structure to eke out every last bit of energy efficiency.

If your home has a solid (ie concrete) ground floor slab, the simplest way to improve its thermal performance is to add a layer of rigid insulation on top, followed by a vapour control membrane and a new floor deck. The drawback is you'll be raising the floor height, which will have a knock on effect for skirtings, radiators and door thresholds. The alternative is to dig out the existing floor and lay a new insulated slab that matches the original levels.

Suspended timber floors are usually easier to upgrade. Rigid slabs, insulation quilts and blown insulation are all suitable for fitting between the joists – but it's important that good ventilation is maintained beneath the structure. In some cases, a breather membrane is attached to the underside of the joists to minimise condensation and drafts. You'll need to insulate the gaps around the skirting board and edge of the flooring, too.

The Building Regulations require that newly insulated floors achieve a U-value of 0.25 W/m²K or less, which translates into about 150mm of mineral wool. According to the EST, a professional installer will charge around £530 to insulate a suspended timber floor in a typical three bedroom home.

CONTACTS

Actis 01249 462888
www.insulation-

actis.com **Celotex** 01473 820820 www.celotex.co.uk **Energy Saving Trust** www.

energysavingtrust.org.uk **Knauf** 01744 766600 www.knaufinsulation.co.uk

Kingspan Insulation 01544 388601 www.kingspaninsulation.co.uk **Mould**

Growth Consultants 020 8337 0731 www.mgcltd.co.uk **Space Insulation**

0870 061 9916 www.space-insulation.com **Superfoil** 01636 639900 www.superfoil.

co.uk **Thermafleece** 0844 8009953 www.thermafleece.com **Warmcel** 01685 845200 www.warmcel.co.uk

asba architects

Building dreams

Get all the help you need from Britain's largest network of local chartered architects specialising in domestic and housing work.



ALTERATIONS • BARN CONVERSIONS • COMMERCIAL DEVELOPMENTS • CONSERVATION
INTERIOR DESIGN • NEW HOUSES AND FLATS • ONE-OFF DESIGN PROJECTS • EXTENSIONS
REMODELLING • RESTORATION • SPECULATIVE DEVELOPMENTS

Britain's largest network of local chartered architects specialising in new homes, extensions and refurbishments.

freephone 0800 387310 www.asba-architects.org



Black Millwork

If it's quality CASEMENT WINDOWS you're looking for...



...you've just found them.

- Quality knot-free engineered timber
- Low-E argon filled double-glazed units
- Fully factory finished
- Comprehensive product warranties
- BS7950 security tested as standard
- Available in storm-proof or flush-casement designs

For further details please contact
Black Millwork Co. Inc. on 01283 511122,
email info@blackmillwork.co.uk or
visit our website www.blackmillwork.co.uk

Get the most from
your windows and doors

Black
MILLWORK CO., INC.

www.blackmillwork.co.uk

IQGLASS

Modern Glass Technology

IQ Glass are the UK's leaders in high specification technical glass solutions and structural glass. With over 25 years experience in specialist glazing IQ's extensive expertise stretch through technical glass products, slimline framing systems, frameless structural glazing, automated glazed items and bespoke structural items.



Contact us to receive our
new interactive e-brochure



Contact IQ on **T** 01923218348 **E** sales@iqglassuk.com **W** www.iqglassuk.com



Inspiring extensions

MIKE BLACK

Build It readers David and Alyson Cowell added a modern garden room extension to their 1930s home. A key design detail is the clerestory windows that run around the top of the walls, which let in plenty of light without compromising privacy

Find design ideas for your project among these stunning extensions – including some of our favourites from the *Build It* reader home archives



JEREMY PHILLIPS

Compact loft conversion

Build It readers Kath and John Grimshaw have created an unusual loft extension that makes intelligent use of a very peculiar site.

In order to provide a firm base for the foundations, the couple had to manually shift tonnes of earth and dig deep terraces into their upwardly-sloping garden. It is so steep that the flower beds reach eaves height at the back of the house.

In the end, their hard work really paid off. The contemporary timber-and-zinc 32m² extension, which cost £39,900 and was designed by A+DP, offers gorgeous views across the gardens and surrounding countryside.



Glazed roof extension

This modern extension by Apropos forms an 'L' shape at the end of the house, creating a quasi-courtyard that melds into the owner's kitchen garden. The key design feature is the custom-made roof, which combines full glazing on the south elevation with skylights on the opposite side. The company's Aprofold doors help to open up the space to the garden, with a level threshold allowing the same flooring material to be used seamlessly inside and out. A similar bespoke structure from Apropos starts from around £25,000. ↓



Light-filled modern extension ↑

Worried that your extension might take precious daylight away from the core of your home? You can avoid a gloomy interior by fitting rooflights near the ridgeline of an extension or switching to a glazed lantern at the apex of the roof. For a contemporary alternative, why not follow the example of *Build It* readers Robin and Zita Crewe? The couple's architect, 3s, designed-in a 'glazed slot' that provides natural light right at the junction between the existing house and the new zone.



CLOSER LOOK

Kitchen diner extension by Origin

When Penny Dawson decided to extend her family home in Solihull, it was to signal the culmination of a staggered, 10-year renovation process that had already seen both the garage and the loft converted into habitable zones. The changes had created a very spacious upstairs storey, so Penny was keen to bring the somewhat limited ground floor plan in line with the rest of the house.

The Dawsons wanted to maximise garden views and natural light, as well as create a modern kitchen with a dynamic design. "I knew exactly how I wanted it to be, I just needed to find the company that could make it happen," says Penny. She had set her sights on bi-fold doors for the main access, and wanted a bespoke run that would be easy to maintain as well as energy efficient.

"We decided on powder-coated aluminium frames after talking to the experts at Origin," says Penny. "We were able to customise the bi-folds right down to the colour of the hinges, which match the slate grey frames." The Dawsons specified two sets (one four-door, the other five-door) for their contemporary kitchen, divided by a narrow brick wall that provides extra support to the roof and allowed them to

incorporate a glazed gable. "The bi-fold doors were a luxurious choice, but I'd recommend them to anyone," says Penny. "They've changed the way we live by creating an open plan living space that connects the garden to the house. As soon as we installed them, the kitchen immediately became our family room."

3 GREAT IDEAS TO TAKE AWAY FROM THIS PROJECT:

- A kitchen diner can be the hub of a modern home, providing a fantastic space for family meals or to entertain guests
- If you want clear access to your garden, bi-fold doors (also known as folding sliding doors) are a fabulous choice. They concertina into a neat stack at one end of the run, taking up even less space than conventional sliders
- Keep maintenance requirements to a minimum by opting for durable, easy-to-clean materials. Aluminium is a great choice for window and door frames

DID YOU KNOW?

If your home's loft is easy to convert, you could be sitting on a goldmine. According to a 2011 survey by Halifax, the average attic conversion costs just £10,000 to build, yet adds over £20,000 to the value of a property

CLOSER LOOK**A dormer loft conversion by Econoloft**

After 11 years in their three-bedroom, semi-detached home in Middlesex, John and Tania Ferrari realised they needed more space. Their daughter, Lucy, had drawn the short straw when they moved in, ending up with more of a box room than comfortable sleeping quarters. Nevertheless, with great neighbours and plenty of community spirit, the couple weren't keen to uproot their young family from the area.

"Moving was never an option," says Tania. "We are really happy here, so we immediately thought of extending." The couple used Mumsnet to research attic conversion companies and got recommendations from other users. They then asked for quotes from three firms before settling on Econoloft for the project. "We definitely made the right choice and we now have a beautifully light and open space," says Tania.

The new loft, which was built under permitted development rights, comprises a full-width dormer at the rear with a Juliet balcony and French doors offering gorgeous tree-top views. Discreet rooflights bring light into the front of the conversion, while also affording great privacy – an important consideration, as the couple use their new space as a master suite, complete with luxury wetroom, while Lucy has moved into their old bedroom. A similar Econoloft conversion would cost around £35,000 to £40,000.

**3 GREAT IDEAS TO TAKE AWAY FROM THIS PROJECT:**

- Get more headroom into your loft conversion with a full-height dormer. They work by increasing the height of the roof at either the front or rear elevation – meaning that half of the internal attic space offers a conventional flat ceiling
- You're more likely to get planning permission for a dormer if it's located at the rear of the house, where it won't have a big impact on the street scene
- If you're adding sleeping quarters, including an en suite is a great way to maintain the ratio of bedrooms to bathrooms (usually two to one)

Expert Advice

"Whatever kind of extension you're considering, it's worth looking for design inspiration in the existing house or its surroundings – whether that's in terms of the overarching style or simply a case of picking up on a single colour or material to provide a visual link between the two spaces"

Opinder Liddar,
lapd architects

**Classic conservatory with a modern twist**

If you're looking for a stylish, affordable way to add space to your home and bring the outdoors in, nothing beats a conservatory extension. This gorgeous bespoke creation by Swish features a Chartwell green finish on both sides of the frame. The coloured glazing bars provide an appealing contrast with the existing house when viewed from the garden, yet complement the stunning vistas when seen from within the room. Expect to pay around £15,000 for a similar design.



High-tech basement

Convinced this light-filled zone must be conventional above-ground living space? Think again. The project by London Basement added a full-height storey beneath a 1930s detached house in Hampstead Garden Suburb. Glazed doors leading to an external staircase flood the space with daylight. The zone is used as a games and relaxation room, but your basement could just as easily house a bedroom, kitchen, gym or even a separate annexe.

CLOSER LOOK

A bright & open extension by IQ Glass

This contemporary extension adds a bold new living space to this 1930s home in the Chilterns. The cutting-edge project, designed by Duncan Foster Architects, is almost totally wrapped in glass to create a wonderfully open relaxation area with panoramic views.



Among the spectacular features are corner-opening frameless glass doors that allow two of the walls to slide away, dissolving the divide between home and garden. The crowning glory of the design is the combination of a fully glazed gable end and vaulted ceiling, which maximises the amount of natural light that enters the space.

On any project that incorporates a large amount of glazing (particularly on a south-facing elevation) it's important to consider comfort levels in summer. Here, solar control glass and an external timber brise soleil combine to minimise any risk of overheating.

The glazing elements for the 34m² extension came to around £37,000 and were supplied by IQ Glass.



3 GREAT IDEAS TO TAKE AWAY FROM THIS PROJECT:

- Capitalise on views and allow plenty of sunlight to penetrate deep into your extension by specifying frameless glass
- Don't assume that only conventional extensions will suit a traditional home. Many planning officers are happy to see a juxtaposition between new and old
- Try using sliding doors to connect your new living space to the garden beyond. Corner-opening arrangements will make a start-of-the-art architectural statement

Expert Advice

"Basement extensions don't come cheap, but they can still give fantastic value for money if you live in a town or city where a conventional extension would eat up much-needed garden amenity"

Andrew Edwards, Revolution Homes

QUICK GUIDE: PERMITTED DEVELOPMENT

Many types of extension can be built without planning permission under a regime known as 'permitted development rights' – but your project will need to conform to strict requirements to qualify. Here are some of the main considerations:

- Extensions to the front elevation, or any side elevation fronting a highway, always require planning permission
- Single-storey rear extensions usually can't be more than 3m deep for attached houses, or 4m deep for detached properties
- Until 30th May 2016, an increased allowance is in effect in England, permitting single-storey rear extensions of 8m for detached homes and 4m for all other houses. This type of proposed development will have to go through the 'neighbourhood consultation scheme', but there's no fee attached to the process
- Side extensions must be single-storey and no greater than half the width of the house
- All single-storey additions must be no greater than 4m tall (to the roofline)
- Multi-storey additions must not extend beyond the rear wall of the original house by more than 3m
- Loft conversions are generally considered to be permitted development, provided no additional height is added to the roof plane on the front elevation, and that all parts of the extension fit below the highest part of the existing roof
- Basement conversions don't usually require planning permission unless the external appearance of the building will change. If you intend to dig a new basement it's best to approach your planning officer directly, as policy varies between local authorities
- Permitted development rights are often restricted or removed for listed buildings or properties in designated locations, such as conservation areas

For more information on permitted development rights, visit www.planningportal.gov.uk. The regime is similar across the UK, but variations do apply. For Wales see www.wales.gov.uk and for Scotland www.scotland.gov.uk

CONTACTS

3s Architects & Designers 020 8332 9966 www.3s-ad.com **A+DP** 01484 686742 www.a+dp.com
adp-architects.com **Econoloft** 0800 269765 www.econoloft.co.uk
Glatthaar Fertigkeller 01932 344454 www.glatthaar.co.uk **IQ Glass**
 01923 218348 www.iqglassuk.com **lapd architects** 01865 407722
www.lapdarchitects.co.uk **London Basement** 020 8847 9449 www.londonbasement.co.uk **Origin** 0845 450 6662 www.origin-global.com
Revolution Homes 01243 885285 www.revolutionhomes.co.uk
Swish 080 8178 3040 www.swishwindows.co.uk

Econoloft is one of the country's most respected loft conversion companies and as a family business established for over 40 years, it is considered by many as *the* loft conversion authority.



PLEASE NOTE: Planning permission rules relaxed 1st October 2008



Loft Conversions

Add Space. Add Value. Use Your Loft



For a **FREE** no obligation brochure or home visit, tel: **0800 269765** or email: **sales@econoloft.co.uk**

www.econoloft.co.uk



ECONOLOFT

THE LOFT CONVERSION AUTHORITY

10 YEAR GUARANTEE AS STANDARD

Structural insulated panels

materials
spotlight:

We take a closer look at the make-up of these wall and roof elements and why they suit energy-saving homes

If you're at the stage of looking into construction routes for your self build project, you may well have encountered structural insulated panels (SIPs). A variant of timber frame, SIPs are pre-insulated, factory-made elements that form the structural skeleton of a building. They're suitable for walls, floors and roofs. As a result, they can be used to deliver a strong, accurate and energy-efficient home that's quick to erect and finish on site.

What goes into a SIP?

Every SIP panel is computer designed to match the planned house. These blueprints are then fed into a clever cutting machine, which carves out the components of the individual panels.

A typical SIP consists of two sheets of oriented strandboard (OSB) that sandwich a thick layer of high-quality foam insulation. Sometimes plywood, fibreglass or cementboard are preferred for the outer facing, while the internal sheet may be of ready-to-decorate gypsum board.

The foam core is usually made of expanded polystyrene (EPS). Products with even greater insulating values are also available, including extruded polystyrene, polyurethane and polyisocyanurate. These cost more, but they can help attain the highest possible U-values as well as allowing for reduced overall wall thicknesses.

The facings are usually 'autohesively' bonded to the insulating core. This is achieved by injecting the insulation between the two OSB sheets under high pressure; as the foam sets, a chemical reaction forms a high-strength bond. Lamination, where the facings are glued to a solid foam core, is also possible.

The exact makeup of your panels will depend on the manufacturer, but as a guide Kingspan Tek's standard SIPs are 142mm thick, with two 15mm-thick OSB sheets and 112mm of insulation.

The panels are 200mm to 1,200mm tall and span widths of up to 7,500mm – although customized elements can be manufactured to suit the project.

What makes them an energy efficient choice?

From an energy-saving point of view, there are several advantages to SIPs. Foremost of these is that the system can deliver low U-values (a measure of heat loss). In fact, they offer a significant improvement on the requirements laid out in the Building Regulations (which set a maximum threshold for walls of 0.30 W/m²K). For example, the 142mm-thick Kingspan panels deliver a U-value of 0.22 W/m²K for walls and 0.18 W/m²K for roofs. Even better U-values, down to as low as 0.10 W/m²K, can be achieved by increasing the thickness of the foam core or by adding an extra layer of external wall insulation.

A SIP panel's foam core is continuous, with no internal studwork to interrupt the insulation (as there would be with timber frame) and minimal risk of voids thanks to the injection process. This helps boost performance by minimising the opportunity for cold bridging; a phenomenon where heat can move out of a building via structural elements that 'bridge' the thermal envelope.

The use of accurately-manufactured, large-format panels also contributes to good thermal performance by simplifying air tightness detailing. Your SIPs erectors will need to follow best practice on site in terms of air tightness by sealing with expandable foams, tapes and the like – but the process should be simpler, swifter and less prone to human error than with conventional construction systems.

What will they cost?

Pound for pound, building with SIPs is slightly more expensive than opting for



NEED TO KNOW: SIPs

- SIPs were developed as a structural solution, but can also be used as an insulating wraparound for oak frames and similar skeletal systems
- Cost restrictions mean they're best suited to new build projects with simple, repeatable details – though extensions are possible
- The panels' strength and insulating properties make them ideal for creating habitable 'warm roof' structures, provided the roofscape is simple in design. This kind of project is particularly cost-effective on a new build project
- Panels are usually craned into position on site. Adjacent elements are then commonly jointed with 'splines' carved from thin SIPs panels that fit snugly into the foam core
- The energy-saving air tightness of a SIPs home must be complemented by designing in mechanical rather than natural ventilation systems
- Many SIPs companies pre-route service channels, either within the foam core or the interior OSB facing, to help maintain good air tightness

conventional brick and block or timber frame. You can expect to pay around a 10-15% premium for using this system, but some of the difference can be clawed back with easier detailing and reduced labour requirements thanks to the speed at which your frame will go up. Ultimately, the fact that good energy efficiency is straightforward to achieve will help create a cheap-to-run home.

Above: This illustration shows an exploded view of Kingspan TEK's SIPs wall and roof panels

CONTACTS

Design & Materials 0845 404 0400 www.designandmaterials.uk.com Kingspan TEK 01544 388601 www.kingspantek.co.uk SIPs Eco Panels 01787 377388 www.sipsecopanels.co.uk SIPs UK 01933 353501 www.sips.uk.com

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

Expert help

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT

92



92 THE PERIOD HOUSE PROJECT

Conservation expert Alan Tierney explains everything you need to know about listed building consent and how it can affect a renovation

96 HEALTH AND SAFETY

To avoid accidents and injuries it's paramount that your building site is a safe work place for you and your construction team

102 ELECTRICS & PLUMBING

Tim Doherty sets out what it costs to fit a boiler, pipework, drainage and lighting and how to get a fair price

110 BUDGETING ESSENTIALS

Want to keep your budget on track? You'll need to work out the price for every element of your build – from choosing tradesmen to specifying the interior finishes

112 MAKING THE MOST OUT OF YOUR PLOT

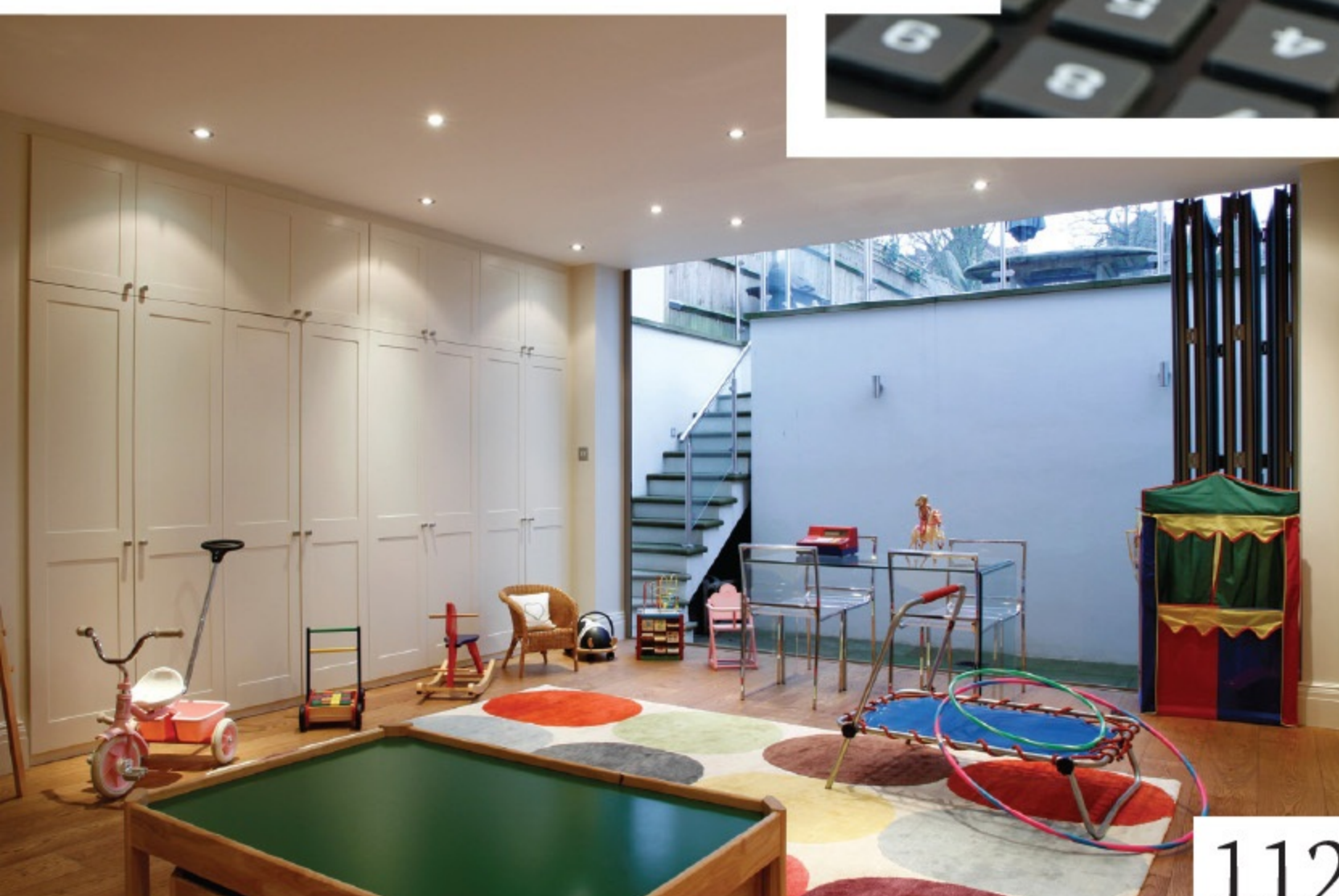
Planning expert Mike Dade explains the key ways of unlocking development potential



102



110

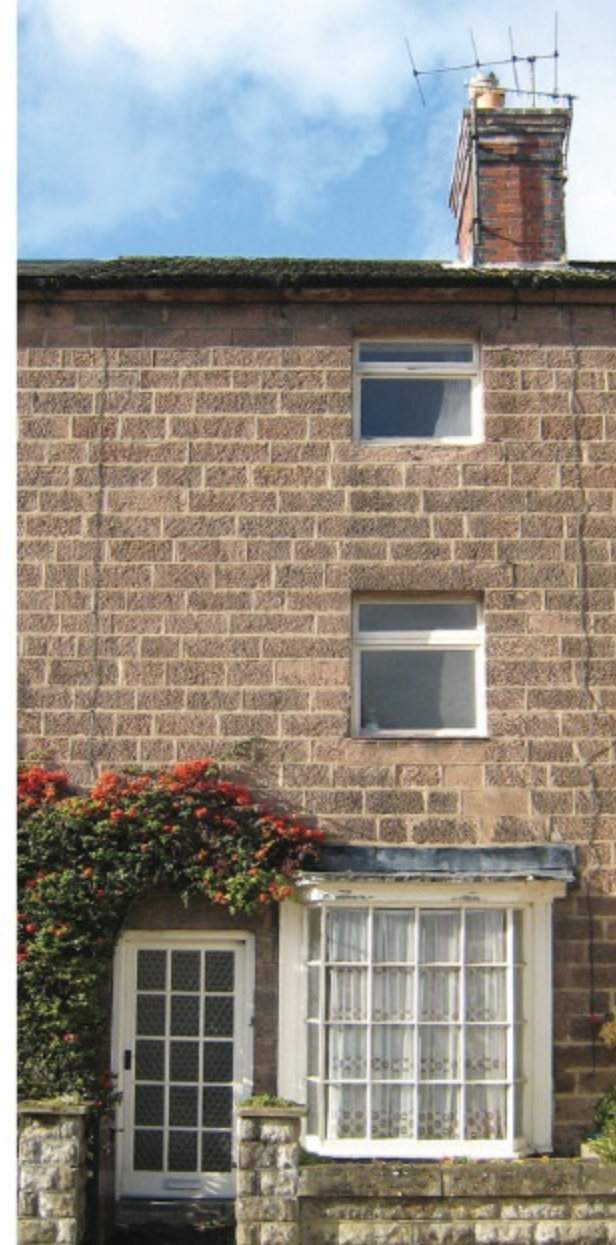


112

PLUS:
BUILD COST CALCULATOR,
YOUR Q&As ANSWERED,
SELF BUILD MORTGAGES,
MIKE DADE'S PLOT WATCH
& LAND FOR SALE >>

The period house project

In the third part of our series on an historic renovation, **Alan Tierney** looks at listed building consent and discusses how the regime affected this project



Below: The roof line of the relatively modern extension has to be altered to clear the lintel above the window

Any alterations to a listed building that may affect its special historic interest (or, as it is now more often described, significance) require listed building consent (LBC) to be granted before work can be carried out. Undertaking unauthorised alterations is a criminal offence – so it's important to get it right.

Requesting LBC is separate from and does not affect the need to apply for planning permission, if it is required. On this project, to renovate an historic mid terrace, some of the work will require both.

Early consultation

Before making an application for LBC it is almost always best to engage

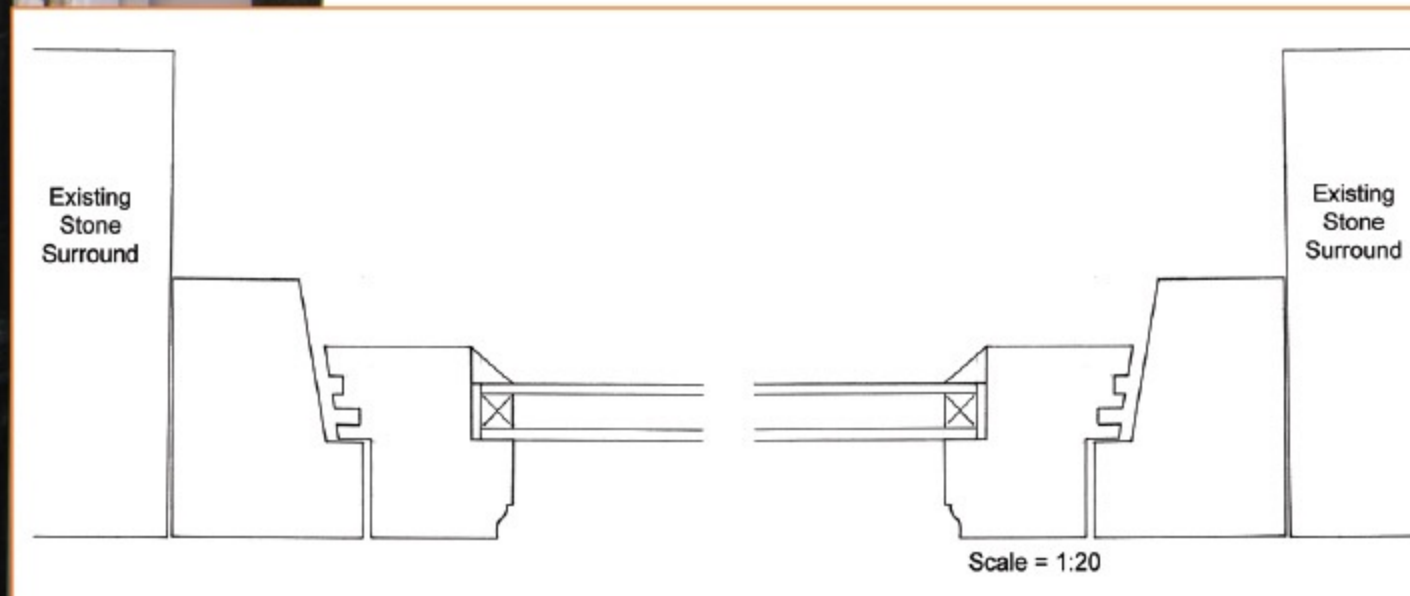
with the local authority in a pre-application consultation (pre-app). This is strongly advised by English Heritage, in government guidance and is also actively encouraged by most councils.

A pre-app generally comprises an informal meeting

on-site with the conservation officer where you can talk through your proposals. Demonstrating that you've gone to some effort to understand the history and structure of the building really pays off at this stage. It shows you're taking a responsible and sympathetic approach. If your proposals are seen to have been influenced by what is important about the building, they are more likely to be looked upon favourably.

At this stage you should have a clear plan of action, but not a fixed idea of what you intend to do. This ought to be a collaborative process and conservation officers are likely to want to influence your proposals. They should be experts in historic building work – especially in the particular style, materials and techniques of the local area. As such, their input can be very helpful in developing your scheme.

Unfortunately there may be elements of what you would like to do that the conservation officer



Above: Alan had to produce a section drawing of the proposed rear window to satisfy one of the listed building consent conditions

will believe to be inappropriate. Sometimes it is possible to negotiate an agreed route through this kind of disagreement; otherwise you will need to consider abandoning an aspect of your plans. The better your preparation has been, the less likely this is to occur. It's rarely worthwhile challenging the officer's view unless you are convinced it is wrong. In that case you will need strong, evidence-based justification and would be well advised to enlist the help of a suitably qualified expert.

The objective of the pre-app is to agree the outline of a scheme that is mutually acceptable and can then be drawn up into a full application. For this project we had an extremely constructive meeting with the conservation officer on site, which lasted a couple of hours – partly because he was very interested in some of the discoveries that had been made about the building.

Most of the proposals were readily agreed, but he was not happy with the intended roofline of the altered kitchen extension due to its potential impact on an original stone lintel. We discussed alternatives and agreed a solution that raised the eaves level to clear the lintel.

This was actually a better design for the new kitchen. It hadn't been



considered before because it meant raising the height at the boundary, increasing the impact on the neighbouring yard. Because there was a conservation imperative, this was now something that we could justify to both the neighbours and planners.

Outcome

It was agreed that some of the work discussed would not require LBC because it did not affect the significance of the building. This included removal of the faux stone

fireplace – but further opening up and reinstatement (including whatever was behind the faux stone) did require consent. As did rewiring, new plumbing and central heating (approaches to these tend to vary between local authorities).

Unusually we agreed to submit two separate LBC applications. This was because a proportion of the work was quite straightforward, while other elements required further justification, although they had been accepted in principle. In doing this we took advantage of the fact that there

Above: Listed building consent was required for all works to the roof. Below: Many of the original fireplaces had been bricked up. The renovation hopes to reinstate all of these



Right: The faux stone fireplace is completely out of character in the property. Its removal does not require LBC

is no fee for making an LBC application – so there's no downside to doubling up. The potential benefit is that rejection of the less certain application will not delay progress on the rest of the work, like having to amend an application would have.

The first application covered:

- Replacement of the front door
- Installing new front windows (single-glazed sliding sashes)
- Changing the concrete tile roof covering to slate

The second application covered:

- Enlarging and altering the rear kitchen extension
- Replacing the back windows with single-pane double glazed units
- Opening up and reinstating fireplaces, exposing a stone pier and some beams

Evidence-based design

The detail of the proposals contained in these applications was based on evidence gathered both before and after the pre-app.

The style of front window and door was prescribed by the local authority (based on the research conducted for the World Heritage Site / conservation area designations) and was confirmed by early photographs. The roof coverings and leadwork detail were chosen to match the style of the adjacent properties in the terrace. The front and rear slopes, while both slate, were coursed differently.

The rear window design was developed from evidence that suggested that these were originally unglazed openings. Obviously it would not be sensible to reinstate that situation, so they were designed



without glazing bars, recessed as deep as possible and with their timber frames painted a neutral grey to get as close as possible to a visual representation of unglazed windows. Because there was no 'correct' window style to follow, we argued (successfully) that they should be double glazed – in those circumstances the presumption in favour of thermal efficiency outweighs the common policy that windows in listed buildings should always be single glazed.

To support the application for reinstating the fireplaces, some additional investigation was needed to identify their form and location as well as confirming their survival behind later finishes. This required removal of the faux stone fireplace and some limited opening up work, which was discussed and approved during the pre-app. It is always wise to gain approval for this kind of opening before intervention in the fabric of the building.

Conditions

Both applications were granted but, as is usually the case, there were a number of conditions. The detail of how authorised alterations are carried out is normally controlled in this way – to ensure the use of appropriate materials and techniques, for example.

The first application had four conditions, requiring approval of roofing materials and lead detailing

as well as inspection of any roof timbers that needed to be replaced.

The second application, being more contentious, had seven conditions. These required detailed drawings of the rear windows, approval of paint and finish colours for them and the render. Precautions to protect the historic boundary wall, detailed drawings of some internal alterations and a photographic recording of the opening up of the fireplaces were also needed.

These conditions won't affect the way the project is executed, but may have an impact on its management. There is some extra work needed to produce more drawings for consent, so there will inevitably be delays while waiting for prior approval before some elements of the project can proceed. The greatest difficulty with satisfying the conditions – as is frequently the case – comes with communication and coordinating the various people involved. A single condition sometimes involves a project manager, conservation officer, building inspector, main contractor and more than one subcontractor, who will all need to understand the relevant requirements and timescale.

Ready to go

Now that LBC is in place and planning consent for the altered kitchen extension has been granted work can proceed – subject to satisfying the necessary preconditions, of course.

Next month: Work is well underway. As Alan and his team start to renovate the property they discover even more about its fabric

ALAN TIERNEY



Alan Tierney is a historic building consultant and conservation specialist. He runs Picketts Historic Building Conservation (www.pickettsconservation.co.uk), offering hands on advice to period property owners.

BARHAM & SONS

SUFFOLK MADE HARDWOOD FLOORS



WWW.
BARHAMS.BIZ




Belgique Antique
hand made & fumed oak floors

**OAK ENGINEERED
ANTIQUE FLOORING**



**NEW BIG PLANK PARQUET
ENGINEERED
IN 60 COLOURS**

ENGINEERED PARQUET 130X650X20/5MM

**OAK DOORS
COLLECTION**



Barham & Sons 01638 561978

Mon-Sat 9/5pm Email: Info@barhams.biz

Newmarket

MAKING MODERN LIVING POSSIBLE

Danfoss

The future proof investment that pays off every single day

Just imagine. You can utilise solar energy stored in the ground or the air to heat your home whilst enjoying the highest possible level of comfort at the same time.

Heat pumps collect CO₂ emission-free solar energy stored in the ground and convert it into an environmentally sustainable indoor climate for your home.

For more information, call us on 0114 270 3900 or email info.heatpumps@danfoss.com

Grants

RHI

All our heat pumps are MCS accredited: meaning you can take full advantage of the Renewable Heat Incentive

Full Range

of renewables

Danfoss offer an extensive range of air and ground source heat pumps for all heating and hot water needs.

Solutions

Tailored to your needs

We offer a full range of high quality solutions and relevant services that can be customised to fit a properties heat requirements

Danfoss



www.heatpumps.danfoss.co.uk

The project management guide:

Health & safety

With so many tradesmen and specialists on site, who's responsible for safety? **Mike Hardwick** explains the regulations

In recent years health and safety has become a bit of a handy excuse for not doing something that might be seen as being in the slightest bit risky. I'm no great fan of the 'elf 'n safety brigade' or 'jobsworths'. Yet, one thing that is abundantly clear to me in my line of business is that construction sites are still some of the most dangerous places to work in the UK and must be taken seriously.

According to figures released by the Health and Safety Executive (HSE), more than 50 people were killed on building sites in the UK over the last year and thousands injured, with 75% of these incidents occurring on small sites. It's pretty sobering stuff. Since you are about to create a small building site yourself, you will need to make sure that you take the necessary precautions to avoid adding you or your tradespeople to the statistics.

Construction Design Management (CDM)

The Construction Design and Management Regulations 2007, generally referred to as CDM, were introduced to improve safety in the building industry by making everyone in the construction supply chain more responsible for the process. CDM is primarily aimed at professional developers, but if you are intending to sell your self-built property immediately once completed, you would be considered to be a developer. This means that many of the CDM rules will apply.

However, if you are an individual self builder intending to live in your new home once it is built, you will be largely exempt from the core CDM requirements. That said, if you directly employ workers to build the property or self-manage the project and take on contractors to do the work then some of the regulations will apply.

CDM for self builders who project manage

If you were a professional developer, CDM regulations would oblige you to: notify the HSE of the project; appoint a CDM coordinator; and prepare a health and safety plan and file for the completed building.

However, if you are undertaking all of the work yourself, then CDM legislation will not apply. Similarly, if you are employing an architect and a general builder, or using a 'turnkey' kit house or prefabricated home service, then that company would be responsible for ensuring compliance with CDM rules, not you.

Between these two self building routes, the division of responsibility becomes less distinct. But as a rule, the more you employ people to do work for you, the more you will be deemed to be 'exercising control' of the build and the more responsibility for health and safety would fall to you. For example, if you declare yourself to be the project manager, then you will be expected to ensure that:

- 1 Health and safety risks are properly controlled throughout the project
- 2 Activities are coordinated to

ensure that all work is done safely

- 3 The people you bring in to work on the project are competent to do the job safely
- 4 People working on site are able to co-operate with each other

If you are employing your own workers on your build, then you will be obliged to take out employer's liability insurance and to control the risks that arise. This cover is included in the proprietary self build site insurance products.

Taking over from the professionals

A good example, and common situation, is where a self builder buys a timber frame that will be erected by the supplier on a pre-prepared site. In this instance, you would be considered to be 'exercising control' (and therefore managing the risks and coordinating the work of your sub-contractors) during the ground works and the finishing stages only. You would hand over responsibility for health and safety to the frame supplier for the duration of the frame erection service.

If you are undertaking a shell build in traditional masonry construction, the builder would hand over responsibility to you when the shell is wind and watertight. You would then take on the health and safety mantle as project manager as soon as your trades move in to complete the build.

Most of the precautions are simply common sense. Anything involving height is inherently dangerous, so keep off roofs and floor joists, tie off

TOP 10 TIPS FOR A SAFE BUILD

There are endless ways that risk can manifest itself on site and it's impossible to eliminate every danger, but to help you along, I've created a list of my top 10 tips for a safe build:

- 1 Buy a few sets of hard hats, goggles and gloves to keep in the site office for when visitors arrive. They are cheap as chips so there's no excuse. Get in the habit of using them, too
- 2 Keep out of deep trenches over waist high. Deep trenches can collapse if not properly shored up, sometimes with lethal results
- 3 Treat concrete with respect. Cement is a strong alkali and can cause serious burns, especially if it gets inside your wellies. If you get it on your skin or clothing, wash it off immediately
- 4 Keep a first aid box on site, together with some saline eye wash bottles to flush out cement dust or stone fragments if necessary. The HSE guidelines will tell you what to include in the kit
- 5 It's easy to fall down open service trenches and manhole covers and get hurt. So protect them with sheet steel plates, which can be loaned cheaply from tool hire firms and are preferable to sheets of plywood and the like
- 6 Stack bricks, blocks and tiles on level ground and never more than two packs high
- 7 Scaffolding has to be erected and adjusted by specialists, but a useful trick to avoid injury is to tape empty fizzy drink bottles over any exposed pole ends that stick out at head height
- 8 Professional builders will normally use yellow transformer boxes to convert 240 volt mains electricity to a 'non-lethal' 110 volt supply. If you will be using standard 240 volt DIY power tools, then be sure to use a residual current detector (RCD) circuit breaker at the socket
- 9 Wear protective footwear. Thick-soled boots with steel toecaps are a must on site and treading on a nail is not a pleasant experience. Keep an eye out for loose timbers with exposed nails
- 10 One of the most useful things you can do is to tidy up at the end of each day. Someone has to do it! A clean and tidy site is a much safer place to work. Salvage any discarded materials that might be reused, like dropped bricks or blocks, and stuff wrappers and off-cuts into the skip or waste heap ready for disposal

MORE INFORMATION

The HSE website offers some excellent practical advice on how to manage a construction site and control the risks. Have a look at www.hse.gov.uk/construction/index.htm. They offer a couple of very useful free downloads regarding Health and Safety in construction and if you prefer a more personal approach you can always call the HSE Hotline on 0845 345 0055 and ask for guidance. There is also some useful advice written in conjunction with the HSE on the Self Build Portal at www.selfbuildportal.org.uk

ladders and remember that balustrades and staircases might not yet be fitted when moving between storeys. Building sites are especially appealing to children, but do remember that they are not playgrounds. Be sure to keep a close eye on all youngsters at all times.

Finally, avoid attempting to pick up any heavy loads. Most builders are used to lifting and have developed the necessary strength and technique over the years. It is remarkably easy to find yourself flat out for a number of weeks after putting your back out (and I speak from personal experience here) through trying to do too much on your own. If it looks too heavy to move, get someone to help, use mechanical assistance or simply leave it to the experts!

Following these simple but sensible guidelines will hopefully help you run a safe and enjoyable project.

MIKE HARDWICK



Mike Hardwick is a self build consultant and project management specialist. He 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 (www.nsbrc.co.uk)



Carpenter Oak & Woodland

Traditional & Contemporary Timber Frames

Let us design and build your dream home...

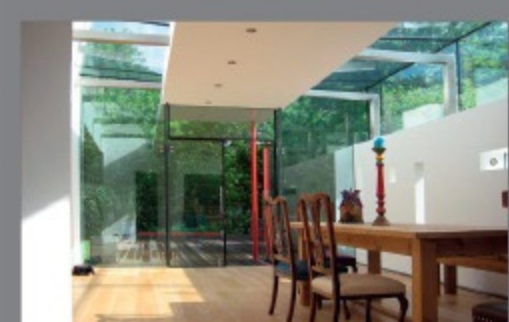


From the design & manufacture of the finest timber framed homes & extensions to the conservation of historic timber frames, we have the solution to meet your needs. Recommended by many professionals as the best in the industry, we've won 14 prestigious industry awards and featured 3 times on Channel 4's Grand Designs.

Find out more by visiting our website & contact us on:

England & Wales: 01225 743089 Scotland: 01575 560393

www.carpenteroakandwoodland.com / info@carpenteroakandwoodland.com



bringing outside inside...

From the most ambitious plan to a simple glass roof, GlasSpace offers unique, practical design with unrivalled service at an extremely competitive price. Using commercial glass technology and minimal framing developed over the last 25 years, GlasSpace structures create a light, warm environment that is highly durable, energy efficient and secure.



0845 230 9569 | www.glasspace.com | leo@glasspace.com

SPONSORED BY:

**BOSCH**

Invented for life

Ask the 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

**DIY**

Eric Streuli has worked at Bosch since 1992 and currently manages the power tools training centre in Denham. He's the go-to man for DIY know-how and is always on hand to provide technical and application support for any customer who needs it

**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

FINANCE

Do I need cash savings to finance a self build?

Is it possible to build my own home even if I don't have a large amount of cash available?

**QUESTION
OF THE
MONTH**

During a building project, cash flow is essential so it is imperative that you have access to funds at all the key stages. Traditional self build mortgages lend money at the end of each phase of the project. This means you will need to have the cash available to pay the companies and workforce at the beginning of each stage before reclaiming the cost from the lender. This would not suit you if you have limited funds. It is also wise to keep some of your savings in reserve to use as a back-up in case any problems occur.

If you don't have a large amount of cash reserves you need a self build mortgage that releases funds to you at the start of each phase, rather than at the end. This type of loan, designed by BuildStore, is called an advance stage payment mortgage. With it, as well as getting money up front, you can also borrow a high percentage of your costs. The lender will give you up to 85% of the value of your plot and up to 85% of the cost of the project. This means, that, provided you can cover the 15% deposit, you can self build.

WIN!
**A POWERFUL
SCREWDRIVER**
**WORTH
£59.99**



DIY tasks often get pushed to the bottom of the 'things to do each month' pile. However, by using the Bosch PSR Select you can complete jobs, such as hanging pictures and shelves, in double-quick time, so there's really no excuse for not tackling your DIY tasks.

The PSR Select is a compact and lightweight electric screwdriver. It's made with a unique rotatable bit box that holds 12 heads, so you'll always have the right one to hand. It's easy to see which bit you've selected using the illuminated window at the top of the tool. It also comes with a lithium-ion battery so it never suffers any self discharge or memory effect.

Each month, Bosch gives away a 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

DIY**What are the benefits of lithium-ion?**

I've got some pretty old, cumbersome kit in my tool box with low quality batteries that don't last very long. I'm considering purchasing new apparatus and have noticed that most brands come with lithium-ion batteries. How do these differ compared to older versions?

Lithium-ion batteries have become the norm in recent years. They differ fundamentally from nickel-based batteries, as they use lithium as a component of the electrodes and have a cell voltage of 3.6 volts, which is three times higher than nickel cadmium (Ni-cad) batteries used in older tools. Less battery cells are required, which enables the power tool to be simultaneously smaller, lighter and more powerful. Unlike Ni-cad batteries, lithium-ion versions do not have memory effect, meaning you cannot damage them by overcharging them. They also have considerably less self-discharge. This means they fully hold their charge even if they are only used occasionally.

PLANNING**Do I need a Design and Access statement?**

I'm in the throes of preparing my planning application for a self build. Do I need to submit a Design and Access statement with it?

Changes to planning rules took effect in June earlier this year in a bid to streamline the process. If you're building a single home in a conservation area or a world heritage site, or your project is part of a major development of 10 houses or more, your planning application still needs to be accompanied by a Design and Access statement (D&A). If it isn't, you no longer need to submit one.

In addition to ditching D&A statements, councils' validation checklists are supposed to be trimmed down. This means that supporting statements on things like trees or ecology are now only being required where obviously necessary.

If you do need to write a D&A statement, find one on your council's website that's part of an approved scheme for something similar to your proposal and copy the general format. The objective is to demonstrate your design process and how the new dwelling will respond to its surroundings. On the access



side, this relates both to convenience in and around the house and safe entry to the site. Ideally, whoever designs the house should write the statement for you.

DESIGN**Who should I employ to draw up my house plans?**

What's the best way to find and employ an architect to work with me on the design of my dream home?



You need an architect that you trust and have faith in to deliver a design that will inspire you and others for a long time to come. It's a good idea to approach the process in the same way as you would when interviewing someone for a job. After all, this is going to be a long relationship with someone who is not only going to have to listen to your needs, but deliver them in an attractive design that's tailored to your budget.

There are a number of sources available to start your selection procedure. The Royal Institute of Architects (www.architecture.com) has an online directory of qualified professionals. Look at websites, magazines, newly finished buildings or books, too, and if you like the work of a particular designer put them on your shortlist. Also, ask friends and family who they have used before.

Once you have a shortlist you need to meet them face-to-face for an interview/chat about your project. The first consultation is usually free. Here you want to know if the architect

stacks up to what they say they can do and gather ideas for your project. Ask them about their recent schemes and request testimonials from their former clients who can vouch for their quality of work. Be sure to select a designer with experience in designing the type and style of property you want to build.

Remember that some practices are only interested in designing modernist white cubes, but you will need someone with expertise in your style of project. You also need to question who will be the designer – larger practices may pass you onto a less qualified architect than the one who originally came to see you. Investigate their track record of approval with local planners by searching the local authority websites. You should also ask them about everything from the drawing phase to the construction period, how they handle each element and what their fees are.

If you get on well and they tick all the right boxes, you've probably found the right architect for your scheme.

ANY QUESTIONS?

Send all your self build, renovation and conversion questions to buildit@castlemedia.co.uk for our panel of experts to answer

Subscribe to **Build It** *today!*



and receive **3 months FREE!**

12 issues delivered to your door
for the price of nine*

saving 25% off the cover price

- Each issue packed with expert advice and inspiration
- Delivered to your door each month
- All subscribers receive two FREE tickets to the next *Build It Live* worth £24

Visit: **www.self-build.co.uk/subscribe** or
call **01442 820580** quoting '**BIOCT13**'

*Offer closes 23rd September 2013. Terms & conditions apply – see website for details

Electrics and plumbing

This month **Tim Doherty** sets out the typical costs selfbuilders should expect to pay for installing lighting, boilers, pipework and drainage



In my experience, the things that often go wrong with newly finished buildings are frequently related to electrics and plumbing, which are euphemistically known as the 'moving parts'. Whilst electrical professionals will disagree, the sensitivity of your residual current device (RCD) means it often needs time to settle down to its new circuits as brand new light fittings and appliances are loaded onto your ring mains. And when it comes to plumbing, it is only after a period of occupation over several months that a badly insulated soil stack, noisy cistern, loud flow rates or, worst of all, any small leaks will be revealed.

From a budget point of view, controlling spiralling costs is down to good planning and design, the clarity of your brief and selecting good tradesmen – who might often not be the cheapest.

Electrics

Your electrical installation is governed by Part P of the Building Regulations approved documents. The rules are under review, but Part P sets out to ensure only qualified (competent) and registered electricians can install new wiring in a property. You'll need a completion certificate, as will building control. And for those of you planning to stay 10 years or more in your property, you are duty bound to have 10-year periodic inspections. There is little scope for a DIY approach to electrics unless you have a professional who is prepared to check, and thus supervise, your work.

What you can do to help control costs is provide a detailed brief to your contractor at the outset so that they are absolutely clear about your requirements. The table on the opposite page details the



requirements on a recently tendered domestic contract. Ideally it would be accompanied by a drawing showing the location of all the sockets, switches and light fittings. This removes any doubt from the contractor's pricing and eliminates the possibility of extra costs being added.

It also provides the scope for you to buy much of the material yourself – which will include quite a few rolls of cable. Typical prices for lighting and power cables will be £65-£70 for each 100m roll and, if your electrician knows that you are providing the bulk of the products, they will give you indicative quantities for their cable requirements. It's important to set these ground rules at tender time because the contractor will still be required to provide a multitude of small components, most of which they will keep in their van.

You should also expect to have to authorise one or two additional sockets, switches or lights. As the house takes shape, it's possible that you might have overlooked something. The earlier you can make these decisions the better for your purse as it becomes more difficult (and thus expensive) for the electrician to make changes when other finishes are also being installed. If you have chosen to supply the

electrical components yourself, order a few spares so that any additional ones specified will match.

When it comes to selecting the light fittings, the choice is huge. It's worth

investing in modern low energy bulbs. LEDs have transformed the market with recent progress made in their warm, soft, decorative and daylight options.

I always suggest you size your consumer unit (fuse board) with a little extra capacity so that if you are planning an extension or a new garden annexe at a later date, you have space to add in a new supply.

Plumbing

From a health and safety perspective, approved installers will be required for hot water components like the boiler and pressurised storage tanks and, of course, anything to do with the supply of gas, all of which will be covered in next month's article. But, for the rest of the plumbing installation, regulation comes from the quality of the work carried out on site and its compliance with Parts G (Sanitation) and H (Drainage) of Building Regulations approved documents.

Historically, all lead work was carried out by a plumber, too, due to its metallic nature. This now tends to be tackled by the roofer. Some plumbers will install external guttering but, here again, other trades like the roofer or carpenter are often more suited.

Internally, and with the improvements made in pipe

technologies, the water supply can either be in copper or plastic. For economy budgets, plastic pipe is available in 100m rolls and a 15mm diameter pipe will cost about £140. The corresponding cost in copper will be closer to £170, which is about 20% more. However, beware the cost of fittings. A 90° elbow in plastic is about £1.50 and its corresponding copper option usually amounts to just 25p. So, on balance, the material supply price will probably not vary very much between the two when you have aggregated all of your quantities.

In terms of labour, plastic is easier to install and more forgiving. Most trained plumbers will tell you they prefer using copper pipe with soldered joints for its longevity and reliability, although it has to be said that plastic pipe does not corrode or burst when frozen. Regardless, all pipes must be properly clipped at appropriate centres, lagged where they are carrying hot water, wrapped in felt and allowed to expand (but not rub) where they pass through joists. Crucially, they must be correctly sized for the job. Failure to get the above right will almost certainly give you a noisy installation which will drive you mad as occupants. It could also lower the value of your finished home.

Waste pipe material will always be in plastic and must be thought through in terms of its design, size, location and ongoing access. For cisterns to work properly the soil pipe must vent the installation at the head of the run and, given that they are almost always internal these days, extra vigilance is required when boxing them in with densely packed rockwool and two layers of plasterboard to block out noise. Also, plastic waste pipes are not just a push fit; they should be solvent welded to prevent them spreading apart.

Knowing where traps or draincocks should be inserted, when non-return valves (for external supplies) should be used or under what circumstances an air inlet valve could substitute for a soil stack, will all add to the successful functionality once you move in. So, if you are leaving your home's plumbing system design to potential contractors ask each one to explain their design and specification by walking you through the drawings to determine which quote to select.

ELEMENT	LOCATION
Location of consumer units	In the ground floor store cupboard with all of the latest RCD & general installation compliance. 2 No. RCD's for lighting and power. MK switches and switch gear preferred.
Power points (doubles)	42 in total (4 to each bedroom, 1 on each landing, 8 to kitchen, 6 to sitting room, 3 to dining room, 1 under stairs, 1 to ground floor store, 1 to hall).
Light points	86 in total (6 to each bedroom, 2 on each landing, 10 to kitchen, 8 to sitting room, 4 to dining, 1 under stairs, 1 to ground floor store, 3 to hall, 2 to ground WC, 1 to hot water cylinder, 6 to each bathroom and 4 to the dressing rooms).
2-way switches	3 zones in total (living room, dining room & master bedroom) each bathroom and 4 to the dressing rooms
3-way switches	4 zones in total (first floor landing, second floor landing, kitchen and hallway)
External power points	1 to rear garden from kitchen wall
TV & satellite	7 standard aerial points in total. For each bedroom, sitting room and the kitchen
Internal telephone	7 in total. For each bedroom, sitting room and the kitchen
Immersion points	2 to the HWC cupboard. 3 to the bathroom heated towel rails
Shaver points	To all three bathrooms
Cooker points	The hob is gas but the double oven is electric
Boiler points	The boiler is wall mounted gas located in the ground floor store
Smoke detectors	Fully integrated and situated as shown on the drawings in the halls and on each landing
Extractor fans	Supply required for the kitchen extractor fan situated above the hob. In all 3 bathrooms and the en suite quiet localised extractor fans are required to be light switch operated
External supplies	Subterranean ducted cable supply to the garage to provide the local consumer unit, 2 external lights, 4 internal lights with localised switches & 3 internal and 1 external double electrical sockets

One thing I recommend to all my clients now is to ensure they have discreet hatches to provide easy access to all shower wastes. Given that most showers are on the first floor and many are now part of wet rooms, this inevitably means a seamless in-line hatch in the ceiling below. The access to all the pipework is well worth it in the event of a blockage or leak upstairs.

In summary, it seems to me that not enough time is spent by many clients in the design and specification of new plumbing and electrics and too much is left to chance or made up as the contract progresses. For more complex houses it is well worth engaging a mechanical and electrical engineer to undertake this design work so that the contractors know exactly what to price and deliver.

CONTACTS

Chartered Institute of Plumbing and Heating Engineering 01708 472791 www.ciphe.org.uk
Electrical Safety Council 020 3463 5100 www.esc.org.uk
Planning Portal www.planningportal.gov.uk
Trust Mark 01344 630 804 www.trustmark.org.uk

TIM DOHERTY



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



BUILD COST *calculator*

Working out finances for a self build or extension project can present a challenge. Your final budget will depend on a variety of factors – from the size of the scheme to the amount of work you do yourself and the method of construction you use. What's more, you'll have to take into consideration that it's more expensive to build in some parts of the UK than in others and decide how high spec you want all your finishes to be.

As all custom home projects are unique, there's no one definitive way to work out how much yours will cost. However, our calculation charts will provide you with a realistic starting point to base your estimates on. All costs displayed exclude VAT.

HOW TO USE THE CHARTS

Look at the house size or extension options at the top of the appropriate chart (below and opposite) and decide which best suits your project

Choose a construction method

There are different routes for timber frame and brick-and-block homes, see the charts opposite for the explanations. Timber frame houses will need cladding, which you must add to your final costs. For extensions (below), costs are based on standard brick-and-block.

Choose your build route

Each option is colour-coded according to how much of the work you want to do yourself (all charts). The pink route is for builds that will be undertaken solely by a main contractor. If you choose the grey route, you would typically do the plastering, general labour and decorating yourself. The orange route is for those on limited budgets or with previous build experience who will be doing most of the work themselves. The timber frame chart has two further

options, where the main contractor builds to watertight and you hire a sub contractor to complete the work (yellow) or you finish it yourself (red).

Additional costs

With each example, we've provided a cost per m² so you can compare prices, regardless of house size or construction method. Use your floor plans to work out your m² estimate.

Remember, costs vary according to region. Overleaf there's a chart to help you work out what the difference in

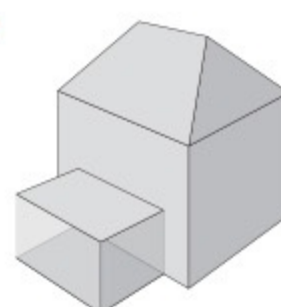
price will be. Furthermore, all figures assume a medium quality finish.

Our figures also exclude the cost of land, landscaping and external works. Many planning departments also have fees that will need to be included. Finally, connecting services can add up to £10,000, so try to establish likely costs early on in the build. These extras will vary from build to build and could add 20% or more to the total budget.

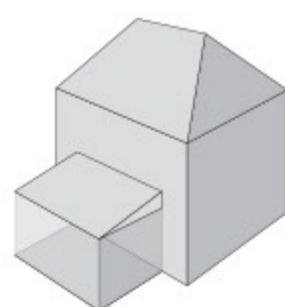
For more on costs visit:
www.self-build.co.uk

What does it cost to build an extension or convert a loft?

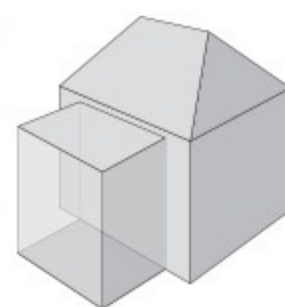
Most home extensions in the UK are built in brick-and-block, so these figures relate to this method of construction. The cost will depend on the size, number of storeys and type of roof you specify. In essence, the more DIY you do, the cheaper it will be. These figures are illustrative only, and do not include fees. Most extensions will be allowed under permitted development, but always check with your planning department.



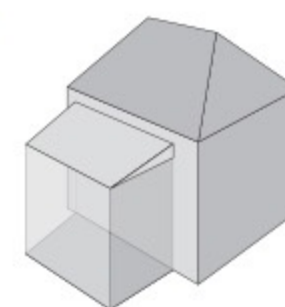
SINGLE STOREY EXTENSION
+ Flat roof 18m²



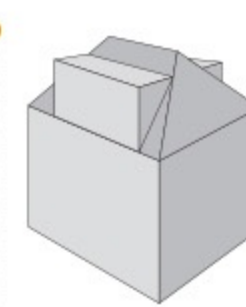
SINGLE STOREY EXTENSION
+ pitched roof 18m²



DOUBLE STOREY EXTENSION
+ flat roof 36m²



DOUBLE STOREY EXTENSION
+ pitched roof 36m²



LOFT CONVERSION
18m²

ALL WORK BY OTHERS	Total cost	£24,000	£24,600	£38,100	£38,900	£36,000
	Cost per m ²	£1,333	£1,367	£1,058	£1,080	£2,000
75% BY OTHERS (balance by owner)	Builder's cost	£18,000	£18,450	£28,575	£29,175	£27,000
	Materials cost	£2,700	£2,767	£4,286	£4,376	£4,050
	Total cost	£20,700	£21,217	£32,861	£33,351	£31,050
	Cost per m ²	£1,150	£1,179	£913	£926	£1,725
25% BY OTHERS (balance by owner)	Builder's cost	£6,000	£6,150	£9,525	£9,725	£9,000
	Materials cost	£8,100	£8,302	£12,858	£13,128	£4,050
	Total cost	£14,100	£14,452	£22,383	£22,853	£13,050
	Cost per m ²	£783	£803	£622	£635	£725

Builder's cost = the sum that the owner has to pay the builder / main contractor • Materials cost = the price of the materials for the work that the owner carries out • Total cost = the overall cost incurred by the owner

Your budget will effect the design, materials and construction route you choose. *Build It's* calculation charts uncover the basic costs involved in the most popular custom build projects

What does it cost to build a new home?

The cost of a home depends on its size, the method of construction (brick and block or timber frame) and the build route you follow. The costs in this table are indicative only and will depend on other factors, such as shape and slope of the site, or quality of the finishes. These figures do not include the cost of the site, professional fees or external works. Don't forget to consult the table of regional variations overleaf and adjust the figure to suit your location.



TWO BED BUNGALOW
90m²



THREE BED DORMER
100m²



THREE BED HOUSE
160m²



FOUR BED/TWO BATH HOUSE
200m²



FIVE BED EXEC HOUSE
280m²

BRICK & BLOCK CONSTRUCTION

ALL WORK BY OTHERS	Total cost	£110,000	£126,000	£201,600	£210,000	£294,000
	Cost per m ²	£1,222	£1,260	£1,260	£1,050	£1,050
75% BY OTHERS (balance by owner)	Builder's cost	£82,500	£94,500	£151,235	£157,500	£220,500
	Materials cost	£12,375	£14,175	£22,685	£23,625	£33,075
	Total cost	£94,875	£108,675	£173,920	£181,125	£253,575
	Cost per m ²	£1,054	£1,087	£1,087	£906	£906
25% BY OTHERS (balance by owner)	Builder's cost	£27,500	£31,500	£50,383	£52,500	£73,500
	Materials cost	£37,125	£42,525	£68,017	£70,875	£92,225
	Total cost	£64,625	£74,025	£118,400	£123,375	£165,725
	Cost per m ²	£718	£740	£740	£617	£592

TIMBER FRAME CONSTRUCTION (does not include external cladding)

ALL WORK BY OTHERS	Total cost	£99,796	£116,655	£147,918	£189,945	£272,971
	Cost per m ²	£1,109	£1,167	£924	£950	£975
75% BY OTHERS (balance by owner)	Builder's cost	£74,025	£86,625	£110,250	£141,750	£204,000
	Materials cost	£11,103	£13,038	£16,537	£21,262	£30,600
	Total cost	£85,128	£99,663	£126,787	£163,012	£234,600
	Cost per m ²	£946	£997	£792	£815	£838
25% BY OTHERS (balance by owner)	Builder's cost	£24,675	£28,875	£36,750	£47,250	£68,000
	Materials cost	£33,312	£38,981	£49,612	£63,787	£91,800
	Total cost	£57,987	£67,856	£86,362	£111,037	£159,800
	Cost per m ²	£644	£679	£540	£555	£571
Main contractor builds watertight structure, sub contractor completes most of the work (except finishes, joinery and decorating)	Builder's cost	£78,960	£92,400	£117,600	£150,055	£217,600
	Materials cost	£8,883	£10,395	£13,680	£17,010	£24,570
	Total cost	£87,843	£102,795	£131,280	£167,065	£242,170
	Cost per m ²	£976	£1,028	£821	£835	£865
Main contractor builds watertight structure, owner completes the work (except electrics)	Builder's cost	£64,155	£75,075	£95,550	£122,850	£176,800
	Materials cost	£15,545	£18,191	£23,602	£29,767	£42,840
	Total cost	£79,700	£93,266	£119,152	£152,617	£219,640
	Cost per m ²	£886	£933	£745	£763	£784

In addition to the basic cost by route provided on the previous two pages, the charts on this spread will help you to estimate what you should budget for the individual elements of your building project.

The charts should be helpful for benchmarking any costs you've been quoted by builders and/or sub-contractors. If they are quoting wildly different figures from what is shown here you might ask them to explain why – most commonly it will be because you are specifying high quality or bespoke finishes.

There are many ways to carve up the building works. We have simplified them into 10 main elements, similar to the cost breakdowns that are

displayed within most of our readers' homes features.

The first element on the charts is for the preliminaries. This means, for example, the cost of setting up and hiring a site hut, a temporary power connection, or complying with health and safety regulations, etc. We go on to list the other main parts of a construction project (foundations, external walls and windows, roof structure and covering, and so on).

As before, there are two charts for the two most popular construction systems in the UK – brick-and-block and timber frame. Different elements in the chart are colour coded as per the numbered box below. The colour in box ‘1’ refers to a main contractor carrying out all the work for you; box ‘2’

shows what the cost would be if you personally project manage the job and hire in a sub-contractor to do the work; and box '3' shows what the cost of you doing all of the work yourself.

The timber frame chart opposite has two additional options, where the main contractor takes the build to watertight stage and then you either hire a sub contractor to complete the work including finishes (box '4') or you finish the work yourself bar the electrics (box '5').

As you'd expect, if you do the work yourself, there are no labour costs. If you hire a main contractor to carry out the job, they will charge a project management fee on top of the sub-contractor's price for doing the work.

There are some anomalies with these charts. For example, you can't really do the electrical work yourself (unless you are a qualified electrician), so the range for doing this work are the same for DIY or using a sub-contractor.

If you go down the timber frame route, the company that provides the package will erect the walls and roof, so there's not really a DIY option here.

As before, it's important to stress that these figures are indicative and should not be used as anything more than a guide price. For example, if you have a steeply sloping site, the cost of the foundations could be much more.

Remember, too, that there are regional cost differences (see box below right).

5) Watertight: owner finishes

cost of materials only. If you hire a sub-contractor the price will be higher as it includes materials and labour. If a main contractor organises the work, it'll be a little more expensive as they will charge a mark up for managing it.

[illegible]

Need more help? Ask our experts

If you have any questions about construction costs, email us on buildit@castlemedia.co.uk or visit www.self-build.co.uk

AVERAGE BUILD COST RANGE FOR TIMBER FRAME CONSTRUCTION

[illegible]

Calculate regional cost variations

Build costs will vary depending on where you are planning to build – it will be more expensive to build in central London than in Merseyside, for example – and this must be factored in to all of your final cost calculations.

So, if your build is in Northern Ireland, for example, just multiply your estimated cost figure by the percentage shown, for example, £100,000 x 70 divided by 100 to arrive at your final figure, £70,000

Northern Ireland	x 70%	Yorkshire	x 101%
Wales	x 94%	Northern England	x 104%
South West	x 95%	South East	x 104%
Midlands	x 95%	Scotland	x 107%
North West	x 95%	Outer London	x 108%
East Anglia	x 97%	Central London	x 115%

NaSBA

National Self Build Association



Build It is an enthusiastic supporter of NaSBA, and we are delighted to see that the campaign to persuade the government to make it easier for more people to build their own homes is achieving such encouraging results. Visit www.selfbuildportal.org.uk, the gateway to more custom build homes. Follow the seven routes to achieving your own self built home.

NaSBA is grateful for the support provided by hundreds of individual self builders and scores of the custom build industry's top companies and suppliers.

Find out more about NaSBA and get involved, support future developments: visit www.nasba.org.uk or email membership@nasba.org.uk or call 01249 890731
Follow NaSBA on Twitter @SELFBUILDASSOC or @SelfBuildPortal

The **Self Build** Portal
The Gateway to more Custom Build Homes



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.



Services :

- 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



Timber Frame Homes
& Much Much More



UK Timber Frame Association

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

Selfbuild mortgages

The right self build mortgage for you will depend on your individual circumstances and whether you need to borrow money in advance or in arrears. For an idea of what funding you can access, take a look at our mortgage table below

LENDER'S NAME	Lends on land	% of end value of property	No. of stage payments	Minimum works completed for 1st stage payment	Mortgage types available	National or local	Telephone
GUARANTEED ADVANCE STAGE PAYMENT MORTGAGES:							
Bath Building Society (Accelerator)	85% (OPP)	80%	Six	DPP & Building Regs granted	5.89%	Eng/Wales	0845 223 4888
Hanley Economic Building Society (Accelerator)	85% (OPP)	80%	Six	DPP & Building Regs granted	6.19%	Eng/Wales	0845 223 4888
Hanley Economic Building Society (Accelerator)	85% (OPP)	60%	Six	DPP & Building Regs granted	4.19%	Eng/Wales	0845 223 4888
Melton Mowbray (Accelerator)	85% (OPP)	75%	Six	DPP & Building Regs granted	5.24%	Local – 70 mile radius	0845 223 4888
Melton Mowbray (Eco Accelerator)	85% (OPP)	75%	Six	DPP & Building Regs granted	4.24% (0.75% discount from SVR)	Local – 70 mile radius	0845 223 4888
Melton Mowbray (Accelerator)	75% (OPP)	60%	Six	DPP & Building Regs granted	5.24%	Eng/Wales	0845 223 4888
Melton Mowbray (Eco Accelerator)	75% (OPP)	60%	Six	DPP & Building Regs granted	4.24% (0.75% discount from SVR)	Eng/Wales	0845 223 4888
ARREAR STAGE PAYMENT MORTGAGES:							
*exclusively available from BuildStore							
Bath Building Society*	75% (OPP)	80%	Six	Foundations	5.29%	Eng/Wales	0845 223 4888
BM Solutions	75% (OPP)	75%	Flexible	Foundations	Depends on scheme	National	0845 223 4888
Chorley BS*	85% (OPP)	80%	Six	Foundations	5.49%	Eng/Wales	0845 223 4888
Cumberland BS	75% (DPP)	75%	Flexible	Flexible	Call branch	Branch operating area only	0845 601 8396
Darlington BS*	80% (OPP)	78%	Six	Foundations	4.74%	Eng/Wales	0845 223 4888
Dudley BS	50% (DPP)	75%	Six	Damp proof course	5.49%	Postcode restricted	01384 231414
Ecology BS	85% (OPP)	85%	Flexible	Flexible	4.9%	National	0845 674 5566
Furness BS	66% (DPP)	80%	Eight	Excavation	5.99%	Local	0800 781 4311
Furness BS*	75% (OPP)	80%	Six	Foundations	5.44%	Eng/Wales/Scotland	0845 223 4888
Furness BS*	75% (OPP)	80%	Six	Wind & watertight	4.99%	Eng/Wales/Scotland	0845 223 4888
Hanley Economic BS*	75% (OPP)	80%	Six	Foundations	5.69%	Eng/Wales	0845 223 4888
Hinkley & Rugby BS	No	75%	Four	Footings	5.64%	Eng/Wales	01455 894052
Holmesdale BS	No	70%	Five	Damp proof course	4.89%	Eng/Wales	01737 245716
Ipswich BS*	75% (OPP)	75%	Six	Foundations	5.75%	Eng/Wales	0845 223 4888
Leeds BS	75% (DPP)	75%	Five	Wall plate	6.19%	National	0845 050 5062
Lloyds TSB Scotland	70% (DPP)	70%	Three	Foundations	Depends on scheme	Scotland	0845 603 1637
Loughborough BS*	75% (OPP)	75%	Six	Foundations	4.99%	Central England	0845 223 4888
Loughborough BS	No	75%	Three	Ground floor	Any of standard products	Leics/Notts/Derbyshire	01509 631950
Mansfield BS*	80% (OPP)	80%	Six	Foundations	5.59%	Eng/Wales	0845 223 4888
Newbury BS	66% (DPP)	75%	Flexible	Foundations	Depends on scheme	Postcode restricted	Local branch
Newcastle BS*	80% (OPP)	80%	Six	Foundations	5.25%	Eng/Wales/Scotland	0845 223 4888
Norwich & Peterborough BS	80% (DPP)	80%	Seven	Foundations	4.89%	Eng/Wales	0845 300 2522
Nottingham BS	No	65%	Flexible	Eaves	Any of standard products	Eng/Wales	0115 956 4716
Progressive BS	No	75%	Four	Wall plate	Depends on scheme	N Ireland	Local branch
Scottish BS	80% (DPP)	80%	Flexible	Foundations	5.99%	Scotland	0131 313 7700
Vernon	75% (DPP)	80%	Four	Wall plate	5.25%	Within a 25 mile radius	0161 429 6262

FIGURES SUPPLIED BY BUILDSTORE AND CORRECT AT THE TIME OF GOING TO PRESS

Budget essentials

To ensure you stay on target financially, you need to work out what every element of your project will cost before you begin your self build, says **Tim Doherty**

A recent episode of a popular house building TV programme included a statement from one self builder blasting cost professionals for stifling specifications on the grounds of expense. In his view it would have been better to save on the fees and

spend the money on having exactly what you want when you want it. It made great TV, but needless to say he went massively over budget and the project overran, taking a long time to complete.

Keeping to budget and managing your cash flow is a discipline in its own



right and, regardless of whether you do this yourself or seek external help, someone has got to do it. It needs to start right after you have secured your detailed planning consent and well before any suppliers or builders have been appointed.

This is stage four of the self build programme I spoke about in the June issue of *Build It*. This phase provides you with an opportunity to reconcile firm costs with your initial budget in terms of the specification mix. We'll look at procurement routes next month but for now we'll examine the material specification.

Six steps to a successful building quote

Your house plans are simply not good enough to secure accurate material and labour quotes. Yes, they reflect the layout and geometric shape of the dwelling, but they don't tell the reader all that they need to know. What your builders, suppliers, building control and warranty providers will need to have access to in order to provide you with an accurate cost estimate will include the following elements:

- 1** Fully dimensioned and notated plans for all floor levels
- 2** All four main elevations clearly identifying the building height, ground levels, site contours and the locations of the different external materials to be used
- 3** A main section reflecting storey heights, ground floor composition, intermediate floor details, roof structure, external and internal wall details and the locations and types of insulation to be used
- 4** A foundation plan with service entry locations and internal drainage (soil stack) positions and details of below DPC blockwork and ground floor composition
- 5** A site plan with overall access and material storage locations, plus any site welfare, a drainage scheme for both foul and surface water and the origins of all service supplies and their routes across the site to their meter locations
- 6** Roof structure, ground and intermediate floor plans

In addition to the above it is also helpful to arrange for any special details to be completed where you want to be certain about the finished outcome. For example, window

installation details showing internal and external cill treatments, soffit, barge and fascia boards and their implications for roof ventilation and bathroom layouts with waste pipe access locations. The list goes on.

Building control

The dwelling will need to comply with all of the relevant Building Regulations and most designers will have a set of standard notes which will be applied to their drawings. Where these are produced it's important that you, as the client, understand what has been selected to ensure it matches your final specification requirements, as sometimes these notes appear on drawings and quickly become outdated by the decisions you take.

Furthermore, the energy performance of your building is now calculated in terms of its overall CO2 emissions and that means a holistic evaluation of your total specification. The notes on the drawings must therefore be clear about air tightness and insulation levels, primary and secondary heating, overall areas of glazing, ventilation and any renewable technologies.

Seven key specification decisions

There are a number of material options that will have a bearing on your drawing. Specific details are significant and below are some of the most important ones to demonstrate the point:

- 1 Your building system.** This might be a traditional brick and block cavity wall, timber frame, insulated concrete formwork (ICF), structural insulated panels (SIPS) or any of the newer types of construction method. All could be used to satisfy your approved planning drawings but each one will have very different design and engineering details and will consequently set the tone for the detailed drawing pack
- 2 Brick bonding and chimney features.** Some houses just appear more attractive than others. Often this is due to subtle choices concerning the brickwork. Unless specified, the default brick bond will be stretchers but there are many other options to choose from. Some

can be much more interesting and more sympathetic with window cills, heads and gable verges. It's really worth taking the time to examine your selection but, as they involve more labour, they will all add to your costs. When it comes to the chimney, you need to have it detailed with the correct proportions (for effective operation) and with the features that you want to see before securing your brickwork prices

- 3 Space heating.** Underfloor heating needs to be concealed and this might steer you towards a screeded floor finish, which may begin to influence the floor structure design itself. And there could be a different treatment at first floor level compared to the ground floor
- 4 Attic insulation.** It is sensible to fully insulate your attic space at the time of building as the marginal cost of doing so will render this space much more useful. However, a warm roof, where some or all of the insulation is laid over the rafters, creates a different set of details for the roof covering and your ultimate soffit box design
- 5 Ventilation.** Heat recovery systems are excellent installations for both their eco credentials and your ultimate comfort in a new airtight property. But they are space hungry and require sizeable ducts to transfer air around the building, which are best incorporated at the outset rather than as a remedial fit late in the day
- 6 Floor finishes.** Stone floors and ceramic tiles require different substrates to vinyl or carpet and come in different thicknesses. It's easy to manage all the different threshold levels if the various different floor treatments have been specified early
- 7 Kitchens, utilities and bathrooms.** Having these rooms properly thought through at an early stage will save potential disappointment after you move in when things don't seem to fit!

Specification & schedule of works for tender

My advice is always to summarise your final choices in one specification and schedule of works document. This pulls together your drawing pack,

your planning approval, any relevant survey details or other reports, and describes for all the individual tradesmen/contractors exactly what it is that you need priced. Where you intend to supply materials or services can be made absolutely transparent and everyone being invited to contribute will therefore be totally clear about your project objectives.

If this is sent as a Microsoft Excel document it is also much easier to start making comparisons between one tender return and another.

Financial summary

The process of selecting your materials and briefing your designers is not necessarily a quick one but it is vital to do this comprehensively if you want to mitigate any risk.

Good drawings and clearly thought-through specifications will enable you to obtain firm quotes with little being left to chance. Obviously this may create some tough decisions where the specification has to be reigned back. However, it is much better to do this before you have started building rather than half way through your project, even if it means your designer has to make a few alterations to your house plans.

The one drawback is that knowing your costs before you start building and being able to manage your budget along the way is unlikely to get you on the television!

CONTACTS

Build It Cost Calculator www.self-build.co.uk/build-cost-calculator **BuildStore** 0845 223 4888 www.buildstore.co.uk **Planning Portal** www.planningportal.gov.uk **Self Build Portal** www.selfbuildportal.org.uk **The National Self Build & Renovation Centre** 0845 223 4455 www.nsbrc.co.uk

TIM DOHERTY



Tim Doherty was the founding MD of the National Self Build & Renovation Centre and a founding member of NaSBA. He now runs Dobanti Property Consultants, a specialist surveying & building consultancy

providing professional support to both the residential and commercial sectors including surveys of all descriptions, site appraisals, project procurement, project management, dispute resolution and custom build solutions

Planning tactics making the most out of your plot

Mike Dade reveals the key strategies you can use to unlock your plot's potential

Whether you're self building, extending or converting an existing dwelling, a key planning question is how can we get a bit more living space? Making the most out of your plot can enhance the quality of accommodation you create and increase its value. However, information on making planning applications, especially that provided

by councils, tends to focus on planning policy and on the mechanics of making a planning application. That's fine as far as it goes, but what's also needed is a clever tactical approach that will help you to optimise your plot.

Basic principles

When attempting to maximise size, a common conundrum is whether it's better to start off with something a bit bigger than you want and then be seen to compromise with the planners, or start small and work your way up to something bigger.

Some builders and developers subscribe to the 'start big' approach. This initially involves going to the planners with a design that's significantly larger than you really want. You then fight tooth and nail as the planners try to get you to reduce it to something more realistic. Eventually you reluctantly concede reductions until you arrive at what you actually wanted in the first place. The planners, you hope, are relieved that they've successfully beaten you down and are happy the end scheme is much better than the one you started off with. Your



LONDON BASEMENT



apparent willingness to concede to the planners' wishes can play well with councillors, too, if your application is decided by committee.

The second approach is favoured by planning professionals and involves starting off with something that is likely to be acceptable to the local authority. Having got their agreement, you then set about making and agreeing minor extensions and alterations until you arrive at what you want. This could mean agreeing a sketch scheme initially – perhaps via the pre-application process – then presenting more attractive, finished drawings that show something just a little bigger. If the planner is happy, you might tweak the designs a touch more before formally submitting them.

Once permission is granted, you can then seek further changes as 'minor amendments to the permitted scheme'. Each new alteration or application is made from a position of strength because all that's being considered is the small difference between what's already permitted and the final design.

Reducing bulk

When you're trying to get as big a house or extension as possible, often the real planning issue is more to do with the overall bulk of the building than the actual amount of space within it. It's possible to reduce bulk by a number of means. Sinking the slab (or floor level) of the building deeper into the plot is a simple way of lowering the whole structure, although too much excavation can add to build costs and potentially create drainage problems.

Reducing the pitch of the roof brings down the ridge height, as does lowering the eaves. Hipping a roof can also remove a lot of volume compared to gables. A combination of these methods can bring about a significant reduction in size without actually losing any internal accommodation at all.

Breaking a long ridgeline, or perhaps stepping a house back into the plot can do much to reduce the impression of size, too. Pushing a house back from the road and planting in front of it can help reduce its impact on the street scene.

Basements

A basement is not the cheapest form of construction, but it can be a really

useful way of adding more room. In green belt, where the size of extensions and replacement dwellings is strictly controlled, some councils don't count basements in their space calculations. Others allow basements as long as they don't provide so-called primary accommodation, such as living rooms and bedrooms. Plant and utility rooms are usually OK, while gyms, cinema rooms and even swimming pools have also been cheerfully accepted underground. For more inspiration turn to page 84.

Permitted development and fall-back

Even if your scheme exceeds permitted development tolerances and you have to apply for permission, don't lose sight of your rights. The fact that you could build a 4m deep extension on your house without planning permission is highly relevant in consideration of a 4.5m or 5m extension. This is known as a 'fall back' position in planning jargon and it's always worth pointing out to planning officers that you're aware of it.

In the countryside and particularly green belt, policies might restrict extensions to less than the size normally allowed by permitted development. In this situation your permitted development rights can be a vital bargaining chip in negotiating a larger extension than policy usually allows. The same applies to rural and in particular green belt replacements. Policies generally restrict replacement buildings to a percentage increase over the size of the existing dwelling. But that property could enjoy permitted development rights which, if taken up, would take it well over the prescribed policy limit. To make full use of this fall back potential it is usually necessary to get a sketch scheme drawn up to present to the planners. This will help to convince them that you really would build the larger extension if they don't allow a replacement of comparable size.

Pre-application advice

Most projects start with getting advice from the council before you submit a planning application. One question many self builders ask is: do you have to follow the advice you're given or can you safely ignore at least some of it? There's an important distinction to be

made here. At the pre-application stage planners will tell you what they'd like you to build. This can be different to what they feel obliged to accept when you make a formal application. So, if you get pre-submission advice on your scheme, make sure you demonstrate that you're following most of it and always provide compelling arguments for any bits you choose to ignore.

Don't forget local politics

It's easy to get so tied up with the details of your project that you forget local politics. Avoiding objections from neighbours and parish council puts you in a good position to elicit support from your district or borough councillor.

If you're buying a property with planning permission, look at the planning file online or at the council's offices to see whether there were objections and what was said. If neighbours have concerns that are fair and reasonable, there's every chance they'll respond well to an early approach and an offer to discuss and address their concerns. On the other hand, if neighbour objections portray a less than tolerant approach, you might do well to just get your application in without warning to minimise the time they have to make mischief. Getting parish councillors on board is always a good idea, particularly if you have neighbours who are irrationally opposed to your plans.

Conclusion

With any application it pays to feel your way forward carefully, fostering good relations with planners, neighbours and local councillors. But being sensitive to feedback from these people doesn't necessarily mean compromising your scheme. Good tactics, creative design and a little flexibility can ensure you maximise your project and make the very most of your self build opportunity.

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

Have you tried *Build It's* digital edition? Available on **iPhone** and **iPad** platforms!

Your favourite magazine is now available on your iPhone or iPad, so you're just a few clicks away from reading the latest issue! Just two quick and easy steps and you'll be flicking through the latest magazine. There's also an archive bursting full of previous issues to enjoy.

How to get started...

1 Set up the app on your device **FREE** and access back issue previews

2 Download the full version of any issue for **£3.99** or **subscribe** for just **£19.99** for six months or **£37.99** for the year



How to get your app

visit www.self-build.co.uk to download from iTunes

Also available on the www.pocketmags.com magazine store



Build It is also available in selected stores and all good newsagents

Sainsbury's

WHSmith

Waitrose

TESCO

PLOT WATCH:

The Padgetts want to join forces with a neighbour to rearrange their properties' access and garden amenity to create a new plot, where the Padgetts could self build their next home. Will the local council allow it?

Mike Dade investigates

WHO Roy & Diane Padgett

WHAT The Padgetts want to build a new home on a new plot that's amalgamated from theirs and their neighbours' gardens. The local council seems unsure of their plans to change the existing boundary arrangements and has raised objections. The couple need to devise a plan to combat these concerns

WHERE Surrey

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

Mike Dade *investigates*

Neighbourly development

Roy and Diane Padgett would like to team up with a neighbour to create a building plot. Both properties have large front gardens, with their houses set back from the road. Carving a plot out of the combined garden area would still leave both properties with ample back yards, plus the plot could take advantage of an existing access route. But initial feedback from the council has not been positive. So, what's the best way to move things forward from here?

Background

Roy and Diane's property is in a quiet and leafy suburb that's just a few hundred metres from the town centre and railway station. It's an attractive and desirable area where house prices are correspondingly high. Their home and their neighbour's sit some 50m back from the road, adjoining a junction with the side road running alongside their neighbour's garden.

A quirk of the current layout is that Roy and Diane have a garage on the side road, with a right of access over the neighbour's garden to get to it. Creating the plot would enable this slightly messy arrangement to be resolved, so that the neighbour takes on the garage and each property has its own dedicated parking adjoining each house. If planning permission is obtained, Roy and Diane would like to build the new house for themselves and sell their existing home.

The plot

The plot is roughly rectangular and extends to some 550m². It's bounded on two sides by a 2m conifer hedge and by a close board fence adjoining Roy and Diane's drive on the third side. A new boundary will have to be built to form the fourth side, subdividing the garden. There's a very large oak tree in one corner of the land, plus an apple tree and various shrubs within the plot, which is mostly lawn. In addition there's a significant level change of over a metre running across the middle of the garden parallel to the side



road, with the rear part of the plot dropping away from the frontage.

The project

Roy and Diane would like to build a two storey detached house, ideally something contemporary in style. Before getting too much into the details of design they have sensibly consulted the council planners to establish whether the idea of a house in this location is acceptable.

Roy has produced a sketch scheme, showing how a new house would fit in and blend well into the streetscene by following established building lines. He'd also explained that both the new development and those remaining would have plenty of garden space. Despite this, the answer came back as a 'no'. What's worse, the planning officer indicated he didn't see any way in which a dwelling could be successfully configured on the plot.

Planning challenges

Roy and Diane need to know whether there's a realistic chance of obtaining planning permission, either from the council or at

YOUR TURN

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



appeal. So, let's have a closer look at the planning officer's reservations and see if they hold up.

The first issue raised by the planning officer relates to the character of the garden and the contribution it makes to the street scene as an 'open plot'. This seems a curious objection, as there are no views into the site due to the boundary hedge. The pattern of housing on both roads adjoining the plot is of detached houses, some quite closely spaced, some less so. A house here would retain rather more open space on each side than is typical of the immediate area. This defies the officer's opinion that a new property would appear cramped.

The second issue relates to 'private amenity provision' which translates as 'garden'. To be fair, the officer's concern here isn't just the amount of outdoor space, but the quality of it in terms of usability. Here, though, the location is relatively central, and with parks and other leisure facilities nearby, a large garden is not essential. In any case,

the amount of garden is some 400m² in total and there would be plenty of scope to configure it in a manner conducive to enjoyable use. There is a fine line between trying to ensure high levels of amenity and imposing an overly restrictive constraint on development. Here it seems to me the planning officer is failing to give enough credit to the power of good design to create interesting and useable spaces. There's fundamentally not a shortage of space.

A final issue arises from the large oak tree on site. The planning officer is concerned that it could be harmed by the proposal. That issue can readily be dealt with by a tree survey and arboricultural impact assessment, the latter including a method statement to specify root protection measures and perhaps to advise on foundation design and construction methods.

Strategy

So, how best to deal with the objections? First, what's said in response to pre-application inquiries isn't binding on the council when a formal application is made. There's no reason why a carefully considered design and justification for it couldn't reverse the officer's objections at the formal stage – at pre-application, they simply say what they'd like to see happen. At the formal stage they have to consider much more carefully whether the scheme meets both their local policies and the thrust of government advice.

A major constraint here is the oak tree, and early input from an arboriculturist will reveal just how much useable space there is

on the plot. From there, a design can be worked up that aims for as compact a shape as possible, so maintaining the openness of the plot and maximising usable amenity space. It's important that Roy and Diane present a scheme where they can refer to the officer's objections and demonstrate they've adequately dealt with them. A combination of a good architect and a willingness to be flexible should enable the objections to be overcome.

A final string to their bow is political lobbying. They know their immediate neighbours aren't going to object, which puts them in a good position to lobby the town council and their local borough councillor, assuming the local policy on lobbying allows this. Political support could just help tip the planning officer in the right direction if he's wavering at decision time. They should also investigate in what circumstances applications in their borough go to planning committee as this might provide a lifeline if the planning officer remains opposed, but their councillor is supportive.

The final question is whether, having devised a suitable scheme, it makes sense to go back for further pre-app advice, or to simply submit a formal application. Here, the risk with pre-app is that the officer will dig in behind his previous objections. A formal application stands a better chance of success, but the costs and risks are higher.

Conclusions

Roy and Diane do face something of a gamble with this plot, given the initial rejection from the planners. But a step-by-step approach to resolving the issues would enable them to take stock at each stage and to review how much progress they are making against the officer's objections.

Assessing the degree of political support will help them as well, as firm backing from their borough councillor would boost their chances of success. Finally, if the council simply won't play ball, they should bear in mind that, with the government desperate to get new houses built, the chances of a successful appeal are as high as they have ever been.

PlotSearch

BY 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

LAND for SALE

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 six months). If you'd like to find out more about the service call 0870 870 9994 or log on to www.plotsearch.co.uk

ABBREVIATIONS

OPP: Outline Planning Permission
DPP: Detailed Planning Permission

ENGLAND

East

Bedfordshire

Bedford Shelton Farm, Plot 3, Lower Shelton Road, Marston Moretaine, 1 Plot with OPP for the construction of a large detached residential dwelling measuring approximately 3,500ft², plus a double garage. Guide price £350,000. Satchells Estate Agents 01462 892041. PS-id: 115767.

Cambridgeshire

Peterborough Woodgate Lane, Maxey, 1 Plot with OPP for the construction of a five bedroom detached family dwelling set in the heart of the village. Guide price £225,000. Knight Partnership 01780 765060. PS-id: 116541.

Wisbech Mill Road, Murrow, 1 Plot with OPP for the construction of a two storey, three bedroom detached residential dwelling with double garage. Guide price £48,500. Maxey & Son 01945 583123. PS-id: 114947.

Essex

Chelmsford Southend Road, Rettendon Common, 1 Plot with OPP for the construction of a residential two bedroom bungalow. Offers in the region of £200,000. Church and Hawse 01245 225853. PS-id: 115965.

Westcliff-on-Sea Ditton Court Road, 1 Plot with OPP to build two detached dwellings. Guide price £424,500. Hair & Son Commercial 01702 432255. PS-id: 115303.

Hertfordshire

Bishop's Stortford Bywell, Chelmsford Road, Hatfield Heath, 1 Plot with OPP for the construction of a 1,600ft² detached residential dwelling. Offers. Simon Layer (private seller) 01279 860219. PS-id: 115119.

Norfolk

King's Lynn Church Close, Pentney, 1 Plot with lapsed planning to build a sizable two storey detached dwelling. Guide price £55,000. Abbotts Estate Agents 01760 721669. PS-id: 116578.

Suffolk

Beck Row, 1 Plot with OPP for the construction of a detached residential dwelling. EPOA. The dwelling comprises extensive accommodation arranged over three floors. Shires Estate Agents 01638 712132. PS-id: 115594.

Bury St. Edmunds Mermal Close, 1 Plot with OPP to build a detached four bedroom dwelling next to the River Lark on a 1,668ft² site. Guide price £125,000. William H Brown 01284 762131. PS-id: 116938.

South East

Berkshire

Reading 3 Kiln Cottages, Kiln Road, Emmer Green, 1 combined with OPP for the construction of a two bedroom cottage. Guide price £300,000. Romans Auctions 01344 753120. PS-id: 116922.

Maldenhead, Adj 42 College Road, 1 Plot with DPP for the construction of a four or five bedroom detached dwelling. Guide price £500,000. Andrew Essex (private seller) 07855 300884. PS-id: 114713.

Buckinghamshire

Bourne End Aston House, Kiln Lane, 1 Plot with DPP to build a 5,200ft² detached contemporary family home. The plot is on the edge of a sought-after hamlet where a number of new houses have recently been constructed. Guide price £1,100,000. The Frost Partnership 01494 681234. PS-id: 115253.

Greater London

90A Buckingham Road, 1 Plot with DPP to build a large three bedroom detached dwelling. Guide price £175,000. An exciting opportunity to build a unique eco home in Hampton. Planning permission granted March 2013. Ed Frith (private seller) 020 8986 6008. PS-id: 116687.

London Bedford Road, 1 Plot with OPP to build a detached dwelling set behind terraced houses on a residential road. Includes shed. The site is close to Clapham common. Guide price £180,000. Foxtons 020 7973 2020. PS-id: 116553.

Hampshire

Rowland's Castle Finchdean Road, 1 Plot with DPP for the construction of a detached residential dwelling measuring 123m². Guide price £200,000. Land & New Homes 01932 828500. PS-id: 116183.

Ventnor Inglewood Park, 1 Plot with OPP for the construction of a detached contemporary-style house with sea views. Guide price £200,000. Churchfield Estate Agents 01202 779911. PS-id: 114570.

Kent

Sheerness Leysdown-on-Sea, 1 Plot with OPP for the demolition of a bungalow and the construction of three detached bungalows with parking. Prices from £160,000. Ward & Partners 01795 664651. PS-id: 116565.

Tunbridge Wells Albion Road, 1 Plot with OPP to build two detached residential dwellings. Guide price £275,000. There is further potential as the site should be able to accommodate a third unit if planned properly. Chapel Place 01892 619289. PS-id: 116733.

Oxfordshire

Chipping Norton Depot, Albion Street, 1 Conversion with OPP for the change of use of a former commercial building into two residential dwellings. The site is close to the town centre. Guide price £150,000. Romans Auctions 01344 753120. PS-id: 116923.

Surrey

Rye Northlam, 1 Plot with OPP to build a detached dwelling comprising of three bedrooms and two reception rooms. Guide price £150,000. Chapel Place 01892 619289. PS-id: 116726.

Sussex

Battle Netherhay, Whatlington Road, 1 Plot with OPP for the construction of a detached residential dwelling. Guide price £495,000. Chapel Place 01892 619289. PS-id: 116735

Rye Malthouse Lane, Peasmarsh, 1 Plot with DPP to build a three bedroom detached dwelling. Guide price £175,000. Situated in a secluded setting within the curtilage

of this sought after village within a short distance of the historic coastal town of Rye. Chapel Place 01892 619289. PS-id: 114646.

South West

Comwall

Mullion, 1 Plot with DPP for the construction of a detached residential dwelling, which will benefit from superb countryside views towards Mullion Cove. Guide price £150,000. Fulfords Land and Planning 01392 813300. PS-id: 114876.

Torpoint Granite Heights, Plot 8/9, Keveral Gardens, Seaton, 1 Plot with OPP for the construction of two detached residential dwellings situated on the edge of Seaton Village. Guide price £150,000. Stags 01392 680058. PS-id: 116778.

Wadebridge Old Manor House, Trevanion, 1 Plot with OPP for the construction of a three or four bedroom traditional-style dwelling. Guide price £275,000. Lee Sutherland (private seller) 01208 812836. PS-id: 115482.

Devon

Plymouth, 1 Plot with DPP to build a four bedroom detached residential dwelling with an integral double garage. Guide price £300,000. Fulfords Land and Planning 01392 813300. PS-id: 115799.

Torquay Rock End Avenue, 1 Plot with DPP to build a detached three bedroom single storey dwelling. Guide price £170,000. Fulfords Land and Planning 01392 813300. PS-id: 115812.

Dorset

Lyme Regis, Land Adj Portland Lodge, Clappentall Lane, 1 Plot with DPP for the construction of a striking contemporary house with sea and coastal views. Guide price £150,000. Martin Diplock 01297 445500. PS-id: 115888.

Poole Banks Road, 1 Plot with DPP to build a large home of just less than 7,000ft². The accommodation is arranged over four floors. Guide price £5,250,000. Tailor Made Estate Agents 01202 706006. PS-id: 115368.

Swanage 5 South Road, 1 Plot with planning application lodged for a two bedroom detached dwelling. Guide price £250,000. Mike Inman (private seller) 01179 397215. PS-id: 114483.

Gloucestershire

Cheltenham Withington, 1 Renovation with no planning required for the extensive remodelling of a Cotswold stone property. Offers over £600,000. Perry Bishop and Chambers 01285 655355. PS-id: 116991

Gloucester The Knoll, Cranham, 1 Conversion with DPP for the change of use of the existing three bedroom bungalow to create a contemporary 180m² family home. Guide price £395,000. Hamptons International Painswick 01452 812354. PS-id: 115983.

Somerset & Avon

Almondsbury, 1 Plot with DPP to build three detached contemporary dwellings. Guide price £550,000. The Land Bank Partnership 07976 104751. PS-id: 115294.

Bridgwater The Granary Barn, Thorngrove, Middlezoy, 1 Conversion with OPP for the change of use of the existing detached stone barn to create a five-bedroom detached residential dwelling. Guide price £175,000. Greenslade Taylor Hunt 01823 334466. PS-id: 115988.

Wiltshire

Swindon Broome Manor, 1 Plot with OPP to build a detached home set within a large plot located on the sought after Broome Manor Lane. Guide price £275,000. Atwell Martin 01793 643643. PS-id: 116850.

North East

Durham

Seaham Westfields, The Village, Hawthorn, 1 Plot with DPP for the demolition of the existing bungalow and construction of two detached dwellings. Guide price £360,000. Wisemove 01388 762156. PS-id: 114650.

Wingate Former Fir Tree Inn, Plot 1, Durham Road, 1 Plot with OPP for



the construction of a four bedroom detached dwelling with separate garage. Guide price £65,000. Euro Property Management 07814 936580. PS-id: 116692.

Northumberland

Wooler The Mill Plot Doddington, 1 Plot with DPP for the construction of a three-bedroom detached house with the possibility of two further bedrooms. The site extends to approximately 0.5 acres. EPOA. Michael Aitchison and Partners 01668 281819. PS-id: 116926.

Tyne & Wear

Ryton Lead Road, Greenside, 1 Plot with OPP for the construction of a two storey dwelling with integral garage. The house will enjoy open rural views to the front. Guide price £89,950. George F White 01388 527966. PS-id: 115300.

North West

Cheshire

Tarporley Old Coach Road, Kelsall, 1 Plot with OPP for the construction of a detached dwelling. EPOA. Wright-Manley Estate Agents 01829 731300. PS-id: 116711.

Cumbria

Brampton The Garden Building Plot, Station Road, 1 Plot with OPP for the construction of a three bedroom detached executive style property. The site extends to approximately 2,000ft². Guide price £110,000. Cumbrian Properties 01228 599940. PS-id: 116240.

Wigton The Beeches, Glasson, 1 Plot with DPP to build a spacious dwelling comprising a lounge, study, kitchen diner, sunroom, four bedrooms, en suite and bathroom. Offers over £100,000. H&H Julie King Estate Agents 01228 810799. PS-id: 116739.

Workington Plot 2 Kilnside, Distington, 1 Plot with OPP to build a detached dwelling. Guide price £40,000. Grisdale Estate Agents 01900 829977. PS-id: 116236.

Lancashire

Chorley Land off Parkside Drive South, Whittle-le-Woods, 1 Plot with OPP to build a detached house. Offers over £240,000. Lea Hough & Co 01254 260196. PS-id: 115657.

Ormskirk Adj to 278 Prescot Road, Aughton, 1 Plot with OPP to build a new four bedroom detached house. Guide price £169,950. The site enjoys superb views. Brighthouse Wolff 01695 580801. PS-id: 116315.

Merseyside

Neston West Vale, 1 Plot with OPP for the construction of a dormer

bungalow providing spacious living accommodation with an integral garage. Guide price £85,000. Clive Watkins Partnership 0151 336 7070. PS-id: 116017.

Yorkshire

Yorkshire East

Driffeld Balnton, 1 Plot with OPP for the construction of a three or four bedroom detached residential dwelling. Guide price £100,000. RM English Property Consultants 01759 303202. PS-id: 116858

Yorkshire North

York Land at, Millington, 1 Plot with OPP for the construction of a three bedroom dormer bungalow. The proposed property will have its own private drive and garden. Guide price £130,000. RM English Property Consultants 01759 303202. PS-id: 116859

Yorkshire South

Sheffield, land between 10 and 22 High Bank, Thurstone, 1 Plot with OPP to build a two storey house and a detached garage. Guide price £105,000. Butcher Residential 01226 288920. PS-id: 116032.

East Midlands

Derbyshire

Ripley 2071, Heage Road, 1 Plot with OPP for the construction of two large detached dwellings. Guide price £245,000. Julian Owen Associates Architects 0115 922 9831. PS-id: 114632.

Leicestershire

Leicester Meadow View, Leicester Lane, Desford, 1 Plot with OPP for the construction of three detached bungalows. The site extends to approximately 1,100m². Offers over £190,000. Bruton Knowles 01452 880128. PS-id: 115935.

Lincolnshire

Stamford Essendine Road, Ryhall, 1 Plot with DPP for the construction of a five bedroom detached family dwelling and a double garage. Guide price £255,000. Richardson 01780 762433. PS-id: 116720.

Northamptonshire

Kettering Rushton Road, Desborough, 1 Plot with OPP for the construction of a detached residential dwelling. Guide price £65,000. The plot is situated within walking distance of the town centre. Keeble & Co 01536 520158. PS-id: 115302.

Northampton Blisworth Close, 1 Plot with DPP to build a stone end-of-terrace property. Guide price £45,000. Mario Bartella 01933 224499. PS-id: 115410.

Nottinghamshire

Worksop Claverton, Sparken Hill, 1 Plot with DPP for the construction of a four or five bedroom detached dwelling. Foundations are already laid. Guide price £200,000. Mark Manley (private seller) 07973 482836. PS-id: 116062.

West Midlands

Hereford

Ross-on-Wye Gorsley, 1 Plot with OPP for the construction of a detached residential dwelling in a lovely village location. Guide price £120,000. Steve Gooch Estate Agents 01531 820844. PS-id: 116995.

Shropshire

Telford Plot 5, Shifnal Road, 1 Plot with OPP for the construction of a three bedroom detached residential dwelling. Guide price £50,000. Harwood The Estate Agents 01952 881010. PS-id: 116947.

Staffordshire

Burton-on-Trent Gainsborough Way, Church Hill Street, 1 Plot with DPP for the construction of a detached three bedroom dwelling and a replacement garage. Guide price £34,950. John German 01283 512244. PS-id: 116836.

Warwickshire

Alcester Sun Cottage, Temple Grafton, 1 Plot with OPP for the construction of a large five bedroom detached dwelling. Guide price £725,000. Godfrey Payton 01926 492511. PS-id: 116356.

West Midlands

Coventry Coombe Street, 1 Plot with OPP for the construction of four dwellings. Guide price £160,000. Berry Morris 01295 273555. PS-id: 116897.

Tipton Factory Road, 1 Plot with DPP to build a detached dormer bungalow comprising of two bedrooms and study. Guide price £50,000. Connells Estate Agents 01384 214770. PS-id: 115604.

Worcester

Malvern Gloucester Road, Welland: 1 Plot with OPP to build a spacious four or five bedroom dormer-style bungalow. Guide price £175,000. John Goodwin FRICS 01531 634648. PS-id: 116502.

WALES

Carmarthenshire

Swansea Plot Adj To 1200 Carmarthen Rd, 1 Plot with DPP to build a four bedroom detached property. Offers in the region of £70,000. Astley Samuel Leeder Auctions 01792 655891. PS-id: 115872.

Ceredigion

Llandysul Rhydownen, 1 Plot with DPP to build two executive four bedroom dwellings and two affordable split-level dwellings. Guide price £150,000. Evans Bros 01570 422395. PS-id: 114550.

Conwy

Anglesey Plot2, Ty Gorsedd, Rhoscefnhir, 1 Plot with OPP for the construction of a detached dwelling in a residential neighbourhood. Guide price £158,000. Dafydd Hardy 01248 723322. PS-id: 116717.

Flintshire

Denbigh Love Lane, 1 Plot with OPP for the construction of two detached dwellings with parking facilities. Guide price £90,000. Beresford Adams 01745 814679. PS-id: 114519.

Glamorgan

Treharris Edwardsville, 1 Plot with OPP for the construction of four detached residential dwellings. Guide price £240,000. Bairstow Eves 01685 388106. PS-id: 114775.

Gwent

Abertillery Old School, Hyde Place, Llanhilleth, 1 Plot with OPP to build a detached residential dwelling. It is situated on the eastern side of the valley and enjoys spectacular views. Guide price £49,950. Asset Estates 01495 211311. PS-id: 114738.

Pontypool Plot 13 School Road, Pontnewynydd, 1 Plot with OPP for the construction of a four or five bedroom detached property. Guide price £95,000. Davis & Sons 01495 752414. PS-id: 115719.

Gwynedd

Blaenau Ffestiniog Plot 16, Cae Madog, Trawsfynydd, 1 Plot with OPP to build a detached residential dwelling. Guide price £50,000. Sandersons Estate Agents 01766 512498. PS-id: 116508.

Bodorgan Adj Llanwen Plot 2, Llangristiolus, 1 Plot with OPP for the construction of a detached residential dwelling in the sought after village of Llangristiolus. Guide price £90,000. Williams & Goodwin 01248 751000. PS-id: 114482.

Pembrokeshire

Newcastle Emlyn Park Villa, Capel Iwan, 1 Renovation with no planning required for the modernisation and improvement of the existing detached three bedroom house. Guide price £219,500. Dai Lewis 01559 363401. PS-id: 117127.

Powys

Welshpool Building Plot, Church Road, 1 Plot with OPP for the construction of a bespoke dwelling with parking. Guide price £75,000. Parry Lowarch 01743 343343. PS-id: 116417.

Wrexham

Holywell Pen y Pylle, Brynford: 1 Plot with DPP to build a four bedroom dwelling. The site benefits from panoramic views. Guide price £125,000. Beresford Adams 01352 711456. PS-id: 116505.

SCOTLAND

Aberdeenshire

Keith Blackfolds Fogle, 1 Plot with DPP for the construction of a detached residential dwelling. Guide price £250,000. CKD Galbraith 01343 546362. PS-id: 114571.

Angus

Dundee 16 Harefield Road, 1 Plot with DPP for the construction of a four bedroom detached villa. Guide price £95,000. Blackadder Reid Johnston Carltons 01382 342222. PS-id: 115134.

Montrose Kirkton of Benholm Plot 1, Benholm, 1 Plot with lapsed planning for the construction of a detached residential dwelling. Guide price £75,000. Aberdein Considine & Co 01569 766166. PS-id: 114977.

Argyll & Bute

Bridge of Weir Donaldfield Road, 1 Plot with DPP for the construction of a bungalow. Guide price £199,000. 1 Move 0141 812 5060. PS-id: 115941.

Collintrave Lot 2, Kyles View, Glendaruel, 1 Plot with OPP for the construction of one residential dwelling with stables and a horse exercise area. The site extends to approximately 3 acres. Offers over £50,000. CKD Galbraith 01738 451111. PS-id: 116913.

Ayrshire

Isle of Arran Honeysuckle Cottage, Smiddy Brae, Whiting Bay, 1 Plot with OPP to build a detached villa in a quiet location within a short distance from the main shopping area of Whiting Bay. Guide price £65,000. Arran Estate Agents 01770 302310. PS-id: 115066.

Borders

Jedburgh Smiths Wynd, 1 Plot with OPP for the construction of a detached three storey family home in the heart of historic Jedburgh. Guide price £60,000. Rettie & Co 01896 824070. PS-id: 115689.

Kelso Ednam, 1 Plot with DPP for the developmnet of two detached dwellings. Guide price £125,000. Edwin Thompson 01896 751300. PS-id: 116705.

Westruther Westruther Mains, 1 Plot with OPP for the construction of a detached residential dwelling on the eastern edge of Westruther – a popular Berwickshire village.



Fixed Price £32,500. CKD Galbraith 01573 224244. PS-id: 116906.

Dumfries & Galloway

Lockerble Fieldview Cottage, Eaglesfield, 1 Plot with DPP to build a detached bungalow. The plot represents the garden area of the existing detached cottage, situated in a village location with views over open farmland to the rear. Guide price £50,000. Harper Robertson and Shannon 01461 203418. PS-id: 114399.

Thornhill Closeburn, 1 Plot with OPP to build a detached residential dwelling. Guide price £80,000. Pollock and McLean 01848 330207. PS-id: 115514.

Fife

Anstruther West End, St. Monans, 1 Plot with OPP for the construction of a detached residential dwelling. Guide price £150,000. Situated on the waterfront, the proposed property will enjoy stunning sea views over St Monans harbour. Pagan Osborne 01333 310703. PS-id: 114562.

Cupar Plot 2 Burnside, Auchtermuchty, 1 Plot with DPP for the construction of a two storey detached dwelling. Guide price £60,000. Located in the Heart of Auchtermuchty and within a conservation area. Rollo Davidson McFarlane 01334 654081. PS-id: 115761.

Lochgelly Kinglassie, 1 Plot with DPP for the demolition of existing agricultural buildings and construction of a detached residential dwelling. Guide price £135,000. Slater Hogg New Homes 01592 755322. PS-id: 115374.

Greater Glasgow

Glasgow 25 Springfield Grove, Barrhead, 1 Plot with OPP for the construction of a detached residential dwelling. Guide price £20,000. Future Property Auctions 0141 632 6599. PS-id: 115406.

Highlands

Lybster Wattenon Croft, Uibster, 1 Plot with OPP to build a detached dwelling in an idyllic setting with beautiful views over Loch Wattenon. Offers over £35,000. Drever and Headle 01847 894379. PS-id: 116818.

Ullapool Morefield, 1 Plot with OPP for the construction of a single or one-and-a-half storey dwelling with stunning views across Loch Broom. Guide price £90,000. Anderson Shaw & Gilbert 01463 253911. PS-id: 115693.

Wick Sarclet Plot 1, Thrumster, 1 Plot with DPP for the construction of a three bedroom dwelling. Offers over £32,000. Drever and Headle 01847 894379. PS-id: 116824.

Lanarkshire

Wishaw Glen Road, 1 Plot with DPP for the construction of a four bedroom detached residential dwelling. Guide price £110,000. Mr Miller (private seller) 07767 204050. PS-id: 116208.

Lothian

Bathgate Academy Street, Armadale, 1 Plot with DPP to build two flats. Guide price £20,000. Alex Watson (private seller) 07411 222689. PS-id: 115541.

Livingston 31 A Templar Rise, 1 Plot with OPP for the construction of a large two storey, four bed detached property in the much sought after area of Livingston New Town. Offers over £64,000. Marion Clark (private seller) 07747 451611. PS-id: 116054.

West Linton Westwater Development, 1 Plot with DPP for the construction of a detached country house. Guide price £195,000. The site enjoys beautiful views over surrounding countryside and lies near the outskirts of the historic village of West Linton. Allan McDougall 0131 240 3818. PS-id: 115307.

Moray

Aberlour Knockando Distillery Plots, Lot 6, Knockando, 1 Plot with DPP for the construction of a detached residential dwelling. Guide price £60,000. Smiths Gore 01343 823000. PS-id: 116061.

Elgin Wardend, Birnle, 1 Plot with DPP to build a detached residential dwelling. Splendid woodland site extending to approximately 1.5 acres. The site is located close to Elgin. Guide price £85,000. Cluny 01309 673836. PS-id: 114989.

Nairn Lodgehill Road, 1 Plot with OPP for the construction of a four or five bedroom two storey dwelling and garage. Guide price £90,000. R&R Urquhart 01309 676600. PS-id: 116919.

Perth & Kinross

Aberfeldy Baldane, Plot 2, Urlar Road, 1 Plot with DPP to build a three or four bedroom detached dwelling. Guide price £85,000. Bell Ingram Rural Estate Agents 01738 621121. PS-id: 114825.

Dunkeld Former Reservoir Site, 1 Conversion with DPP to transform the old existing stone reservoir building into a house. Located in secluded surroundings. Guide price £120,000. CKD Galbraith 01738 451111. PS-id: 115893.

Pitlochry Plot 2 Tulloch of Ballechin, Ballechin, Ballinlulg, 1 Plot with DPP for the construction of a detached residential dwelling. Guide price £75,000. The plot occupies a south-facing position

with attractive rural aspects and both sites have access off the A827. Bell Ingram Rural Estate Agents 01738 621121. PS-id: 114834.

Roy Bridge Glenspean, 1 Plot with OPP to build a detached dwelling. The plot enjoys a unique rural location with panoramic views sweeping over the surrounding countryside. The plot measures approximately 3.78 acres. Guide price £95,000. MacPhee & Partners 01397 702200. PS-id: 114890.

Stirling

Callander The Log Cabin, Strathyre, 1 Plot with lapsed planning for the construction of a detached residential dwelling. Guide price £75,000. Amy Beaton (private seller) 07818 212204. PS-id: 115928.

Dollar Plot 2, Vicars Bridge Road, Blairingone, 1 Plot with DPP for the construction of a detached residential dwelling. Offers over £90,000. Andersons LLP 01577 862405. PS-id: 114751.

Larbert Falkirk Road, 1 Plot with DPP for the construction of a 240m² detached family dwelling consisting of five bedrooms set over three floors. Offers over £180,000. Foundations have been laid to the solum level. Vincent McGuire 07809 609383. PS-id: 115261.



Antrim

Ballymoney Knockmore Road - Plot 1, Mosside, 1 Plot with DPP for the construction of a four bedroom dwelling. The plot measures 3,300ft² and is surrounded by mature beech trees and hedging. Guide price £165,000. McAfee Properties and Mortgages 028 2076 9404. PS-id: 114383.

Belfast 40 St. Meryl Park, 1 Plot with DPP for the construction of an impressive two storey detached family home. Offers in the region of £49,950. Ulster Property Sales 028 9060 5200. PS-id: 114300.

Larne 7 Logans Loanen, Oldglenarm Road, 1 Plot with DPP for the construction of a detached residential dwelling. Guide price £80,000. This site is situated on the edge of Larne close to the Antrim Coast Road. Brian A Todd and Co 028 2827 9477. PS-id: 114901.

Armagh

Armagh Drumcalm Road, 1 Plot with OPP for the construction of a chalet bungalow and a two storey detached residential dwelling. Guide price £200,000. Situated in a mature setting in a sought after location. Allens Estate Agents 028 8676 2233. PS-id: 114941.

Armagh, 65m East of Summerisland Road, Loughgall, 1 Plot with OPP to build a detached residential dwelling and garage with an 8m ridge height. Guide price £49,950. Tom Henry and Co 028 8772 6992. PS-id: 115782.

Craigavon 48 Teagy Road, Portadown, 1 Plot with DPP for the construction of a detached residential dwelling. Guide price £30,000. Joyce Clarke 028 3833 1111. PS-id: 115273.

Craigavon Georges Island Road, Aghalee, 1 Plot with lapsed planning for the construction of a 6,000ft² dwelling. A stunning site with spectacular views over Portmore Lough. Guide price £110,000. Robert Wilson 028 9261 3100. PS-id: 114907.

Craigavon Glass Moss Road, Gilford, 1 Plot with DPP for the construction of a 1,400ft² replacement dwelling. The site extends to approximately 0.5 acres. Guide price £59,950. Joyce Clarke 028 3833 1111. PS-id: 114313.

Craigavon Between 30 & 30B Derrykeeran Road, Portadown, 1 Plot with DPP for the construction of a large four bedroom detached dwelling measuring 2,475ft². Guide price £59,950. Located in a popular and quiet semi rural location. Tom Henry and Co 028 8772 6992. PS-id: 115781.

Down

Banbridge Murrays Hollows, Ballyrone, 1 Plot with DPP for the construction of a 2,500ft² bungalow and garage. A superb building site located in the highly sought after Katesbridge area. EPOA. Joyce Clarke 028 3833 1111. PS-id: 114314.

Dromore 40 Ballynahinch Road, Dromara, 1 Plot with DPP for the construction of a detached residential 2,000ft² dwelling. Guide price £75,000. Templeton Robinson 028 9066 3030. PS-id: 115213.

Hillsborough Adj 20 Clogher Road, 1 Plot with DPP for the construction of a 3,000ft² detached residential dwelling. Guide price £100,000. Elevated site with spectacular views. Templeton Robinson 028 9066 3030. PS-id: 115207.

Hollywood 10 Glen Road, 1 Plot with DPP for the construction of a luxury detached residential dwelling. Offers in the region of £495,000. Templeton Robinson 028 9042 4747. PS-id: 115264.

Newry Anthonys Road, Ballymartin, 1 Plot with DPP for the construction of a detached residential dwelling. EPOA. This site enjoys rural views. George Graham and Sons 028 4176 4242. PS-id: 114334.

Newry Bavan Road, Mayobridge, 1 Plot with DPP for the construction

of a 1.5 storey detached residential dwelling with a detached double garage. The site occupies a pleasant rural setting with panoramic views over surrounding countryside. Guide price £69,000. Hanna Hillen Estates 028 3026 9003. PS-id: 114474.

Newtownards 89A Ballykeel Road, Moneyrea, 1 Plot with OPP for the construction of a detached residential dwelling measuring approximately 2,380ft². Guide price £100,000. Templeton Robinson 028 9066 3030. PS-id: 115210.

Fermanagh

Enniskillen Marble Arch Road, Killesher, 1 Plot with DPP for the construction of a spacious detached dwelling and double garage. Guide price £45,000. The site has extensive road frontage to Marble Arch Road. Montgomery 028 6632 4485. PS-id: 115198.

Enniskillen Kilmacrannell, Lisnaskea, 1 Plot with DPP for the construction of a three bedroom detached bungalow. Guide price £29,000. The site enjoys an excellent location within easy commuting distance into the town centre. Watters Property Sales 028 8952 2800. PS-id: 114420.

Enniskillen Lisroddy, 1 Plot with DPP for the construction of an attractive two storey dwelling extending to approx 3,000ft². Guide price £50,000. Montgomery 028 6632 4485. PS-id: 114991.

Londonderry

Coleraine Adj 73 Cullyrammer Road, Garvagh, 1 Plot with OPP for the construction of a bungalow with a ridge height of 5.5m. Guide price £27,500. HA McIlrath and Sons 028 2954 0588. PS-id: 115102.

Magherafelt Ballymulligan Road, 1 Plot with DPP for the construction of a two storey detached residential dwelling with a 7.5m ridge height and garage. Guide price £125,000. Allens Estate Agents 028 8676 2233. PS-id: 114934.

Magherafelt Oaklea Road, 1 Plot with DPP for the construction of a 3,410ft² dwelling and double garage with first floor storage. Offers over £100,000. Allens Estate Agents 028 8676 2233. PS-id: 114928.

Magherafelt 45 Carraloan Road, 1 Plot with DPP for the construction of a substantial two storey dwelling extending to 3,040ft². Offers over £150,000. Allens Estate Agents 028 8676 2233. PS-id: 114888.

Portstewart 6 O'Hara Drive, 1 Plot with DPP for the construction of a detached residential dwelling of approximately 4,190ft². EPOA. The site offers breathtaking panoramic views of the Atlantic Ocean. Armstrong Gordon And Co 028 7083 2000. PS-id: 115048.



Have you seen the *Build It* website?

The online home of your favourite self build and renovation magazine, self-build.co.uk has undergone a big revamp. We've taken on board your feedback to deliver a knowledge-packed hub for self builders and renovators, plus a host of new ways to interact with the *Build It* magazine editorial team, our experts and your fellow readers. Here's just a taste of what you'll find online at self-build.co.uk to help kick-start your home building project today!

READER HOMES & HOUSE PLANS

- Explore real-life reader's homes
- New images that didn't make the mag
- Check out our house plans archive

self-build.co.uk/readers-homes

MUST-READ FEATURES

- Great articles from the *Build It* magazine archives
- Exclusive online content
- Search for the info you need

self-build.co.uk/features

NEWS & BLOGS

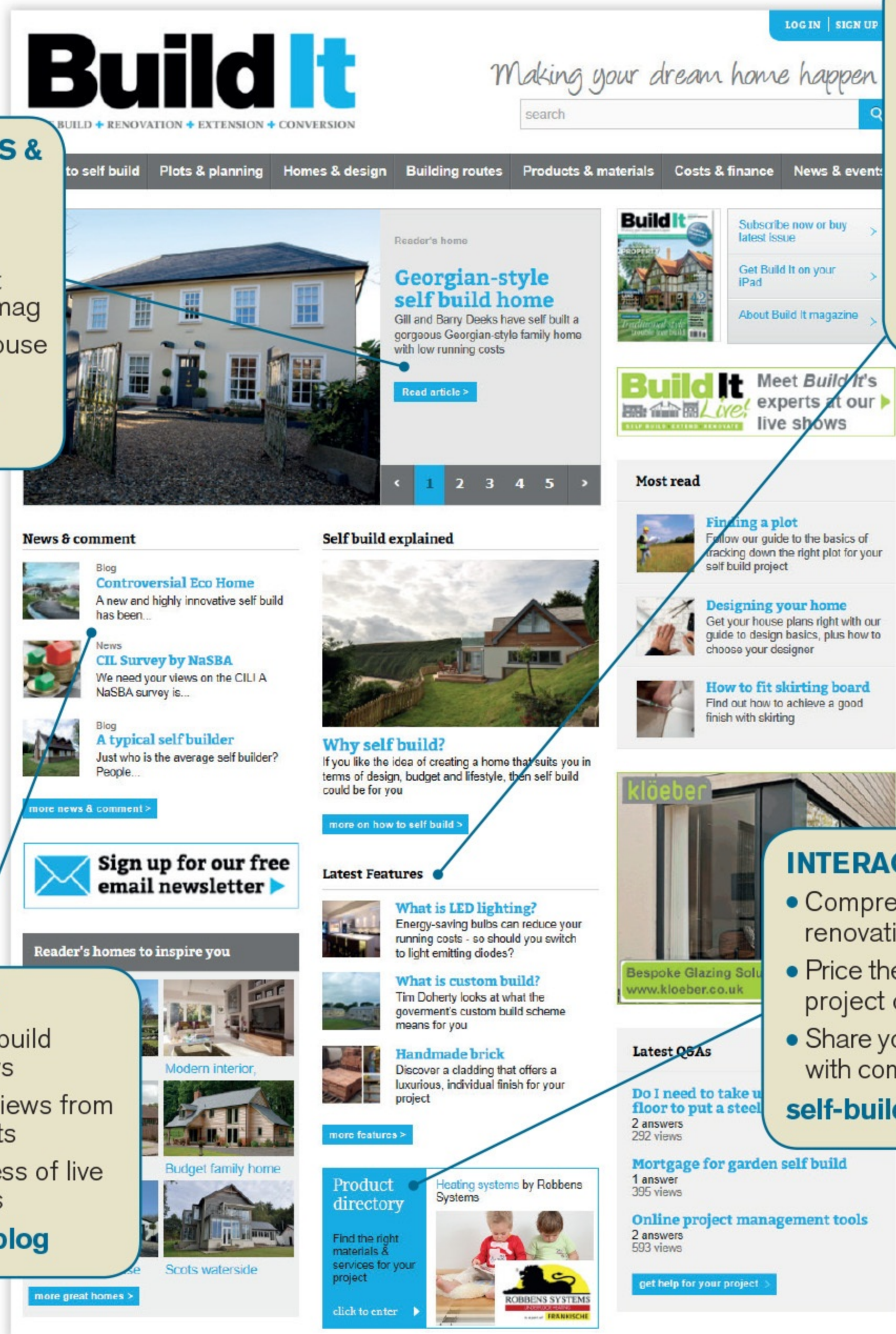
- All the latest self build & renovation news
- Editors' blogs & views from the *Build It* experts
- Follow the progress of live self build projects

self-build.co.uk/blog

INTERACTIVE TOOLS

- Comprehensive self build & renovation product directory
- Price the job with our online project cost calculator
- Share your views & experience with comments and Q&As

self-build.co.uk/tools



www.self-build.co.uk

THE ONLINE HOME OF *BUILD IT* MAGAZINE

Build It

Making your dream home happen

Your essential guide to choosing quality products and services for your new home

● BUILDINGS ● CARAVANS ● CLADDING ● DECKING ● FIREPLACES

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

PINCKNEY GREEN FIREPLACES



Makers of Fireplaces from Natural Stone
For a Free brochure call
0117 937 2555
www.pinckneygreen.co.uk



Worcestershire
CARAVAN SALES
Over 150 new and used mobile homes permanently on display.

Open 7 days.
Delivery - buy back from £500
Tel: 01299 878872 / 877577
www.worcestershirecaravansales.com

Clavell Caravans

Lincolnshire based offering a wide selection of static caravans.
Nationwide delivery.
Hire and buy back options.

01507 358398
07971 530408 - 07912 582208
www.clavellstaticcaravans.com



CLAD

QUALITY TIMBER CLADDING



Pre-painted fine sawn timber cladding.
Available Nationwide

Tel: 0800 849 6339 Email: cladding@hoppings.co.uk www.timber-cladding.co.uk

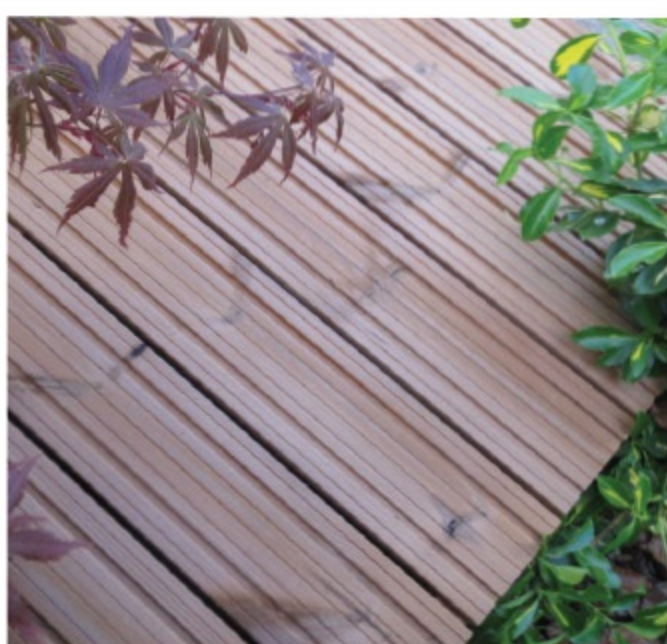


DECK

LUNAWOOD

NEW Modified Wood Decking.

A cheaper alternative to hardwood



Buy online via www.qualitydecking.co.uk
Tel: (0800) 849 6339 (Mon-Fri 9-5pm)

● ELECTRICAL ● FLOORING

MASSIVE DISCOUNTS on Electrical Products at QVS

17th Edition 12 Way (5+5+2)
Split Load Consumer Unit
C/w 100A
Mainswitch,
2 x 80A RCDs
& 12 x MCBs
of your choice

£47.75
+vat



- cables & flex
- sockets & switches
- indoor & outdoor lighting
- heating & ventilation
- leds, lamps & tubes
- tools & fixings

1000's of items at
Below Trade Prices!



FREE NATIONWIDE DELIVERY!

0800-197-6565
www.qvsdirect.com

CALL FOR A
FREE
CATALOGUE



TopOil

For wooden

kitchen work tops

and general

interior joinery



- Osmo TopOil is a special oil and wax combination made with natural plant oils and waxes
- Offers highest coverage of any oil on the market (1 litre covers approx 12m² with 2 coats)

OSMO UK
Unit 24 Anglo Business Park
Smeaton Close, Aylesbury
Buckinghamshire HP19 8UP

Tel: 01296 481 220
Fax: 01296 424 090
www.osmouk.com
info@osmouk.com



Build It

Making your dream home happen

To advertise a product in this section please call Classified sales

0203 627 3246

● FIRES ● FIREPLACES ● HEATING ● INSULATION ● KIT HOUSES

www.flamewavefires.co.uk 0845 257 5028



efficient open fires
don't cost the earth

Original FARAL Aluminium Radiators, always appreciated, often imitated since 1966. The choice of many Architects and local authorities for over 50 years, Faral radiators provide the highest heat output achievable from one of the most energy efficient low water content aluminium radiators available today.

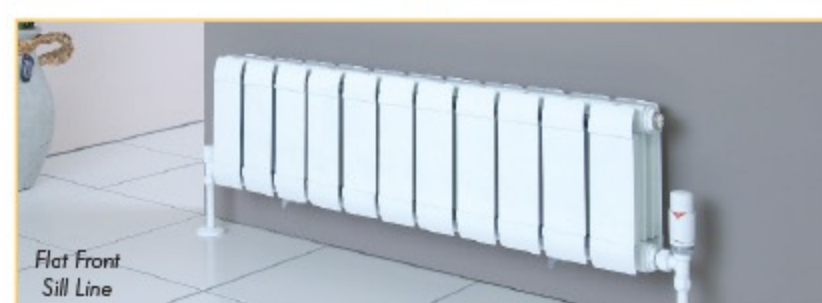
riba
product
selector

EN 442

CAD

Die Cast Aluminium Radiators

AEL
FARAL
AEL - UK Distributor



© AEL copyright all photographs & CAD drawings

AEL
HEATING SOLUTIONS

Detailed drawings of AEL radiators and valves in a CAD drawing format that is also compatible with AUTOCAD is available on digital disc or via www.aelheating.com e-mail: sales@aelheating.com Tel: 01928 579068



Handmade
for You

Bradley Mills, Little Bradley,
Greetland, Halifax, West Yorkshire,
HX4 8BH

Tel: 01422 311922
www.jarabosky.co.uk

JARABOSKY

sensible heat

be sensible – take control

- > Telephone interface
- > Controls heating and hot water remotely
- > Works with existing heating controls or Honeywell Hometric
- > Perfect for holiday homes
- > UK/Ireland nationwide sales

Honeywell



www.sensibleheat.com
01273 475834

HEBHOMES



Beautiful architect designed SIP kit houses that integrate super-insulated construction with stunning interiors.

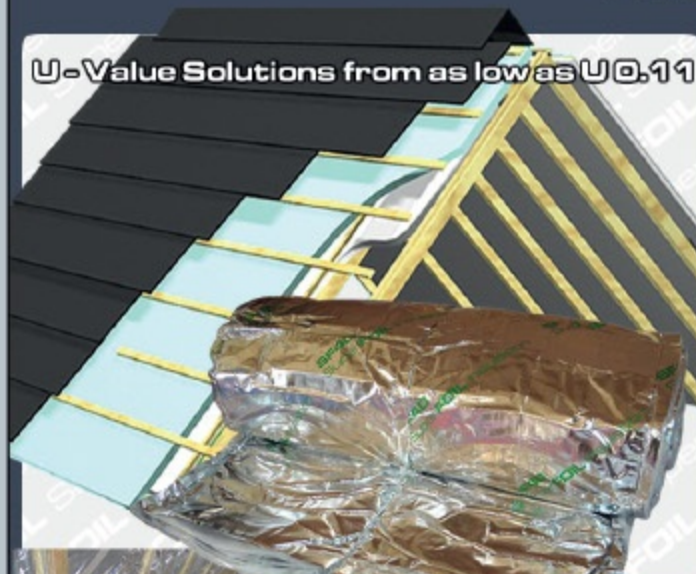
Take a tour at: www.hebhomes.com
Telephone: 0141 550 7360
Email: lynsey@hebrideanhomes.com

Offices in Glasgow and Isle of Skye

SuperFOIL Insulation

Thermal Insulation for use in
Roofs, Walls & Floors

U-Value Solutions from as low as U0.11



SF19

Exceptional value multi-layer foil insulation

SF40

UK's top performing multi-foil insulation

SF60

The ultimate multi-foil insulation

SFUF

Multi-foil insulation for floors

SFTV

Thermal, vapour & air tightness barrier

SFBA

Multi-layer bubble foil insulation

registered
LABC
RD199-0512



Find out more

01636 639 900

Request a Free Sample Pack @

www.SuperFOIL.co.uk



PINELAND FURNITURE LTD

- 100% solid wood kitchens – no MDF, chipboard or ply
- Dovetail jointed drawers – mortise and tenon joints for carcasses
- Free design service, individual, hand drawn plans
- Non-standard sizes, at no extra cost, to suit your kitchen dimensions
- Fully assembled units; no annoying flat-pack assembly
- Straightforward, easy to understand costing – prices include VAT & delivery

PINELAND is a privately owned, family company that has been established for over 20 years. We believe in listening to our clients, and our hand drawn plans, reflect our customers desires and opinions. The final design combines well planned functionality, with elegance and beauty, and our clients are often surprised how all this can be achieved at such a reasonable cost.

Web: www.pineland.co.uk Email: sales@pineland.co.uk

Tel: 01299 271143 (Cleobury Mortimer Shropshire) – 01606 41292 (Northwich Cheshire)

ADVERTISE YOUR PLOT WITH**Build It***Making your dream home happen***0203 627 3246****Build It***Making your dream home happen*

To advertise
a product
in this section
please call
Classified sales

0203 627 3246**Terence Ball Kitchens***A name you can trust*

- High Quality Cabinets (Lifetime Guarantee)
- Bespoke Manufacturing
- Over 250 Door Ranges
- Unbeatable Industry Advice & Service
- Deliveries Throughout the UK

www.terenceballkitchens.co.uk
sales@terenceballkitchens.co.uk
 01984 624640

**NEED A
STRUCTURAL
ENGINEER?****FindanEngineer.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.

**THE ACORN RANGE**
over 480 designs

Free planning drawings with every order on our Acorn Range*

Oak Frame garages Ideal for Self Assembly or by our Expert Team

*(subject to conditions)

**PRICES FROM
£2395****£3000**
List price £3429 all+VAT**The Barcombe** - Offer expires 31/12/13**STAR
BUY**

- Traditional Oak frame garages
- Full build available
- Choose from over 480 Designs
- Planning Service
- Assembly pack
- Optional extras

Try our 'Quick Quote' on our new website

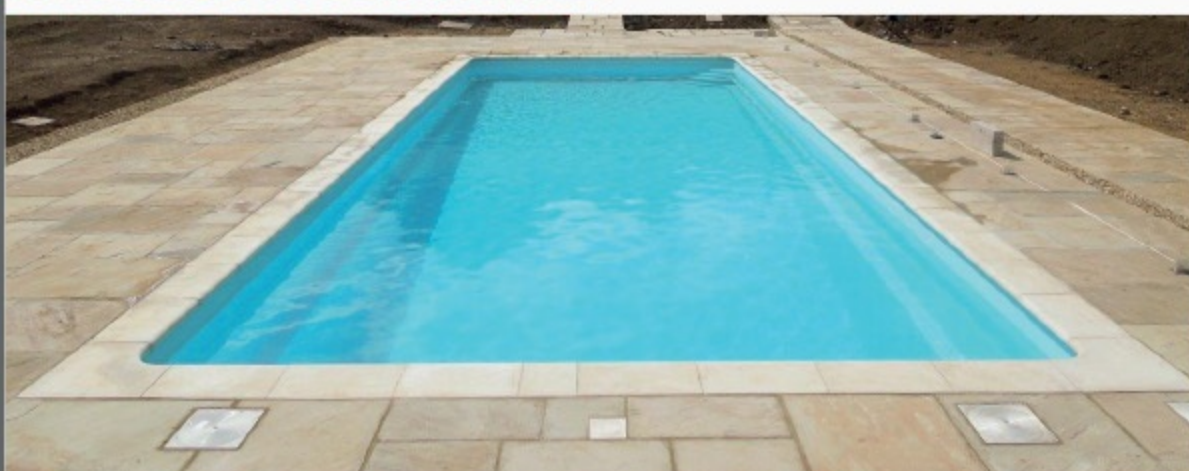
Prices include oak posts, eave & tie beams, braces, softwood soleplates studwork, rafters, weatherboarding & staddle stones. Excludes groundworks, bricks, roofing, assembly & delivery.

Contact our Sales Team on 01273 400411www.oakdesigns.org**THE SUSSEX RANGE****100% Stainless Steel
Towel Rails & Radiators****Tel: 01444 831200****www.sussexrange.co.uk**

● SOFTWARE ● STAIRCASES ● SWIMMING POOLS

 **SUNDANCE**
FIBREGLASS POOLS

Family business specialising in one-piece inground swimming pools for over 15 years. Range of ceramic and fibreglass models.



T: 01296 715071 W: SUNDANCEPOOLS.CO.UK

20-YEAR MANUFACTURER GUARANTEE ON CERAMIC POOLS. 10 YEARS ON FIBREGLASS	SMALL POOLS WITH COUNTER-CURRENTS IDEAL FOR EXERCISE	FIXED & SLIDING ENCLOSURES
LOW MAINTENANCE - WORKS VERY WELL WITH SALT WATER CHLORINATORS	UP TO 11M (36FT) - SUNQUEST MODEL SHOWN ABOVE	SUITABLE FOR INDOOR & OUTDOOR INSTALL IN UNDER 2 WEEKS

www.saxum.co.uk
sara@saxum.co.uk
+44(0)1803 866893



DESIGNED MANUFACTURED INSTALLED
bespoke, space transforming, contemporary
STAIRCASES AND BALUSTRADES



Build It

Making your dream home happen

To advertise a product in this section please call Classified sales

0203 627 3246



From Mouse to House!

ARCON 2D to 3D Home Design Software



Special Offer

Use coupon code **BLD10** in your cart at checkout & save an extra 10% on all ARCON titles. Offer only available at: **www.3darchitect.co.uk**



www.3darchitect.co.uk tel: **01252 267788**

email: arconsales@eleco.com

ELECO SOFTWARE LTD, Lower Barn, 4 Hillside Road, Aldershot, Hampshire GU11 3NB

SPiRiT RENEWABLES

Solar A1

Heat Pumps

Biomass

MCS

REA

Tel: 0845 475 3953
For a no-obligation quote...

info@spiritsolar.co.uk

Cut your energy bills by 50%

- Benefit from generous government subsidies:
 - Solar PV Feed-in Tariff: earn up to 15.44p per kWh generated for 20 years!
 - Heat pumps / biomass / solar hot water: up to 17.3p per kWh (proposed).
- Meet your renewables targets.
- Suitable for new builds and refurbishments.

Spirit has completed over 1000 installations.
96.6% of our customers rated our service as first class on www.reviewcentre.com

www.spiritsolar.co.uk
Energy for the 21st century
Accredited under the Microgeneration Certification Scheme

Dimplex • Samsung • Vaillant • SMA • PowerOne • SunPower • ET Solar

Hot Summer SALE
On Contemporary Verandas and MORE!

UP TO 25% OFF

Sun Awnings

Nationwide Verandas are designed to provide a stylish and practical area to enjoy outdoor living whatever the weather

- Custom built to your specification
- Wide range of styles and finishes
- Quality aluminium framework
- Compatible with Sun Screens, Roof Blinds and Sliding Glass Panels
- Choice of 10.8mm Safety Glass or 16mm Triple Wall Polycarbonate
- Integral guttering
- Any RAL colour available
- Professional installation service
- Complete with a 5 Year Guarantee

UK's No.1 FOR HOME IMPROVEMENTS

BUY NOW, PAY 2014!*

For a FREE brochure or no obligation design consultation
Call us today on 0800 084 5096
or visit us online at www.nationwideltd.co.uk

NATIONWIDE HOME INNOVATIONS

*Subject to status. Written details on request.

LOWFIELD
TIMBER FRAMES

Lowfield Timber Frames Ltd is a unique supplier specialising in the design, supply and erection of next generation, energy efficient modern methods of construction, namely Timber Frame and Structural Insulated Panel Systems (SIPS)

If you would like our help or advice and a no obligation quotation, please call or email us for further information.

Lowfield, Marton, Welshpool, Powys, SY21 8JX, Tel 01743 892009, email enquiries@lowfieldtimberframes.co.uk

UKSIPS Association

TRADA

PEFC

FSC

Build It
Making your dream home happen

To advertise a product in this section please call Classified sales

0203 627 3246

Lochdhu Cottages Ltd
CIVIC TRUST AWARD 1985

Quality Timber Frame Kit Homes

The most personal hands-on service you're ever likely to get!

- Timber and masonry clad kit homes to any size
- Traditional or contemporary styles
- Bespoke service
- Excellent planning permission record

Telephone: 01854 612820
www.lochdhucottages.co.uk

CROXFORD'S
Joinery Manufacturers & Woodturners

CE marked Windows & Doors

Timber Fold & Slide • Tilt & Slide Lift & Slide Patio Doors • Casement Sliding Sash • Tilt & Turn Windows

Our patio doors and windows are made to measure and feature:
Easy Maintenance • Dual Draught Seals • High Tech Specification
High Security • Expert Craftmanship • Ideal Fire Escape

T.01484 850892 E.info@croxfords.co.uk
www.croxfords.co.uk

Metham Joinery Works,
New Street, Metham,
Holmfirth, HD9 5NT

Build It

Making your dream home happen

The self-builder's guide to specifying and sourcing products



Floors of Stone Ltd

Prices for our tiles start from as little as: £12.50/m² (ex vat). We are the leading wholesaler of premium grade stone floor tiles. Using regular price checks, we remain the cheapest in the UK. See before you buy, we are happy to send tile samples free of charge. Based in Leicestershire just off junction 23 of the M1 and always have a large quantity of stock for immediate collection or next day delivery. **Tel: 01509 234000**
Web: www.floorsofstone.com
Email: enquiries@floorsofstone.com



Stylish Window Fittings

Handlestore present a beautifully finished range of window fittings in a choice of contemporary or traditional styles.

- Quality UK fittings at affordable prices
- Superior finishes in polished chrome, satin chrome, polished brass and many more colours.
- Specified by architects and interior designers
- Matching stays available for timber windows

Web: www.handlestore.com
Tel: (0) 8448 040 080



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



Bespoke Solid Wood Kitchens

- 100% solid wood kitchens – no MDF, chipboard or ply
- Dovetail jointed drawers – mortise and tenon joints for carcasses
- 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

Tel: 01299 271143/01606 41292
Fax: 01299 271166
Email: sales@pineland.co.uk
Web: www.pineland.co.uk



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



Kingspan TEK Building System

You want your dream home, but you want it to be at the cutting edge of construction and quality. You want your home to be comfortable and warm, but you don't want it to cost the earth to heat. The Kingspan TEK® Building System is based on structural insulated panels (SIPs) technology and is a simple, but revolutionary, way of building your dream home.

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



EGERTON CERAMIC SINK FROM SHAW'S OF DARWEN

Egerton is a popular Shaws of Darwen 'British' made handcrafted double bowl fireclay sink featuring a unique and distinctive patterned front and the offset dividing wall is branded with the well-known Shaws logo to complete the finished 'look'. Due to its weight, Shaws recommend this sink is installed professionally with bespoke cabinetry.

Tel: 01254 775111 Fax: 01254 873462
www.shawsofdarwen.com



Basement waterproofing

Basement waterproofing solutions from Safeguard Europe Ltd. Using Vandex cementitious waterproofing products and Oldroyd cavity drainage membranes, a choice of waterproofing systems are available for internal and external applications.

Safeguard offer free technical advice for choosing the most suitable method of waterproofing a basement, along with CAD drawings and technical datasheets.

Tel 01403 210204
Email info@safeguardeurope.com
Web www.cellars.co.uk

Build It

Making your dream home happen

To advertise a product in this section please call Product Profile sales on:

0203 627 3246



BUSHBOARD **M-Stone quartz worksurface**

Bushboard's M-Stone quartz worksurface is the new breed of 'installer ready' product that can be fitted directly on site, saving time and cost. Available in a choice of sizes for worksurfaces, splashbacks and upstands and guaranteed for 10 years, M-Stone is priced at £270/lin metre inc VAT.

Tel: 01933 232242

help@bushboard.co.uk

www.bushboard.co.uk



KLOEBER KUSTOMSLIDE

Kloeber's Kustomslide Aluminium Sliding doors available in any RAL colour in bespoke widths and various configuration options up to 6 door panels and run on 2 or 3 stainless steel tracks dependent on the opening configuration chosen. For security, the doors are fitted with lever operated 5 point multipoint locking as standard.

Call 01487 740044 for further details of our full door range or visit www.kloeber.co.uk



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
- Many standard shapes
- Variable lengths & widths

Tel: 01481 701 333 or visit www.spadelamare.com



FERVOUR BASIN TAPS FROM ABODE

The Fervour range of bathroom brassware and showering products offer the very best contemporary styling in this unique and stunning design. Sharp crisp lines meet smooth angles to create an original family of products that will add the perfect finishing touches to any bathroom.

Tel: 01226 283434

Fax: 01226 282434
www.abode.eu



BLACK MILLWORK PROVIDES CHARACTER TO LUXURY LIVING

Andersen® windows and doors supplied by Black Millwork have been installed at a luxury development in Staffordshire, which includes the complete renovation of a historic mill building. Andersen's range of 400 Series casement windows and frenchwood doors provide a period look, combined with high energy performance and low maintenance costs.

For more information please visit www.blackmillwork.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



GROUNDTHERM

A trusted, family-owned company and expert installers of renewable heating for over a decade, GroundTherm offer a wide range of energy solutions including Ground Source/Air Source Heating, Underfloor Heating, Heat Recovery, Solar Thermal and Photo Voltaic. We offer free quotations, planning and technical support, and promise to keep things simple - saving you money in the long-run. **Tel: 07796811072**

www.groundtherm.co.uk

Email: info@groundtherm.co.uk



TeleBeam™ registered **LABC**

Forget steel beams and cranes – TeleBeam is the new way of converting lofts in modern properties with roof trusses. It is the first pre-fabricated lightweight and adaptable system which deals with a wide range of roof spans and pitches. TeleBeams have LABC Registered Systems Approval giving you peace of mind.

www.telebeam.co.uk

01380 739000



NEW SELF BUILD SHOWCASE FOR ALUTEC

Giving self builders the chance to get up close and personal to its wide range of aluminium rainwater and eaves systems, Alutec has opened a permanent display at the National Self Build and Renovation Centre in Swindon.

The new display, which is located on stand 197 of the exhibition centre, showcases products from across all of Alutec's ranges.

For more information please visit www.marleyalutec.co.uk

Build It

Making your dream home happen

To advertise a product in this section please call Product Profile sales on:

0203 627 3246

next month...

November issue on sale 25 September

READERS' HOMES

Meet the Bolton-Kings, who gave up busy city life to build a super-efficient highland retreat for their growing family



MARGARET SORAYA



FIREPLACES

Nothing matches the allure of an open fire. Next month we reveal our pick of the best surrounds



OPEN PLAN LIVING

Essential design advice on how to create a modern multifunctional zone



CARL PENDLE

PLUS SIPS, INSULATION, PERIOD HOUSE RENOVATION, PROJECT MANAGEMENT & MORE

The *Build It* team

EDITORIAL

Editor Anna-Marie DeSouza

Deputy editor Chris Bates

News & homes editor

Sophie Hoyland

Art editor David Flint

Contributors

Alan Tierney, Mike Hardwick,

Mike Dade, Tim Doherty

Contact 020 3627 3243

BUSINESS DEVELOPMENT

Business development director

Sarah Wilcock 020 3627 3247

ADVERTISING SALES

Advertising manager

Nick Gillam 020 3627 3245

Account executive Iyesha Cheema-

Bradshaw 020 3627 3246

PUBLISHING

Managing director Calum Taylor

Finance director Katherine Taylor

Marketing director Claire Drakeford

Accounts

Emily Blackwell 020 3267 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

Sub rates: UK £49.80,

EU £51.90, non EU £75.90

Published by Castle Media Ltd

Head office: Castle Media Ltd,

Peasemore House, Newbury,

Berkshire, RG20 7JH

Tel: 020 3627 3240

Fax: 0872 331 5207

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 we talk to architect **Laura Clark** about her project to convert a disused public toilet into a place she now calls home



Architect Laura Clark saw past the dirty, derelict state of the underground loos (far left) to create a modern and stylish habitable abode (above)



How did you find the plot?

I was walking past in 2005 and the underground toilets were boarded up. I was curious as

to what was down there. It took about six months of investigating to work out the plot belonged to Lambeth council and to get the caretaker to show me around.

Using crowbars, we removed the gated doors and were greeted with a dark 56m² space filled with rubbish. The toilets hadn't been used since 1983 and it was absolutely disgusting, but I fell in love with it.

What were your plans?

I originally drew up proposals for a bar or quirky cinema but it was 2008 and the financial crisis had begun. Suddenly the banks weren't lending anymore, so I started playing around with other ideas.

I realised that the space could work well as a dwelling so I instructed my solicitor to change my planning application to residential use and resubmitted the drawings. Consent was eventually granted in 2011.

What work did you do?

We had to use massive concrete breakers to knock down the partition between the ladies and gents and to remove the tiles from the wall. The whole space was tanked

and the drainage and sewage were sorted. We upgraded the walls with insulated plasterboard. New wooden flooring went down, the kitchen and bathroom was fitted and we put in new windows and doors. We had to dig out a cave for the bed using a specialist concrete diamond cutter which, although expensive, was well worth it.

What have you created?

As you walk down the original steps you reach the entrance courtyard and see windows looking through to the lounge and kitchen. Walk through the front door and the lounge is to the left and kitchen to the right. The space measures about 4.5m wide and 15m long. I've installed wide floating shelves which make an interesting, as well as practical, storage feature. I've also got storage space hidden away behind wall panels as well as a secret utility room, tucked behind one of the kitchen units. The whole place is top lit by light wells. We managed to salvage some of the tiles surrounding the basins in the gents and reuse them as a kitchen splashback.

What's your favourite feature?

I love the bathroom. I went a little crazy with red tiles and a gold leaf wall. I had to apply the gilding in freezing cold temperatures because the heaters had to be switched off to prevent everything blowing around everywhere. But I'm really pleased with the result so I'm glad I did it.

How much did it cost?

It cost approximately £20,000 to purchase the plot and gain planning permission. The actual work amounted to £65,000, but I designed everything and did a lot of the labour myself. I've had it re-valued and it's now worth £250,000, but I don't think I'll ever sell it.

Would you do another small conversion?

I would do it again and I'm currently looking for the right project. A couple of potential ideas have fallen through. I'm really interested in micro-regeneration in a small community and making the most out of disused and forgotten spaces. I spent about £5,000 on the external renovation, which I didn't have to do. But it's part of the community's history and I think it's important for it to look nice from ground level.

What advice can you share?

You need to do a lot of investigation before buying an unusual property, such as figuring out lighting, electricity and telephone lines. I spent three days in Croydon library trying to find the plans to work out the sewage system. It's also beneficial to get everyone on board with your design ideas. Speak with the local council, planners and building control. Finally, don't give up!

Laura owns Lamp Architects. For more details about the company call 07746 475353 or visit www.lamparchitects.co.uk

The National Self Build & Renovation Centre



**NSBRC
FREE
ENTRY**

*The UK's Only Permanent Exhibition Centre For
Self Build, Renovation & Home Improvements*

**Our aim is to
inspire, educate
and provide
impartial advice
for our visitors.**

**With everything
you'll need under
one roof, why go
anywhere else!**

**Making the most
of your visit**

-  Self Build Educational Zone
-  Renovation House Tour
-  Help Desk - FREE technical advice & support
-  Trade Village - showing the latest innovation and technologies
-  Land Finding
-  Financial Planning

**OPEN 6
Days a Week**
Tues - Sun
10:00-17:30



Featuring

BIG GREEN home show

**SHOW
ADMISSION
£5 PER PERSON**
(UNDER 16'S GO FREE)

**CLAIM YOUR
FREE TICKETS**

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

**Your key to
creating a
greener
home**

-  **NEW SHOW FEATURE**
Live Demonstration
Arena
-  **FREE** one-to-one's
with eco experts
-  Theatres with
FREE seminars
-  Over 200 exhibitors
-  Real life case studies
-  Guided tours of
life-sized exhibits

**25th-27th
October
2013**



To claim your **FREE** show tickets, simply log on to www.nsbrc.co.uk and follow the link to book your tickets. Enter voucher code **BUILDIT13** together with your details and you can then download a maximum of 4 free tickets. Alternatively, please call **0845 223 4455** and quote **BUILDIT13** to claim your **FREE** tickets!

For further information and to book your free entry tickets to the centre call ☎ **0845 223 4455** or visit www.nsbrc.co.uk
Swindon (M4, Junction 16) The National Self Build & Renovation Centre,
Lydiard Fields, Swindon SN5 8UB

Follow us on



NEED TOOLS? JUST TAP THE APP.

The Brandon Hire app. Tools, branch locations, support and special offers, all in the palm of your hand.

BRANCH FINDER.

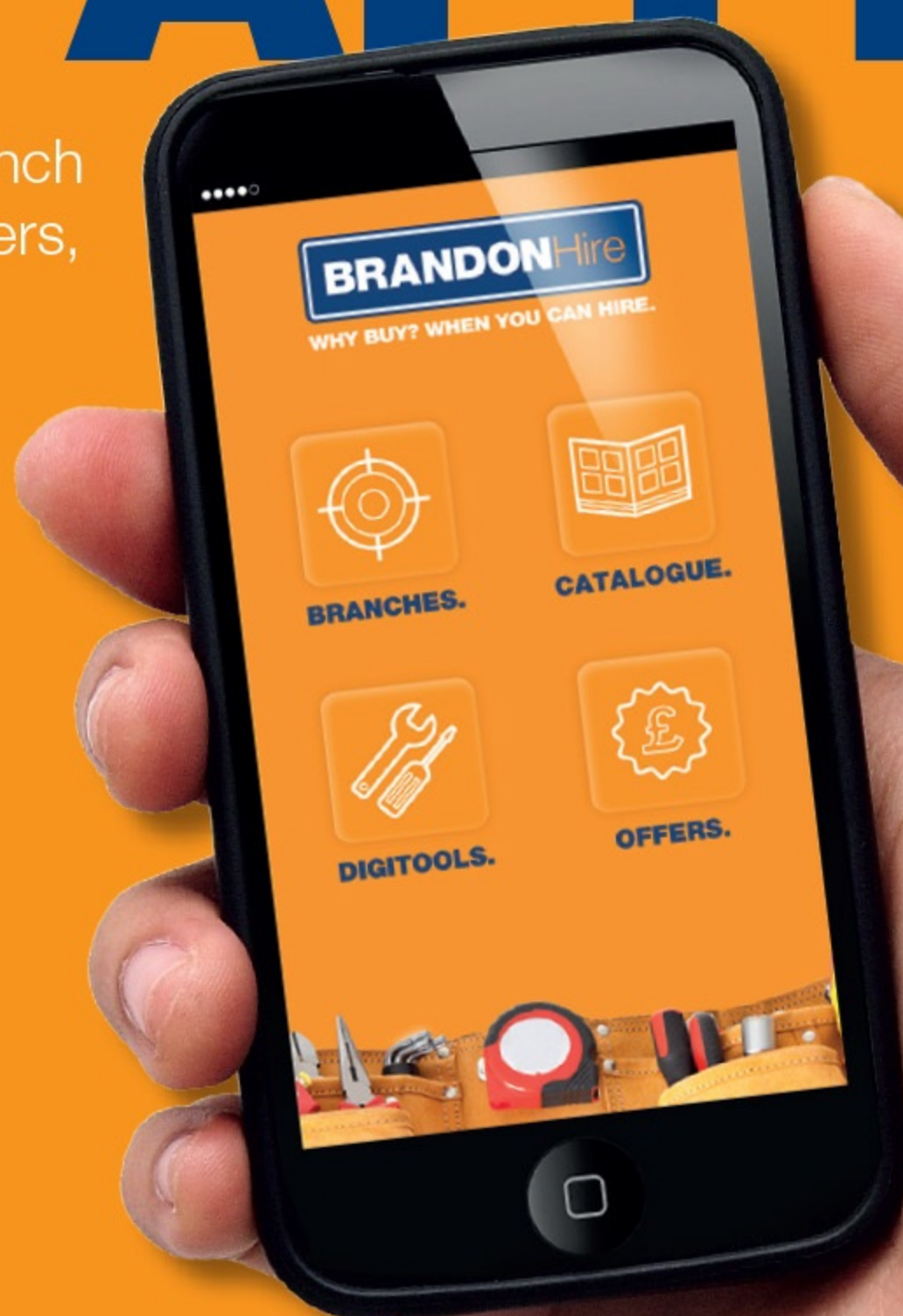
Locate your local branch, get directions or simply give them a call.

OFFERS.

The latest offers and discounts sent direct to your phone.

DIGITOOLS.

Helpful little tools, like a digital spirit level and a unit converter for those old imperial to metric puzzles.



Download from the app store today or visit **brandonhire.co.uk** to find out more.

WHY BUY? WHEN YOU CAN HIRE.

BRANDONHire