

CREATE AN EFFICIENT BRICK & BLOCK HOME | HEATING & LIGHTING CONTROLS | DESIGN
TIPS FOR COASTAL PROJECTS | EXPERT VIEW: GOVERNMENT'S RIGHT TO BUILD INITIATIVE

Build **It**

✦
Making your
dream home
happen

SELF BUILD + RENOVATION + EXTENSION + CONVERSION

SELF BUILD SECRETS

17 design ideas
for a future-
proof home for life

Best of British
2015's most inspiring
self build & renovation
projects revealed

Real Life Projects

- ★ Smart, family-friendly revamp
- ★ Light-filled home on a sloping plot
- ★ £60,000 straw bale self build

How to make money
with eco heating

Modern *classic*

Heritage brick meets
contemporary oak

September 2015 £4.35





MYSPACE

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

Because everyone's space is special

We all have different aspirations for our home. From the simplest project through to the most ambitious and dramatic extensions, IDSystems can help you develop your aspirations and make them real.

We have market-leading expertise in bespoke architectural glazing, bi-fold doors, glazed roofing, open design and close liaison with structural engineers. Everything you need to create your perfect space.

IDSystems
GLASS INNOVATIONS



Welcome

A recent report by the National Custom & Self Build Association (NaCSBA) shows that one in five councils have established a register or carried out assessments to gauge local demand for plots for one-off housing. If you're struggling to convince the planners to approve your scheme, that 20% figure might not sound too impressive; but it represents a huge step forward, as councils move from passively assessing applications to actively enabling more self build. It also suggests that local authorities are getting geared up for the government's Right to Build initiative, which our planning expert Mike Dade looks at in more depth over on [page 110](#).

It's no great surprise that London is the least active region for progressing individual schemes (just 21% of councils are taking action so far, compared to 70% in the North East). But that didn't stop one of this year's *Build It Awards* nominees from pressing ahead with a remarkable one-off home on a tight plot in Putney. Find out more about this and the five other amazing projects contesting the Best Self Build or Renovation award over on [page 19](#). Let us know your favourite by voting instantly online at www.self-build.co.uk/vote/!

As if these spectacular homes weren't inspiration enough for your project, we've got a master issue this month that's packed full of design advice and practical guidance. On [page 34](#), you can explore a stunning home (another *Build It Awards* contender) that appears to be a quintessential brick farmhouse at the front – but opens out at the rear thanks to a stunning glazed oak gable. On [page 102](#), Julian Owen explains how you can make the most of a coastal plot, while on [page 107](#) Alan Tierney looks at the do's and don'ts of renovating a listed building. And just to wrap it all up, this issue comes with a free book, *The Essential Guide to Architects & Designers*. Enjoy!

MEET THE TEAM



IFEOLUWA ADEJEBI is *Build It's* homes & design editor. With a keen interest in architecture, she's got an eye for the latest trends. This month she visits a mesmerising brick-and-oak home ([page 34](#)) and gives her tips on smart heating and lighting ([page 93](#)).

MIKE HARDWICK

is a consultant and project management specialist. In 2014 he was elected as the self build representative on NaCSBA's executive committee. Turn to [page 13](#) to read his regular report on the biggest issues affecting self builders.



TIM DOHERTY was the founding MD of the NSBRC and is the acting chief executive of NaCSBA. He advises on a range of issues, including finance and budgeting. On [page 98](#), he explains what it would cost to dry-line and decorate *The Build It House*.

MIKE DADE

is a planning specialist and *Build It's* plot guru. He's the author of several must-read books on land and planning. This month he casts his expert eye over the government's Right to Build initiative ([page 110](#)) and advises on a rural plot's potential ([page 122](#)).



JULIAN OWEN is *Build It's* design doctor and architecture expert. He is a self build architect and the chairman of the Association of Self Build Architects. Read his tips on how to create a low-maintenance coastal home that maximises views on [page 102](#).

ALAN TIERNEY

is a heritage buildings consultant. He runs Picketts Historic Building Conservation, offering hands-on advice to period property owners. On [page 107](#) he reveals what changes to listed buildings might need consent – and which don't.



OPINDER UDDAR is a *Build It* award-winning architect and director of Lapd Architects. He specialises in self build and renovation and is a regular consultant at the National Self Build & Renovation Centre. He created the design for *The Build It House* and is part of our expert team at the *Build It Live* shows.

EDITOR'S
FAVOURITE
FEATURES

79



110



SUBSCRIBE TODAY

See [page 120](#) for this month's subscription offer or visit www.self-build.co.uk/suboffer



Hassle Free...

'Easy Fit'

FLOOR HEATING

...for the same price as a kit!

Save at least 50%

Watch our online videos - you'll soon see if you can 'do it yourself'. Your hands, your labour and our support make for great savings.

Don't worry about getting stuck, we're here to help 7 days a week. Just give us a call and we'll get you back on track in no time.

Even if DIY is not for you, we can help you project manage - either way you'll save at least 50%.

'Easy Fit' have developed professional heating systems designed to be easy to install and maintain. Simply follow our free pipe layout drawing and video tutorials - we'll guarantee that your floor heating will work perfectly...

...or we will replace it free of charge!



INTEREST FREE CREDIT

24 month credit example*:

System cost £1500

Deposit £150 • 24 monthly payments of £56.25
(0% apr Representative)

Total cash price £1500 • Total credit price £1500



Send your plans or room dimensions for a free no obligation estimate to:

plans@easyfitfloorheating.co.uk

Showroom Open
7 days a week



**Easy Fit* Floor*

"Easy Fit were highly recommended because of their Lifetime Warranties and support should we ever need it - we really feel we're in safe hands"

'Easy Fit' - a division of **WUNDA GROUP PLC**

easyfitfloorheating.co.uk | 0800 5420 816



the low energy building system

At **Thermohouse**, we manufacture and install a low energy building system consisting of Insulated Concrete Formwork (ICF) walls together with a low energy floor and roof system giving you a complete airtight, thermal envelope. With Thermohouse, you can expect a healthier indoor environment, a reduction on energy costs, excellent thermal performances (to meet passive standard if required), elimination of all cold bridging, more creative innovative design opportunities, superior structural strength and an easy to install lightweight system with a substantially reduced building time.

Thermorooft Thermofloor Thermowall

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Roof insulation to the highest standard • No roof trusses, therefore full attic space available • Made with two steel beams to take all design loads • Fast, versatile and easy to install • Takes all types of roof covers, tiles and slates | <ul style="list-style-type: none"> • Increased speed of construction • Can be cut on site to meet individual lengths • Spans up to 8 metres • Improved control of the thermal insulation and air tightness between floors • Light and easy to handle | <ul style="list-style-type: none"> • Allows accurate and rapid construction • Efficient sound insulation • Superior insulation significantly reduces energy bills • Meets and exceeds new building regulations • Lifetime guarantee, no rust, rot, condensation, mould, draughts or leaks. |
|---|---|---|



Thermohouse UK Ltd. CDS House, 8 Concord Business Park, London W3 0TR
T: 0208 752 8016 E: kdarmody@thermohouse.co.uk W: www.thermohouse.co.uk

klöeber®



Bespoke glazing solutions in timber aluminium & composite

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



- folding sliding doors
- sliding doors
- french doors
- single doors
- windows
- shaped glazed screens
- entrance doors
- roof lights



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



Visit our showrooms in London, Cambridgeshire and Buckinghamshire, see website for details

telephone
01487 740044

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

September 2015 issue



34



43



50



59

READERS' HOMES

COVER STORY

Double take

34

Guy and Julia Seaton have employed oak and masonry building methods to create a property that combines traditional design elements with modern living

Family matters

43

When Sylvia Walker downsized from a barn conversion to an adjoining stone cottage, there was only one man she wanted to manage the renovation – her son Charlie

The beauty of compromise

50

The Setterfields took on a challenge when they purchased a plot next to a listed property, but tweaking the plans to suit the area has allowed them to accomplish their aims

Open up

59

Rob and Andrea Clarke extended their 1950s detached house and rebuilt the substandard loft conversion to create a contemporary, light-filled space for their growing family

The power of one

66

Damian Helliwell made the bold decision to design and build his own straw bale home on the Isle of Eigg

RENOVATION & BUILDING

Masonry structural systems

74

As well as being a highly adaptable construction method, brick and block is an economical option that can form part of an efficient, comfortable home. Chris Bates explores the pros and cons of this self build favourite

Creating a home for life

79

Designing a property that meets your needs both now and in the future comes with its own set of challenges. We investigate what's involved in establishing an accessible, future-proof living space

Renewable heating & the RHI

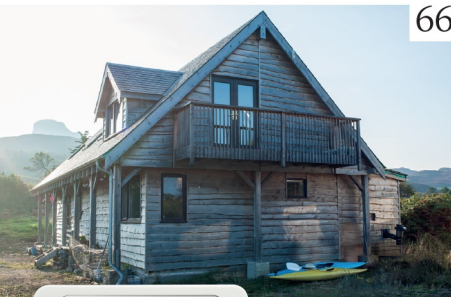
87

From solar thermal panels to ground and air source heat pumps, Emily Brooks summarises the innovative technology that can lower your utility bills and make you money through the government's cashback scheme

Power to you

93

A dynamic, easy-to-control heating and lighting scheme creates a comfortable ambience and could even cut your energy usage. Ifeoluwa Adedjei outlines the essential considerations for devising a system that suits your lifestyle



66



93



74



102

17

87



Britain's
best homes
2015
Page 19

EXPERT HELP

The Build It House 98

Budgeting expert Tim Doherty offers an insight into what it takes to build your own home as he discusses the latest stage of our virtual project. This month, it's plastering and painting

Coastal homes 102

Dreaming of an idyllic life by the sea? Architect Julian Owen explains the design points you need to consider before you start fantasizing about the blissful ocean views

Renovating a listed building 107

Conservation specialist Alan Tierney explains why owners of a heritage property might need consent for alterations that affect unique historical or architectural features

What is the Right to Build? 110

Planning specialist Mike Dade discusses how this government-led initiative could grant individuals and community groups the right to a plot from their council

Starting over 122

Mike Dade investigates an old bungalow – could it be demolished and replaced by a new eco home?

REGULARS

News 11

Build It's favourite finds this month

Letters 27

Oak frame diary 28

Mark & Julia's self build advances as the doors and windows are installed

MATERIALS: Dry Ridge Tiles 85

Ask our experts 118

Subscribe today 120

Plots for sale 125

Next month 137

Coming up in October's issue

Focus on 138

Invisible Homes is mobilising self builders to buy group plots

LUXURY FOR LIFE

Baufritz is passionate about creating a luxurious living environment that's designed just for you. All our homes use an abundance of high quality, natural materials that are completely free of toxins, creating a harmonious atmosphere that looks beautiful, protects the environment and makes you feel good.

*The Pioneer
of eco-homes*



BAUFRITZ

Der Ökohaus-Pionier seit 1896



www.baufritz-bi.co.uk

Find out more about Baufritz and contact our UK office:
enquiries@baufritz-bi.co.uk | 01223 235632





Modern Glass Technology



IQ Glass are the UK's premier residential glazier, specialising in architectural glazing, large sliding glass doors and modern aluminium windows and doors. IQ Glass UK can offer a specialist glazing service to all glass elements of a project.

Contact IQ Glass to visit our showroom – the largest residential glazing showroom in the UK.

IQ Glass can also provide a range of aluminium windows and doors to suit your project requirements from slim framing to large opening sizes and high thermal performance



The Courtyard Showroom, Sky House, Raans Road, Amersham, HP6 6JQ

@IQGlassUK

T 01494 722 880

E sales@iqglassuk.com

W www.iqglassuk.com

HAMMILL PARK

Near Sandwich, Kent

Create your own Grand Design

A rare opportunity to acquire stunning self build plots in a great rural location between Canterbury and Sandwich. Plots start at £225,000 for 0.2 acres to create a 2,500sq.ft house.



Example of a house built by Quinn Estates



View from site

Quinn
Estates

www.quinn-estates.com

T. 01227 831 212

E. quinnestates@quinn-estates.com

inspiration



A glass act

This family home in south west London combines thin-framed architectural glazing with clean lines and white render to achieve a stunning aesthetic effect.

The contemporary five-bedroom property has a strong connection with the garden space via IQ Glass's slim frame sliding glazed doors, which offer views out to the pool.

Structural silicone-jointed rooflights combine with a circular frameless window to flood the rear kitchen-diner zone with copious amounts of natural light. An exposed two-storey stone wall adds interest to the minimalist interiors, while a substantial patio space gives the occupants the option to entertain guests outdoors.

For more details call 01494 722880 or visit iqglassuk.com

PROJECT OF THE MONTH

That's a wrap by Build Team

Making use of their redundant side return has allowed this family to create a bright and spacious lounge, kitchen and dining room extension.

Build Team increased the usable living space in this semi-detached south London home by incorporating a 50m² wraparound. The design and build firm was also enlisted to transform the loft space into an extra bathroom.

The ground floor zone is now bathed in natural light thanks to the addition of a central roof lantern and a set of 7m-wide bifold doors, both of which feature low-maintenance, powder-coated aluminium profiles. The glazed opening leads out to a raised patio area and a compact private garden space.

Internally the new living area also features a cellar conversion. This is accessed by a spiral staircase visible only upon opening a trap door, which is operated via gas-lift struts.

For more information call 020 7495 6561 or visit www.buildteam.com



Zero carbon energy target scrapped

The government's decision to abandon the Zero Carbon Homes policy, introduced in 2006 to ensure all new builds generate as much energy as they use by 2016, has met opposition. "It is short-sighted, retrograde and damaging to the industry, which has invested heavily in delivering energy-efficient homes. We need more housing but there is no justification for building homes with a permanent legacy of high energy bills," says Julie Hiriogoyen, chief executive at the UK Green Building Council.

1 in 5

local councils have already taken action in the quest to help more aspiring self-builders realise their dreams, according to the National Custom and Self-Build Association (NaCSBA). The organisation has found that many have already established a register of people keen on creating their own bespoke home. Its research concluded that the region with the least active councils is London.

Brownfield site to host self builds

Plymouth Council has approved funding for two new bespoke housing projects on a site that was previously used as a youth centre. The £241,048 capital will cover the cost of providing local infrastructure and services for the plots. "Our aims are to help local people into the property market, to provide alternative housing choices in the city and for these self-build sites to act as a springboard to bring forward additional sites in the medium term," says Chris Penberthy from Plymouth Council.

What's on?

ARCHITECTURAL CERAMICS

7th SEPT
£110
SUSSEX
www.wealdanddown.co.uk

SUMMER PROPAGATION

10th SEPT
£29
ESSEX
rhs.org.uk

DESIGN YOUR PERFECT KITCHEN

12th SEPT
FREE
CAMBRIDGESHIRE
selfbuildacademy.co.uk

SOLAR PV OFF-GRID

13th SEPT
£60
POWYS, WALES
courses.cat.org.uk

HISTORIC FINISHES

16th SEPT
£175
HAMPTON COURT PALACE
spab.org.uk

WALLPAPERING

18th SEPT
£149
BREDDBURY, STOCKPORT
thedyschool.co.uk

OPEN HOUSE LONDON

19th - 20th SEPT
FREE
LONDON
openhouselondon.org.uk

LIGHTING MASTERCLASS

22nd SEPT
£35
LONDON
johnnulenighting.co.uk

CLADDING SHINGLES & BOARDING

3rd OCT
£60
POWYS, WALES
courses.cat.org.uk

TIMBER EXPO

6th - 8th OCT
FREE
NEC, BIRMINGHAM
ukconstructionweek.com

BUILDING WITH RAMMED EARTH

10th - 11th OCT
£250
BRIGHTON
brightonpermaculture.org.uk

ASK AN ARCHITECT

31st OCT
FREE
NSBRC, SWINDON
nsbrc.co.uk



Cardiff University builds energy positive house

The Welsh School of Architecture has constructed an affordable zero carbon home in just 16 weeks. The faculty claims that at a cost of £1,000 per m², the build is in line with the normal budget for social housing, which is usually between £800-£1,000 per m². The new property features a host of eco solutions, including solar electric panels on its south-facing roof. "Using the latest technology, innovation and design, it is indeed possible to construct a zero carbon house at low cost and generate long-term benefits for both the economy and the environment," says Phil Jones, professor at Cardiff University. "The cost of our carbon-positive house makes it an affordable option for house builders and we hope that this can be replicated in other areas."

EVENT IN FOCUS

THE BIG GREEN HOME SHOW

23RD - 25TH OCT
FREE

The Big Green Home Show is the UK's must-attend event for anyone wishing to make their home more eco-friendly. With over 75 free seminars and experts on hand to answer your questions, you'll be sure to find the solutions to your project's needs.

www.nsbrc.co.uk

industry news

The perfect self build opportunity

Last month I took a trip to Kloeber's new showroom for a *Build It* reader day. It was a pleasure to meet a select group of self builders in such a wonderful environment; it's a lovely part of the country and the firm has created a spectacular space to promote its range of windows and doors.

My journey took me past the former Ministry of Defence (MoD) site at Graven Hill in Bicester and, not surprisingly, during the day I met a few couples keen to be involved with Cherwell District Council's inspired decision to open up this redundant space for prospective self builders. It still looks very much like an MoD site at present, but it's great to know that's about to change and that the dreams of thousands of self and custom builders will become a reality here in the near future.

Cherwell DC's plans will not be news for many of you, but for those of you that are just about to embark on building your own home, you may not be so familiar with the scheme. This project is the largest self and custom build opportunity available in the UK, which is very exciting.

For all of you looking for a location in the heart of England with access to just about everywhere, you won't find much better than the 187 hectare Graven Hill site. It has received outline planning permission for up to 1,900 new homes and will cover everything from affordable housing (which will take up 30% of the site) through to group and community self build, eco houses and bespoke detached family homes.

The first plots will be reserved for prospective self builders from October this year so if you have not already registered, visit www.gravenhill.org.uk to sign up. The remaining land will be released at a rate of around 200 sites per year over a 10-year period so it will take a while to complete the whole scheme and the planned infrastructure to go with it.

It's certainly going to be a diverse and exciting site and although applications from local residents are set to take precedence, the opportunity is open to all. Some initial indications of plot prices are emerging and while a wide range of budgets will be catered for, you'll still have to demonstrate that you have sufficient funds or access to a mortgage suitable for your design. The plan is for the whole site to be covered by a Local Development Order. This means that provided your plans meet the approved design code and the Plot Passport criteria, which will outline key elements of an acceptable scheme, then there will be no need for a further planning application to approve 'reserved matters' as would normally be the case. I hope this comes to pass because it will make life much easier for both self builders and the planners. With any luck, we are looking at the future of self and custom building, and it's looking great!



MIKE HARDWICK

is a self build consultant and project management specialist. He is the self build representative at NaCSBA and helps to deliver a three day self build course at the NSBRC in Swindon.

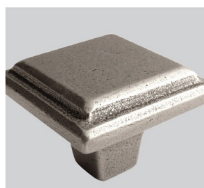
Follow Mike's blog online:
self-build.co.uk/blog/mike-hardwick

IronmongeryDirect

MASTERS OF OUR TRADE

A RANGE TO INSPIRE. A SERVICE TO ADMIRE.

From contemporary to traditional, you'll find the right look with the
UK's Biggest Range of Ironmongery all available the **NEXT DAY**.



Call **0808 168 28 28** or go online to get your **FREE CATALOGUE**

Text: ZY6186Z to 80800
for FREE! Followed by your
name, address and email.



ORDER BY 8PM
GET IT NEXT DAY



FREE DELIVERY
OVER £45*



FREE RETURNS
WITHIN 30 DAYS



MINIMUM
5 YEAR GUARANTEE



LOCKED DOWN
PRICES

CHECK OUT
OUR MOBILE
WEBSITE



CALL 7am-8pm 7 days a week
0808 168 28 28



ONLINE Shop 24/7!

IronmongeryDirect.com

FIND US ON ►

*Ex VAT

spend **v** save

£2,400



Achieve a streamlined finish in your kitchen by installing this modern appliance, which is designed to sit flush with the worktop. You can combine two of the four individual zones to form a larger cooking space for bigger pots and pans. **KM6389 induction hob** £2,400, miele.co.uk

£450



Install this smart 60cm hob that's been designed with direct touch controls to help make cooking a pleasure. It has a pause function, timer, pan detection and a safety lock so you can ensure children won't get their hands on the controls. **BH1645SS induction hob**, £450, baumatic.co.uk

product news

Great shopping ideas for your custom home project



CLEAR VISION

This conservatory employs Pilkington's self-cleaning solar control glass panels to help create a beautiful and practical extension space. **Pilkington Activ**, £POA, pilkington.com



ALL IN HAND

Odd jobs will become a doddle with this updated class-leading tool. Lightweight and lithium battery-operated, it's ideal for a wide range of DIY tasks. **Bosch Ixo IV screwdriver**, £29.99 argos.co.uk

SAFE & SOUND

This award-winning security system uses face recognition technology to help keep your home secure. It sends notifications to any paired mobile device, alerting you when it detects an unknown presence. **Welcome**, £199, netatmo.com



NICE FIT

Specially designed to suit smaller kitchens, this compact electric range cooker will slot into a standard 600mm-wide space. **Everhot 60**, £4,755, everhot.co.uk

3 of the best SINGLE LEVER BASIN TAPS



1 Hero chrome monobloc mixer, £108, hudsonreed.co.uk



2 Strayt monobloc mixer, £155, kohler.co.uk



3 Precision monobloc mixer, £155, mirashowers.co.uk



the **underfloor heating** store



affordable luxury for your dream home!



- ☒ UNDERFLOOR HEATING
- ☒ ADHESIVES & LEVELLERS

- ☒ SOLAR PV SYSTEMS
- ☒ AIR SOURCE HEAT PUMPS

- ☒ THERMOSTATS
- ☒ WET ROOM KITS

...it's what's underneath that counts!

prowarm™
WATER UNDERFLOOR HEATING



from **£409.99**
INC VAT

SOLAR PV KITS



INSTALLATION AVAILABLE
subject to site survey

from **£2499.99**
INC VAT

SAMSUNG
AIR SOURCE HEAT PUMPS



from **£2299.99**
INC VAT

Everything you need under one roof! Discounts available when you buy online, enter this code at checkout: **BIDISCOUNT**

**Homebuilding
& Renovating Show**
25-27 SEPT 2015
ExCel LONDON

SEE US ON
STAND D165
Feel the warmth!

www.theunderfloorheatingstore.com

call today and quote this Ad for discounts

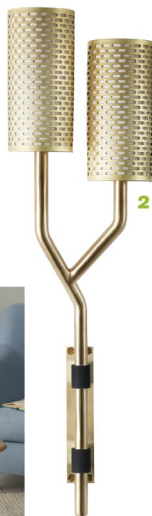
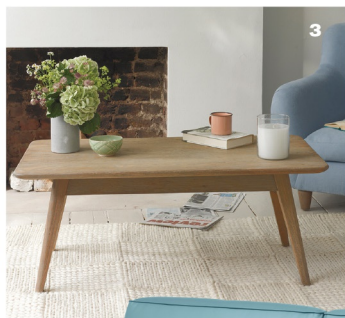
0845 868 6910



**FREE NEXT DAY
DELIVERY**

interiors notebook

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



Shopping list

- 1 Create an ideal setting for entertaining by introducing this elegant coffee-coloured, textured metal table and leather chairs into your home. Omega table, £800, chairs £1,100 each, natuzzi.co.uk
- 2 Add this distinctive hand-brushed brass statement light to your hallway or living room to help you establish a space that oozes wow factor. Yew wall light, £808, bertfrank.co.uk
- 3 Sometimes a simple yet stylish accessory, such as this solid oak weathered-finish coffee table, is all you need to complete your scheme. Hill Billy coffee table, £245, loaf.com
- 4 Designed to provide comfort and a burst of colour, this cotton and polyester mix fabric sofa will liven up your interiors and create a fab focal point. Dagarn sofa, £550, ikea.co.uk
- 5 Brighten up your home by applying this refreshing wallpaper pattern, which combines lime citrus and cool blue hues to great effect. Tempo collection, £29 per roll, galeriehome.co.uk

THE **BIG GREEN HOME SHOW**

**OCTOBER
23rd - 25th**

Show Admission £12 per person or
pre-book your **FREE** tickets on our
website, www.nsbrc.co.uk and use
promo code: **MAGAZINE**

Your key to creating a greener home!

Ask the Experts - FREE Consultations
FREE Renovation House Guided Tours
Live Practical Demonstrations
Trade Village with over 200 Exhibitors
Educational Zone
Theatre with FREE Seminars
Real Life Case Studies
Café & FREE Parking



The National Self Build & Renovation Centre
Lydiard Fields, Swindon, Wiltshire, SN5 8UB
0845 223 4455 www.nsbrc.co.uk

**M4, JCT 16
SWINDON**

Britain's best homes 2015

Every year we see dozens of amazing homes in the pages of *Build It*, and we want you to help decide which has been the best of 2015 in the *Build It Awards*.

The past 12 months have produced some awe-inspiring schemes, showing the breadth of wonderfully individual projects that self builders and renovators create across the UK. It's been tough for the editorial team to whittle them down to a shortlist for *Build It* readers to vote on. But after some impassioned debates, we've settled on six candidates that have wowed each of us for different reasons.

From a heritage-style home snuggled into a tight city plot through to a rural oak frame gem with a build cost that belies its luxury finish, there's something to inspire everyone on this year's shortlist.

Now it's over to you to vote for your favourite and help us crown the Best Self Build or Renovation Project of 2015 – and to whet your appetite here's a rundown of each of the contenders.



in association with BuildStore

CHOOSE YOUR FAVOURITE AT
WWW.SELF-BUILD.CO.UK/VOTE

SENSITIVE MODERN EXTENSION



Fiona and Tim Johnson's light-filled home is an exemplary model of how to sympathetically add space and value to a traditional building. Rather than rush into the work, the couple first took the time to learn about how they interacted with the Arts & Crafts house – not to mention save hard after their budget was stretched to the maximum to buy the south London property.

Personality and relationships were critical to the success of this project, especially when it came to finding the right team. The Johnsons' financial advisor recommended local builders BTL Property, who in turn switched the couple on to Clapham-based architects, Granit.

The practice's design involved demolishing the existing extension and replacing it with a space that made a strong contemporary statement, without overpowering the existing architecture. The steel frame addition features a clever cantilevered roof to create a shaded zone for outdoor entertaining. Slim-framed glazed doors opens up views of the garden, while clerestory windows filter brightness deep into the floorplan.

"I had a picture of my kids doing their homework at the island unit while I was cooking dinner," says Fiona, who was inspired to take on the project by the way her antipodean siblings enjoy their homes. "The light and space we've been able to create is very much akin to Australian living, and it's lovely to have a connection with the garden, which now feels like an important part of our home."



Extension size: 74m² Project cost: £325,000

Read the full story: www.self-build.co.uk/johnson

BUDGET-FRIENDLY OAK FRAME HOME

Serial renovators Colin and Pamela Leech had never taken the plunge on a self build – until they were shown an idyllic plot by Welsh Oak Frame, who had completed an extension for Colin in the past.

The site had already defeated one couple, who divorced shortly after work started – but not before completing the strip foundations. With the footings in place, Colin and Pamela saw a unique opportunity to get the individual home they wanted at a bargain price: they would submit a revised planning application with a reconfigured layout that would perch on the existing foundations.

Since work had started in the early 2000s, technically the Leeches' project only had to comply with the Building Regulations that applied at the time – but true to the intrepid self build spirit they've created a highly-efficient home that exceeds the latest regs. They even future-

proofed the scheme by running extra services to allow for easy expansion in the future.

Once the oak frame was up, Colin took on the mantle of project manager. The couple also worked in tandem with the trades wherever they could, picking up in the evening where the contractors left off: "We used all the offcuts and scraps of 300mm Rockwool to fill up gaps in the internal partitions for sound-proofing," says Colin.

Since completion, their dream home has evolved further: the couple once again commissioned Welsh Oak Frame to add a rear annexe for Pamela's parents. "They managed to create the extension within six weeks," she says. "Our home is now complete and we wouldn't change a thing."

House size: 308m² Project cost: £250,000

Read the full story: www.self-build.co.uk/leech



CANTILEVERED BARN

Alastair and Nicola Pickard didn't let a modest budget get in the way of their dream of creating a unique contemporary home inspired by masterpieces such as Frank Lloyd Wright's Fallingwater, which juts out proudly above a waterfall.

The couple's aspirations have been skilfully interpreted by architects ATA Studio, who initially developed six different designs that addressed the dynamics of this wooded site in various ways. It's perhaps no surprise that it was the most ambitious idea – a cantilevered dwelling – that captured the Pickards' imagination.

"I have a civil engineering degree so constructing such a bold design was hugely attractive," says Alastair. "The thought of sitting in the living area looking out across the waterfall really appealed, and it was an amazing opportunity to make the most of the site.

The Watershed is essentially a linear, barn-style house set perpendicular to the cliff edge.

The floor plan is split over three levels to allow the building to nestle into the site and culminates in the cantilevered living space. A saltbox roof follows the plot's slope and is reflected in the adjacent garage.

Keeping finances under control was central to this project, so lightweight construction was used to reduce the strain on the cantilever and cut overall construction costs. And despite the inclusion of luxury items internally, such as the kitchen's granite worktops and the glass balustrade for the staircase, the project represents true value for money, coming in £500 under budget. That's an astonishing achievement for such a highly-engineered home.

House size: 190m² Project cost: £270,773

Read the full story: www.self-build.co.uk/pickard



CONTEMPORARY CHARM

Working with architect Aaron Chetwynd and the team at Oakwrights, Guy and Julia Seaton have created a quintessential self build that sees a heritage-style facade give way to capacious, light-filled living spaces – complete with a characterful contemporary oak frame.

A first-time self builder, Guy is willing to admit he's gained plenty of know-how from this project. Perhaps the steepest learning curve came with the finances; a classic sticking point for many schemes. "We expected to pay £270,000 to build the main house but it ended up being more like £430,000 – plus the garages and other outbuildings," he says. "The fit-out costs a lot more than you might anticipate, so you get to watertight stage and think you're on the home run, but in fact you're not. If you've not done it before it's really tough – but our home has turned out pretty much how we envisaged."

Financial challenges aside, the couple are delighted with the results. The house ticks all the boxes in terms of



energy efficiency and is kitted out with a 16-panel array of solar electric. The interiors are flooded with natural light thanks to the dramatic glazed oak gables that set this project apart, while top-down brightness is captured via a row of Velux rooflights that help to illuminate the main stairwell.

House size: 270m² Project cost: £647,000

Read the full story: www.self-build.co.uk/season



MODERN HOME ON A SLOPING SITE

Based on Scandinavian and Californian design principles, Martin and Karis Smith's luxurious home brings a slice of mid-century modern to north west England. "I felt that the property we built should emulate the ethos of architects I admire, such as John Lautner, Donald Wexler and Albert Frey, who all incorporate glass, clean lines and seamless indoor-outdoor spaces so effectively," says Martin.

Their cutting-edge contemporary home, developed in conjunction with Reid Architects, does just that. Featuring a steel frame encased in floor-to-ceiling glass and iroko, the starkly-shaped building blends neatly into the tree-lined suburban plot. That's partly down to the natural warmth of the vertical timber cladding – challenging to install but well worth the pain and delays – and partly due to the way the house nestles into the slope.

Packed with natural wool insulation and fitted with solar panels and an air source heat pump, this is a sustainable home finished to a high standard inside and out. Among

the carefully-considered details is the letterbox-format window in the kitchen. This is set at the perfect height for those seated at the dining table to catch views of the garden, where the enveloping mature trees lend a secluded feel to the family-friendly outdoor space.

House size: 241m² Project cost: £399,460
Read the full story: www.self-build.co.uk/smith



RARE LONDON SELF BUILD

With a daughter approaching primary school age and their two-bedroom apartment starting to feel cramped, Matt and Jo Warnes stumbled on an innovative way to navigate the capital's property market by self building on Matt's mother's brownfield plot in south west London.

Both the design and construction of this unusual project were uniquely tailored to the tight 156m² plot, which is set in a conservation area and tucked beside a train line. Matt's research led him to prefab building specialist Hanse Haus to make the most of the site. "Hanse was the only one that could offer a bespoke home with the brick slips and bay window required by the planners," says Matt, who project managed the build. "What's more, they had a can-do attitude and no qualms about tackling what was a particularly difficult plot."

While their plans for a three-storey home were initially met with resistance by the planners and neighbours, the prefab system soon got the locals on-side. "They were visibly relieved when they saw that using this method of construction meant there was none of the noise, dirt and disruption of traditional schemes," says Jo.

The finished house fits beautifully into the Victorian streetscene, while delivering the best that contemporary living has to offer with clean lines, open-plan spaces and excellent levels of energy efficiency.

House size: 140m² Project cost: £464,300
Read the full story: www.self-build.co.uk/warnes



How to vote

Find out more about each of these spectacular homes and vote for your favourite online at:

www.self-build.co.uk/vote



The future of home construction

Hanse Haus is a premium German supplier of turnkey, pre-manufactured ultra-high efficiency homes. Founded as a carpentry business in 1929, it now erects some 400 timber frame homes annually Europe-wide and has been active in the UK since 2006.

To talk to us about your individual requirements, contact us using the details below.

Hanse Haus GmbH

Email info@hanse-haus.co.uk

Telephone 0845 658 9780

www.hanse-haus.co.uk

**HANSE
HAUS**

Genau mein Zuhause.

WIN! £2,000 worth of Kährs oak flooring



Whether you're building a new home or renovating an old one, chances are you're looking for ways to make it as low-maintenance as possible. Installing wood flooring will allow you to do just that.

Engineered timber coverings can help establish a modern or classic finish, and they work efficiently with underfloor heating, too.

Build It magazine has teamed up with expert wood floor manufacturer Kährs to give our readers the chance to update their interior space with £2,000 worth of the Oak Oyster flooring from the Artisan collection.

Featuring a sustainable oak surface layer with a spruce, pine, and poplar core, the Oak Oyster design provides an elegant aesthetic, as well as durability.

It is available in a wide plank format that features distinct bevelled edges and has been hand-scraped to achieve a rustic look.

The one-strip board has a gnarled and knotty appearance, which is further enhanced by a white Nature Oil pre-finish. This protects the wood and allows for easy cleaning and maintenance.

For more details visit www.kahrs.com

**HOW TO
ENTER
THE
COMPETITION**



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

Terms and conditions

One reader will win £2,000 worth of the Oyster Oak flooring from Kährs. 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 September 2015, *Build It*, Castle Media 7 Kings Street Cloisters, Clifton Walk, off Kings Street Hammersmith, London W6 0GY. The competition closes on 1 September 2015. If you enter after the advertised closing date you will not be entered into the competition.

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 A good work ethic

The star letter writer wins an Einhell cordless drill, worth £119.99



What a pleasure it was to read about the Barber brothers' project in Cornwall. These builders are working to the standard that the whole UK construction industry should be striving to achieve. Their ethos of simplicity, attention to detail and standard of design is the winning combination that we usually associate with high quality German package home providers. Their can-do attitude to difficulties on site and common sense decisions on the structure, insulation and services are a credit to their professionalism. As for the result – what a stunning house!

One of the biggest hurdles to creating a bespoke home is finding competent builders who can be trusted to do the job properly. If we can get all UK trades to work to the same standards as these guys, we would increase self build tenfold and raise standards dramatically throughout the industry.

I'm currently working on my own project and am constantly disappointed by the results I get from builders and sub-contractors, so I end up doing a lot of the work myself. That's what made me take the initiative and write in to congratulate these guys. Great house, great job – an inspiration to us all.

Mike Jones via email

Editor's reply: We agree; taking a design-led approach and paying attention to the details can lead to spectacular results! It's great to read that you're embarking on your own project, but a shame that you're finding it so difficult to employ reliable trades. The Barbers used subcontractors they knew and trusted for their scheme; have you tried asking friends and relatives for recommendations?

Working through the plans

I've just read the query published in the August issue of *Build It* in regards to planning issues. I'm actually having the same problem where my local authority is hell bent on designing my house for me. When I read your response about the guidance to councils in the National Planning Policy Framework I was initially encouraged, but then dejected to discover this document only applies to England.

Since the reader who sent in the question doesn't mention their location in the UK they might be north of the border like myself, where the policy is different. Is there any chance of indicating 'England only' in your replies? Or could you quote which Scottish documents contains similar guidance?

Andy, via email

Editor's reply: You make a very good point about the perils of policy differences between England, Scotland, Wales and Northern Ireland. We do strive to point these out where possible; apologies as this one slipped through the net. Unfortunately Scotland's National Planning Framework doesn't contain anything comparable, so it's down to local policy and the vagaries of the planning officer.

WIN! AN EINHELL CORDLESS DRILL WORTH £119.99

Next month's star letter writer will win a TE-CD 18 Power X-change cordless impact drill from Einhell, worth £119.99. This is a practical two-speed power tool that is robust and versatile.

It has three functions, which include screwdriving, drilling and hammer drilling in masonry. It also has a safe stop feature, plus an additional handle for ease of use. For details about Einhell's range of power tools for home and garden call 0151 649 1500 or visit ehnell-uk.co.uk



HAVE YOUR SAY

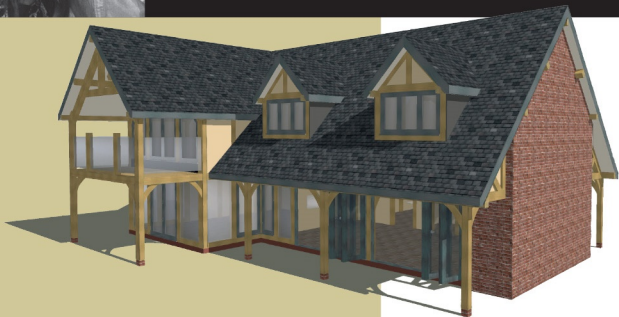
Build It magazine wants to hear from you. Whether you have advice, a self build story or simply want to make us laugh, write to us with your name and address, at **Letters, Build It, Castle Media, 7 King Street Cloisters, Clifton Walk off King Street, Hammersmith, London, W6 0GY** or you can email us on buildit@castlemedia.co.uk. We reserve the right to edit and publish all correspondence



An oak frame

BUILD DIARY

NAMES Mark & Julia Jones
LOCATION Shropshire
PROJECT Oak frame self build
HOUSE SIZE 235m²
PLOT COST £150,000
PROJECT COST circa £400,000
WORK BEGAN November 2014



Mark and Julia fit their windows and doors with a little help from their friends

skills to my own build. I think the fact is that on this scheme I am making more decisions based on my emotions rather than purely business sense, plus I have a tight budget to work with. Together they don't make for a very smooth ride.

I have been focusing on closing in the building for the best part of six weeks since the scaffold came down, but frankly I am making poor progress. With the best will in the world, and given the fact that I live and breathe project management in my professional life, I just cannot seem to translate these

Fitting the joinery

I am finally starting the installation of our doors and windows, which have been sitting around on site for over two weeks now. We've gone for triple glazing and the units weigh an absolute tonne. There is no way I could do this alone so I've enlisted some support. The availability of





friends at the weekend is something I have to factor into all of my plans.

Fitting windows into an oak frame is not the same as in brick and block construction. You've got to consider the gradual shrinkage of the oak members over time. The process involves hanging the frames on stainless steel dowels, which allows for some lateral movement. The gap between window and door frames and the oak is covered with a nice trim or beading. The Welsh Oak system provides for a groove within

the wood for the lead flashing to slip into and perform a continuous weatherproof line. However, great care is needed with the lead detailing on the sills. I also have the issue of air tightness to deal with, and the advice given is that it is best to attach some of the membrane to the perimeter of the window and door frames prior to installation. What I thought would be straightforward is sounding like it's going to be a tricky little job.

The finished item does look a treat. I have gone for quite a contemporary

look with some of the materials I'm using against the more traditional chunky appearance of the oak. I think it's a good combination, but as I know from working with clients daily, beauty is in the eye of the beholder. My bifold doors are also being fitted in the next few days, and they require specialist attention to detail that I cannot provide. In all honesty I didn't fancy doing the job so I called in the experts to complete the installation. I got all my glazing and doors from a company called Valdi who have been fantastic; they've provided quality products when I needed them.

I decided to put in a temporary oriented strandboard (OSB) front door for fear of damaging the nice new shiny one I have had delivered. It cost me a lot of money and the potential of scratching and ruining it is high as it is the main point of entry to the house. Once all this work is done the house will be all but closed in and secure.

Breaking news

There is only one other aspect of the process that has been blighted with unbelievable bad luck and that is my glass rooflight. In my previous diary entry I mentioned that the company was under pressure to deliver it to the site before the scaffold came down, but when it arrived it was





broken. The replacement glass was delivered two weeks later – but unfortunately it wouldn't fit because the frames were made too small. The firm accepted they made an error and offered to resend the part, plus fit it at another date. But it was back to square one again when the next unit arrived and it was damaged – so the saga continues.

As I have reported many times before, the self build journey is a continual process of highs and lows; a veritable emotional rollercoaster. However, there is one piece of good news this week in that it looks like our neighbour won't be troubling us much longer. The property she owns has 'sold' signposted on it. We're now hoping that when the new owners move in they'll be a little warmer.

Out of service

Getting our utilities connected continues to be something of a nightmare for both Chas (who is self

DUCTING FOR SERVICES



Not allowed



Allowed

building on the plot next door) and myself. Trenches need to be dug for both electricity and water services at different depths: 450mm for electric and a minimum of 750mm for water. Both connections would come into the site at a similar point and so it seemed reasonable to dig one trench at 750mm and lay both pipes beside each other. We asked the utility companies to confirm that this would be fine, but getting a response out of them was like pulling teeth. Southern Electric finally came back and said it would be OK, but I left it for Severn Trent to inspect the work and kept my fingers crossed. It's a major inconvenience and a hazard having open trenches crossing the site. Between these and the 200 tonnes of crushed stone, it's like walking through a disaster zone. Actually manoeuvring around is proving difficult. The trip to the portaloo is a major expedition!

Southern Electric signed the work off on their first visit. Severn Trent, whose inspection we had to pay for, were however not happy with the depth of the trench in places; the thickness of the lagging used at the point of entry into house; plus the fact that I ran both electricity and water pipes within the same duct again on entry. I feel that if we'd been

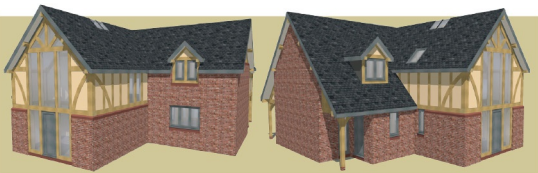
given clear instructions in the first place this wouldn't have happened. This whole thing seems to be based on trial and error, but whenever there is a problem, I have to pay for the re-inspection fee!

We carried out the modifications according to the report and 10 days later we were paid another visit by a different official. He had an issue with the 100mm drain pipes I used as a conduit going into the house; they weren't at the correct angle, nor in one single continuous piece. Lastly, the end of the conduit pipe needed to be sealed up with duct tape. I became very annoyed and called the inspector to ask why there appeared to be a double standard between the two representatives and was told that I would need to pay for a third visit. By then the trenches were filling with water from heavy rainfall, but I was told we were just going to have to put up with it.

Sometimes you've just got to laugh as there's no point in arguing. I have made the modifications and a third inspection has been scheduled. Apart from this entire saga the good news is that I now have permanent electricity supply and a meter to my house, which is great as there's no further need for having extension cables around the site.

NEXT MONTH

FIND OUT IF MARK AND JULIA HAVE MANAGED TO SECURE THE EXTERNAL GLASS RIDGE LIGHT AND DISCOVER HOW WORK IS PROGRESSING INSIDE THIS NEW OAK FRAME HOUSE





**BURG
WÄCHTER**

Recognised worldwide as
'ALWAYS THE SAFE CHOICE'

BURG-WÄCHTER the leading German safe manufacturer is now offering UK customers:

- Safes manufactured to internationally recognised standards with full UK accreditations and insurance approvals
- A comprehensive safe range to meet all requirements and budgets for home and commercial applications
- Certified finger scan technology makes forgetting codes or losing keys a thing of the past - you can't forget your finger!

PRODUCT FEATURE

Combi-Line Approved Fire Safes



- **AiS Insurance Approved**
- **£4,000 cash**
- **£40,000 valuables**
- **Choice of three sizes**
- **Three locking options:** key, combination and finger scan

- **Certified to demanding European fire standards with LPS 30P fire protection certification**
- **Available with the only secure certified finger scan on the market (VdS Tested to EN 1300 Class 1)**

Four market leading models in a wide choice of sizes:

Diplomat

★★★★★



- * £10,000 cash rating
- * 60 minute fire protection
- * AiS approved

Karat

★★★★★



- * £6,000 cash rating
- * Fire resistant properties
- * AiS approved

Combi-Line

★★★★★



- * £4,000 cash rating
- * 30 minute fire protection
- * AiS approved

PointSafe

★★★



- * £1,000 cash rating
- * Motorised bolts
- * Enhanced drill protection

To find out more information on the Burg Safe models visit www.burgsafes.co.uk or for stockists call Burg on 01274 377383 quoting "BurgSafe-C2"

Tel: 01274 377383

E: sales@burgsafes.co.uk

W: www.burgsafes.co.uk

Sterling Locks Ltd, part of the
worldwide BURG-WÄCHTER group



'SUPREME'
ALUMINIUM
GREY OR WHITE
FROM £2289

EXTERNAL
BIFOLD
DOORS
FROM £1419

INTEREST-FREE
CREDIT AVAILABLE
0% APR REPRESENTATIVE

INTERNAL
ROOM
DIVIDERS
FROM £889

'INSPIRE'
FOLD-FLAT
RANGE
FROM £999

SUPREME EXTERIORS. INSPIRED INTERIORS.

CUTTING-EDGE EXTERNAL & INTERNAL BIFOLD DOORS, EXCLUSIVELY FROM VUFOLD.

■ 10 YEAR GUARANTEE ■ PREMIUM HARDWOODS & ALUMINIUM ■ DESIGNED IN THE UK ■ EASY-INSTALL DOOR SETS

Vufold Ltd., Queen's Court, Queen's Avenue, Macclesfield, Cheshire, SK10 2BN. Vufold Ltd is the credit broker and is authorised and regulated by the Financial Conduct Authority.

The credit advertised is provided by Barclays Partner Finance with whom we have a commercial relationship and is the lender. Credit available on orders over £1000 and is subject to status. Prices correct at time of publication. E&OE.

VUFOLD
WWW.VUFOLD.CO.UK
01625 442 899

realising your perfect home.

To achieve perfection, first dream it. Then talk to us.

Everyone has a different concept of perfection. For us, each new project means working with our client to discover what their dream oak framed house would look like. And because we don't simply build homes, but craft them, we realise those dreams down to the last detail.



Contact us today to discover more...
www.welshoakframe.com 01686 688 000
Perfectly crafted oak framed homes



Readers' homes

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT

50



34 DOUBLE UP

The Seaton's inspiring self build looks every inch the quintessential brick cottage from the front – but opens up to a spectacular contemporary oak frame at the rear

43 FAMILY MATTERS

When Sylvia Walker decided to trade in her barn conversion for the stone-built cottage next door, she turned to her son, Charlie to complete a sympathetic overhaul that delivers all the mod cons

50 THE BEAUTY OF COMPROMISE

The Setterfields' new home isn't the traditional oak project they'd originally envisaged – but the modern chalet bungalow they've created suits them down to the ground

59 OPEN UP

With the help of a resourceful architect, Rob and Andrea Clarke have taken a poorly extended 1950s house and reconfigured it to provide a wonderfully light-filled contemporary living space

66 POWER OF ONE

Intrepid self builder Damian Helliwell has single-handedly created a tailor-made straw bale home on the Isle of Eigg for a wallet-friendly build cost of under £60,000



66



59



43

MORE ONLINE >>

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

Double take





THE SEATON FILE

NAMES Guy & Julia Seaton**OCCUPATIONS** Construction manager & IT director**LOCATION** Staffordshire**TYPE OF BUILD** Self build**STYLE** Traditional farmhouse with contemporary elements**CONSTRUCTION METHOD**

Brick & block and oak frame

PLOT SIZE 4.5 acres**LAND COST** £430,000**BOUGHT** April 2012**HOUSE SIZE** 270m²**BUILD COST** £647,500**COST PER M²** £2,396**TOTAL COST** 1,077,000**BUILDING WORK COMMENCED**

November 2012

BUILDING WORK TOOK

45 weeks

Their vision of a property that would combine a traditional brick facade with a contemporary glazed oak at the rear has given **Guy and Julia Seaton** a truly individual new home

WORDS **IFEOLUWA ADEDEJI**PHOTOS **OAKWRIGHTS/JEREMY PHILLIPS**

You'd be forgiven, as you head up the gravel drive to The Green, for assuming that Guy and Julia Seaton had simply built a charming farmhouse in the Staffordshire countryside. The heritage-style brickwork and oak frame sash windows, which are complemented by elegant stone sills and a timber porch, lend the property a chocolate-box cottage air. However, once you enter the house and head towards the rear you come to appreciate the dedication and detail that's gone into merging modern living with traditional style.

Guy and Julia didn't have to think twice about putting in an offer to buy the original dilapidated cottage, set within four acres of land, because they immediately fell in love with the area. "When we went to see the property Julia looked at me and simply said 'yes, I'd like to live here,'" explains Guy. Although he's been working in the construction industry for many years and owns a brickwork sub-contracting company, undertaking a self build was actually Julia's dream – and she'd done her research on how to take the project forward. So when they were faced with a choice between renovating the existing house and knocking it down, the couple knew it made more sense to start over.

Persuading the planners

The Seaton's had clear ideas of what they wanted to establish on the four-and-a-half acre plot; namely a home that would bring together the best of timber and masonry design. "I made some sketches and took them to our architect. He then worked closely with our chosen oak frame provider, Oakwrights – who we felt comfortable with right from the start – to devise a proposal that we could take the planners," says Guy.

Before the couple could get the go-ahead they had to prove to the council that building a new property was more financially viable than refurbishing the existing one. "The cottage was very old and had really low ceilings so to get it habitable we'd have had to change the floor levels and it would have taken a lot of work," says Guy. The Seaton's hired a quantity surveyor to help them get a realistic idea of the costs involved in renovating as well as building



A woodburning stove keeps this family living space feeling cosy during the winter months





The contemporary kitchen adds a pop of colour to the neutral interior scheme

a new house. "Our quantity surveyor made some calculations and gave us some figures. We were able to show that it would cost us more to transform the cottage into a modern and energy-efficient property than to start again," says Guy.

The planners granted permission for the couple's new home in spring 2012 and work was scheduled to start in the summer of that year. However, discharging the conditions the local authority put on the build delayed the scheme. "We had labour ready and waiting to go and we couldn't afford to lose them," says Guy, who acted quickly to move the project forward.

In particular the council wanted more information on how the house would blend into the setting and asked them to produce a landscape plan. "At that stage we had no idea where shrubs would go – we were more worried about pouring concrete," says Guy. The couple put a design together in order to placate the planners, but they were also instructed to conduct a bat survey and had to work around a tree protection order. "These were small nuisances," explains Guy. "We managed to start on the outbuildings first to give us time to have the conditions discharged."

Moving forward

The footings for the stables and garage were laid and preparation for the main house's basement – which would be built using insulating concrete formwork (ICF), a modern masonry system offering an easy route to a waterproof substructure – began at the same time. Guy explains that while digging for the foundations they were lucky to hit bedrock level when they did. If it had occurred any shallower, they may not have been able to create their basement and would have had to install a standard strip foundation. "This was really a great thing as we could put a concrete slab down and build straight off it," says Guy. The subterranean zone has given them an extra 50m² of living space



WE LEARNED...

THE ACTUAL BUILD itself wasn't stressful. It was the external aspects such as waiting for the conditions to be discharged, which are out of your control, that made it difficult.

IT'S EASY to overspend once you get to the interior fittings and finishes stage, so things end up costing a lot more than you initially anticipated. Make sure you have room in your budget for a contingency.

HIRE TRADES that are local to your site and have a reputation to uphold. We knew our contractors already and they all did an amazing job on the project.



and contains a home cinema and plant room. "We really needed that because the planners only let us replace the original 165m² cottage with a structure that was 70% bigger," says Guy.

The couple's dual-style home is the result of combining two principal building methods above ground; a striking oak frame cleverly merges with conventional brick and block. "We built the ICF section of the house up to damp proof course level and then started laying the brick and block to eaves height. While the oak frame was being erected for the rear section we added the trusses, porch, softwood roof and the purlins to the front as well."

Plans derailed

The couple originally wanted to knock the cottage down and build a new home while living in their existing property at the time. They'd hoped to then sell their home to fund the final stages of the project. "We already had a buyer lined up for our converted barn," explains Guy. "But they pulled out because when the plans for the new HS2 railway line were published, it showed it would be running straight through our existing front room."

This left the couple with a financial shortfall as they were relying on the sale of the property to complete the finishing touches. But



Velux windows combine with modern downlights to illuminate the central void and staircase

The Jack and Jill ensuite bathroom on the first floor can be accessed from two of the bedrooms



eventually, after six months of negotiations with HS2, the Department of Transport (DoT) bought the converted barn through a hardship scheme, which was established to allow the DoT to buy from people who could prove they have a need to sell due to the disruption caused by the proposed railway track.

Running the project

Although it was his first time, Guy was confident he could manage the build himself – especially as he had access to trustworthy trades that could help him with the scheme. He focused on making sure that the contractors had all the materials and tools they required to do the job on time. “You’ve got to be on the ball but not look too far ahead, either. I think people can get a bit too organised and order something three months in advance only to find they then need to change it – there’s a balance to strike,” he explains.

The couple didn’t set a schedule, nor does the initial budget reflect the final project cost. “We expected to pay £270,000 to build the main house and it ended up costing £430,000,” says Guy. “I think you’re more likely to underestimate the budget for the internal works rather than overspend on the main structure. The fit-out costs much more than you expect; so you reach watertight stage and think that you’re on the home run when in fact you’re not. It’s also hard to get a handle on different trades doing a range of tasks. Plus you’ll probably end up changing your mind on some parts of the spec. If you’ve not done it before it’s tough.”

Warm & welcoming

Guy and Julia really wanted a house that would be comfortable to live in, so they made sure to pack in as much insulation as possible

to make it thermally efficient. “We used Celotex boards in the roofs and the walls and have installed underfloor heating (UFH) throughout,” says Guy. “Where this has been laid under screed it’s fantastic, but it doesn’t work as well where we have suspended floors because the system takes considerably longer to warm up.”

The couple also chose to install a 16-panel array of solar photovoltaics (PVs), which provides them with more electricity than they use. The panels are sited on the roof of one of their three stables so as not to disturb the aesthetic of the main house. “We are also able to benefit from the Feed-In Tariff,” says Guy. Looking at the figures I think that it was worth installing them; we’ll get our money back in about five to six years.”

The property is flooded with light through the glazed oak gable and via a set of Velux rooflights, which illuminate a stairwell that links the four floors. Exposed oak beams and brick walls combine to bring warmth to the interiors. A neutral palette and elegant, high-quality fixtures and furnishings mean that the decor will not date. Each of the bespoke home’s four bedrooms benefits from stunning country views and has access to an ensuite bathroom.

Guy doesn’t regret a thing about the construction process, but he does wish that the planners had allowed them to build a bigger property. “We’d have loved to have increased the house size by approximately 15%; it is set within four-and-a-half acres of land so it wouldn’t have had much of an impact on the landscape,” he says. Nevertheless, the resulting house is not far off the design that the couple initially took to their architect. “From the front the property looks like a traditional farmhouse but at the other end it’s fairly contemporary. Our home has turned out pretty much how we envisaged it would be,” says Guy.



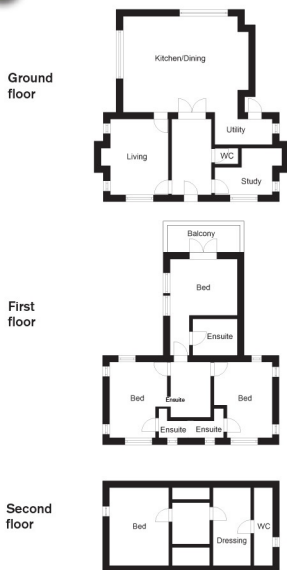
closer look

Picture perfect views...

The Seatons' favourite aspect of the house is the oak frame zone at the rear of the property. It offers fantastic views from the modern kitchen-diner and sun room. Their architect worked closely with Oakwrights to design the two-storey section with its glazed gable-ends. Its visual appeal is further enhanced by its pairing with a large timber feature balcony on the upper storey. This provides a connection between the master bedroom and the external space. Black Pig installed the fixed panes using a face applied glazing system. This method overcomes the issue of potential water ingress when adding glazing to green oak, which is constantly moving while it dries and settles. The glass units are clamped and secured onto the outside of the timber using dry seasoned oak cover boards that will not warp or move. This leaves the oak frame completely visible internally and stops rain water from seeping in.



Floor plans



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



TOTAL BUILD COST BREAKDOWN

Elements	Cost m ²	Cost %	Total cost
Demolition	£15	<1%	\$4,000
Site clearance	£37	2%	\$10,000
House foundations incl basement	£159	7%	\$43,000
House superstructure	£117	49%	\$317,000
External works, fencing /drainage	£156	6%	\$42,000
Garage foundation	£33	1%	\$9,000
Garage superstructure	£170	7%	\$46,000
Stables subs structure	£52	2%	\$14,000
Stables foundation	£189	8%	\$51,000
Capital purchases & consumables	£81	3%	\$22,000
Solar PVs	£20	<1%	\$5,500
Landscaping	£222	9%	\$60,000
Fees	£85	4%	\$23,000
Grand total			\$647,500

Useful contacts

ARCHITECT **Aaron Chetwynd** 01889 270013 www.aaronchetwynd.com
BRICKS **Northcot Brick** 0800 038 9575 www.northcotbrick.co.uk
BRICKWORK **Kre-8** 01785 284542 www.kre-8.com BASEMENT **Polar Wall**
0845 838 2181 www.polarwall.co.uk BUILDERS **MERCHANT Simmons** of
Stafford 01785 227766 www.simmsonsbm.co.uk KITCHEN **English Interiors**
01538 399191 www.englishinteriorsltd.co.uk GLAZING **Black Pig** www.blackpig.me OAK FRAME **Oakwrights** 01432 353353 www.oakwrights.co.uk WINDOWS
Brookeswood Architectural 01538 361955 www.brookeswood.com



BUILDING 'THE WRIGHT WAY'

Over the years we have recognised that every build is different - we have never built the same house twice - and everyone's needs and situations are different. Some self-builders already have their own architect on board and simply employ us to design, manufacture and construct their oak frame and encapsulation system. Other's look to utilise our extensive experience of the industry to help guide them through the full process, from employing one of our skilled Architectural Designers through to accessing the excellent relationships we have with tradesmen in every region.



OAKWRIGHTS®

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

THE INTELLIGENT OAK FRAME



With years of experience of building oak framed homes under our belt, we have developed a simple approach to the overall build process, designed to allow you, the self-builder, more flexibility. We call this Building 'The Wright Way'.





"it's all about the beauty of wood"

Brookeswood's hardwood door and window products will transform your home into something of real beauty.

Designed and meticulously manufactured to last, using the finest timber of your choice, our hardwood door and window systems, folding sliding doors, french doors, lanterns, portico's and staircases will add real value to your home.

To discover how we can transform your home call us now, or visit our website...

01538 361 955
www.brookeswood.com

brookeswood
architectural



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 21st 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.



Tel: 01524 782596
www.lakelandtimberframe.co.uk
email: info@lakelandtimberframe.co.uk
Nationwide service • Free estimates



svarre®

**Window and
Door Systems
All Glass Exterior**



**Unique Danish design ...
triple glazed uw 0.86
1800 Pascal's weather tightness
secured by design certified**

Passivlux

Passivlux Ltd. 6 The Stour Centre,
22-24 Stour Street' Canterbury, Kent,
CT1 2NZ Web: www.passivlux.com
Sample on show at The Building
Centre WC1E 7BD



Family matters



With a complete overhaul and extension, **Charlie Walker** has transformed mum Sylvia's stone cottage to give her the ideal home

WORDS **HEATHER DIXON** PHOTOS **DAVID BURTON**

Sylvia Walker knew exactly who to turn to when she decided to renovate and move into the cottage that she owned next door – her son Charlie. “He was the only man for the job,” says Sylvia, “if he hadn’t taken it on I would have moved elsewhere. I just didn’t trust anyone else to do it properly.” Luckily he was only too happy to help. “I wanted to do it for my mum,” says Charlie. “I lived on the farm as a teenager so it holds special memories for us both. I used to work for my Dad and when he died seven years ago I took over his property business, so



The FB2 double-sided woodburner from Firebelly Stoves cleverly creates a visual divide between the open-plan kitchen and living areas. It keeps both zones warm in the winter



this was a great opportunity to renovate a house from start to finish – and work on the interior design, too.”

Originally, the cottage and adjoining barn had been converted as a single large property, which Sylvia and her husband had then split in two. Sylvia had continued to live in the converted barn and let out the other property until she decided it was time to downsize. “I’d always preferred the cottage, as it seemed more homely to me,” she says. “Historically, it had been a family home that was meant to be lived in. It has an atmosphere that you simply can’t buy, whereas the barn, although lovely, never felt quite as cosy.”

A necessary change

However, after years of being tenanted the cottage was looking tired and the fittings were quite dated. If Sylvia was going to live there she decided that she would need a bigger kitchen, more light and plenty of open spaces. Never one to do anything by half measures, Charlie knew that the best way to achieve this was to strip the cottage back to a shell and start again. This way he could maintain a high spec for the build and keep the project moving at a good pace, while liaising with his mum over the style and design of the interior layout and decor. Key to the renovation was a new extension, which would project into an area designated as both garden and green belt, as well as a partially raised roofline to create more headroom upstairs, with a seamless finish externally.

However, their scheme got off to a rocky start when Charlie and Sylvia spent months negotiating with the planners. When they were finally given the go-ahead, it was on the condition that they only



THE WALKER FILE

NAMES Sylvia & Charlie Walker

OCCUPATIONS Retired

LOCATION West Yorkshire

TYPE OF BUILD Extension & renovation

STYLE Classic contemporary

CONSTRUCTION METHOD Stonework

PLOT SIZE One acre

HOUSE SIZE 177m² plus a double garage

PROJECT COST £254,500

COST PER M² £1,438

BUILDING WORK COMMENCED

January 2012

BUILDING WORK TOOK

14 months

CURRENT VALUE

£500,000

extended over the footprint of an old lean-to and reduced the loft space. "We knew the extension was sensitive and liaised with the planners. Working in Dad's property business has meant that over the years I've developed a really good professional relationship with them," says Charlie. "If you're open to discussion and stay flexible you can usually reach an agreement that works well for everyone."

All in the detail

When it came to the build itself, Charlie refused to compromise, as he explains: "I've inherited my Dad's eye for quality and details, and

I was determined to do the absolute best for Mum and give her the home she deserves." As he lives just 10 minutes away from the family home it was easy for Charlie to be on site every day. He helped to manage the team of tradespeople, while also researching cost effective suppliers, ordering materials and taking a hands-on approach with the development from start to finish.

"I'm demanding but I lead from the front," he says. "I love the whole process of taking something old and tired and bringing it back to life, but I know how I want things done and I won't cut corners. I suppose that can make me difficult to work for but I



WE LEARNED...

LISTEN TO the planners and work with them to get your dream home; they usually want the best for the site just as you do.

DON'T COMPROMISE on the quality of the workmanship – push to ensure high standards throughout.

VISIT THE SITE as often as you can. Being on hand helps you stay on top of the work and make day-to-day decisions, which will keep everything on track.

don't expect anything from others that I wouldn't expect from myself."

The first stage was to strip out everything from the building, including the internal lime plaster from the 600mm-thick rubble-filled walls. Internal walls, ceilings and flagstone floors were also removed, resulting in 20 skips of waste being taken off site.

"You could stand on the ground floor and see right up to the roof beams, with the fireplace openings visible halfway up the walls," says Charlie. "Mum couldn't believe it. When she saw what was happening she put her head in her hands and wondered what on earth we were doing, but I knew it was going to be OK."

Fortunately, the cottage had been fantastically well built on a stone base, which meant the rock-solid walls didn't need underpinning. The roof had also been renewed eight years previously and was completely watertight, while the exterior mortar was also in good condition. This meant they could move straight onto the metre-deep concrete foundations for the extension. With these in place the walls were built to first-floor level in locally-sourced stone and then tied with RSJs into the original part of the house – including two running parallel either side of the log burner where the original fireplace had been.

When working on the outside of the property, Charlie chose to keep the best stone for the front of the house, with the more random-sized pieces applied onto the rear elevation, just as they would have been originally.

Water-based underfloor heating was laid throughout the ground floor, along with 70mm of concrete screed and 75mm of insulation. An electro-osmotic damp-proofing system was installed just above ground level. This works by sending a small electric current into the walls through a series of steel anodes inserted into the brickwork. These repel the rising moisture molecules back down into the ground, ensuring the characterful masonry remains dry and protected.

In addition to these works, the roof over a rear storeroom was removed in order to allow the walls to be built up by seven courses, with new trusses creating the base for a single pitch of reclaimed slates. This has evened out the previously unsightly staggered roofline.

Unfortunately, cold weather hampered the build, which meant the shell took nine weeks to complete. "You can't build below 3°C, so when the conditions were freezing





A heritage-style four poster bed complements the period features, such as the exposed beams in this room

I restructured the timescales and prepared the garage foundations, returning to the main house on good weather days," says Charlie.

The raw, cold winds of winter also prompted Charlie to fit 65mm-thick insulated plasterboard to the inside of all the external walls, with 125mm-thick Kingspan insulation on the extension, to ensure his mum would be warm year round.

Fitting out

The second fix stage of the project involved more extensive research, as Charlie and Sylvia chose the bathroom and kitchen fittings, in addition to practical elements such as plumbing systems that would make living in the cottage much more comfortable.

"Our water comes from a local bore hole that's shared with 12 homes," says Charlie. "However, the water is very brown, so I installed a three-stage filtration system with an ultra-violet bacteria killing device to make sure it comes out as clear and pure as possible. I also installed a silent water pump to achieve the pressure required for the bathrooms, and two tanks so there'll never be a shortage of hot water."

Charlie concealed the pipework in a rat run – a narrow void in the eaves – which means it is hidden away but easily accessible for servicing and repairs. He also ordered more tiles than he needed for the bathrooms to cover for mistakes and broken tiles.

One of Charlie and Sylvia's favourite elements of the house is the staircase, which features the original worn stone steps that have been covered with solid oak treads. The stone's side profile is clearly visible so that old and new are inextricably linked. "If anyone wants to reveal the original steps some time in the future, they can simply take off the treads, which we've stuck down with flexible adhesive," says Charlie. "We had to cover them because in some areas the stone had been worn down by around 60mm, so I thought it was safer to modernise them. I measured each tread individually and bespoke joinery manufacturer Machells custom made each tread on site with a bullnose."

Intriguing challenges like this are exactly why Charlie prefers conversions and renovations to new builds. "It was a tough project but I love the problems an older property throws at you, and the way it evolves during the process. You have to listen to the building and work with it so that, in a way, it takes on a life of its own."

But at the end of the day it's his mum, Sylvia, who has the final word. "I had always wanted to live in this house and Charlie has not only done everything I asked for, but he's also gone the extra mile to make it absolutely perfect for me," she says. "He has put as much time and effort into the elements you can't see, but which are crucial to the quality of the house, as he has into the areas on display. He's really taken a leaf out of his father's book and I'm so proud of him and the amazing home that he's created for me."

A rooftop lets lots of natural brightness flood into this contemporary bathroom space



closer look

Working with period features...

Sylvia Walker's cottage is a 250-year-old property that's part of a larger farm. When working with a period building, try to make the most of its historical features, which may only be revealed as part of the stripping back of the fabric. While it's not always practical to maintain these elements as they stand, they can often be incorporated in the finished scheme. Charlie did a great job of this with the cottage's staircase, where the uneven stone steps have been covered with oak treads. These give a very modern aesthetic when paired with stainless steel and glass balustrading. The solid profiles have been retained, with the plasterwork cut back to the original stone to give a neat finish.

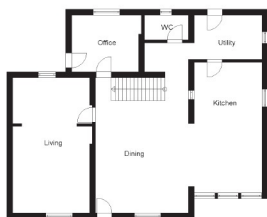


Stepping stones

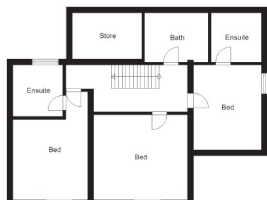


Floor plans

Ground floor



First floor



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



TOTAL BUILD COST BREAKDOWN

Elements	Cost m ²	Cost %	Total cost
Roof, walls & floors, incl garage	£508	35%	£90,000
Windows	£45	3%	£8,000
Labour	£282	20%	£50,000
Bathrooms	£62	4%	£11,000
Kitchen & appliances	£169	12%	£30,000
Staircase	£28	2%	£5,000
Floors	£37	3%	£6,500
Lighting	£23	2%	£4,000
Sockets	£8	1%	£1,500
Bifold doors	£14	1%	£2,500
Tiles	£28	2%	£5,000
External doors	£23	2%	£4,000
Internal doors	£14	1%	£2,500
Door furniture	£17	1%	£3,000
Stove	£14	1%	£2,500
Dining room fireplace	£17	1%	£3,000
Decorating	£17	1%	£3,000
Furniture	£45	3%	£8,000
Landscaping	£85	6%	£15,000
Grand total			£254,500

Useful contacts

ARCHITECT Allison & MacRae 01943 862785 DESIGN & PROJECT MANAGEMENT Beck House Developments 01535 604032
www.beckhousedevs.co.uk KITCHEN Knaresborough Kitchens 01423 862286 www.knaresboroughkitchens.co.uk WOOD FLOORS & STAIRS
 Macchells 0113 250 5043 www.wmacchells.com INSULATION Kingspan 01544 388601 www.kingspaninsulation.co.uk PLUMBING RIS Plumbing 07711 819630
 ELECTRICS Newmark Electrical 07816 661806 BATHROOM FITTINGS Villeroy & Boch 0800 030 4228 www.villeroy-boch.co.uk WOODBURNING STOVE
 Fire Belly Stoves 01422 375582 www.firebellystoves.com FURNITURE Barker & Stonehouse 0333 355 9011 www.barkerandstonehouse.co.uk



ROUND WOOD *of Mayfield*

Win £1000
of vouchers at
roundwood.com



OAK FRAMED GARAGES

Self assembly kits available from
just £2,665 plus VAT
www.roundwood.com

Oak Framed Buildings | Hardwood Decking | Oak & Walnut Flooring | Home & Garden Features

BESPOKE HAND FINISHED OAK
FRAMED HOUSES & EXTENSIONS
GARAGES • SUN ROOMS
PORCHES • ROOF TRUSSES
POOL BUILDINGS • CLADDING
BEAM COVERS



PURE QUALITY,
BEAUTIFULLY FINISHED

OAKMASTERS

oakmasters.co.uk
01444 455 455

The beauty of compromise



A tricky site next to a listed property meant that **Graham and Mo Setterfield** had to review their plans, and they're very pleased that they did as they've created a home that adapts to their changing needs

WORDS JANE CRITTENDEN PHOTOS JAMES FRENCH



THE SETTERFIELD FILE

NAMES Graham & Mo Setterfield
OCCUPATIONS Semi-retired & retired
LOCATION Devon
TYPE OF BUILD Self build
STYLE Modern chalet bungalow
CONSTRUCTION METHOD
 Closed panel timber frame
PLOT SIZE 1,400m² (0.35 acres)
LAND COST £245,000
BOUGHT December 2011
HOUSE SIZE 251m²
BUILD COST £480,000
COST PER M² £1,912
TOTAL COST £725,000
BUILDING WORK COMMENCED
 March 2013
BUILDING WORK TOOK
 Nine months
CURRENT VALUE
 £900,000

Getting the green light to crack on with a self build project is undoubtedly an extremely exciting prospect. But even when you have a plot and finance in place, working out what to build can be a journey in itself – as Graham and Mo Setterfield discovered. “We started talking to oak frame companies at first because we really like the feel and style of these traditional properties,” says Graham. “But the house we actually ended-up building is far more modern, which we like even more!”

Graham and Mo's new direction wasn't so much a change of heart but a realisation that the oak design they liked just wasn't going to be financially viable. After months of discussions and drawings with an oak frame specialist, the build costs were higher than they had at first anticipated, and the local planning authority thought the design was overly large for their site. “I don't think our pre-application sat on the planner's desk for long,” says Graham. “Our plot is next to a Grade II listed building and they wanted our house to be subservient to it.”

A lucky find

The Setterfields first saw the site – the old tennis court of the listed lodge – in 2010. They knew it was in a fabulous part of Branton, Devon, as they own holiday houses in the area and have been coming here since 2001. “The plot is on a nice road and slopes down 2.5m, levelling out where

The spacious kitchen-diner offers Graham and Mo the opportunity to engage with guests while preparing food



the tennis court once was," says Graham. "We knew we would have amazing views over the Taw Estuary and towards Bideford from the upstairs rooms, and it seemed too good an opportunity to pass up."

The couple put in an offer straight away with the intention of building a house for themselves to live in. They were hankering for a lifestyle change with a permanent move to Devon from their Brighton home – but the purchase wasn't straightforward. "The owner of the plot and lodge only wanted to sell on the basis that we made a contract with him to build the house that he had planning permission for," says Graham. "Unfortunately the design wasn't to our liking so we decided not to proceed."

Although they were disappointed, the couple weren't too disheartened as they weren't in a rush to move because they still had their jobs back in Sussex. Then a year or so later the plot came back on the market. "This time the vendor was happy to sell to us, but as he was going to be our new neighbour, we agreed to keep him in the loop with regards to our design ideas," says Graham.

Taking the package route

By now it was 2012, and although Graham was still working and living in Sussex, the couple sold their house to finance the project. They rented locally and the plan was to move as soon as their new

home was built. "This was the start of the exploratory journey that led to us choosing a Potton-designed home," says Graham. "We spent nearly nine months on an oak frame plan before we realised the design was simply too complex, which meant it was going to exceed our budget." So they got in touch with a range of other firms to obtain ballpark figures on the home that they wanted to create. However, nothing seemed quite right, so they decided they either had to find an architect and start from scratch or turn to a package company that could take on a bespoke project.

But while attending a self build show they got chatting with Potton. "By then we realised the structure of the house was as important as the design. We liked the reassurance of the company's building route where the frame is pre-engineered in a factory. We read some good reviews and decided they were a firm that had a decent reputation, and one we could trust," says Graham.

They also liked the company's design flexibility, as it offered a range of styles from ultra-modern through to traditional. So in August 2012 they started talking to their local Potton designer, Sean Adams. "We met with Sean and described the journey we'd been on to get to this point," says Graham. "He listened to our requirements and within days he'd given us a completely different design. And with just a few minor alterations, it was exactly what we wanted."

“We look back at our original design and wonder how we came to it! But it was all part of the learning process; this house is just perfect for us”



Designing for the future

The Setterfields had some key points in their brief. They wanted their new home to have a galleried landing to create an airy hallway space and a downstairs room with an ensuite that could be used as a bedroom for when Graham's elderly mother came to stay. It needed to have a side entrance close to a wetroom to wash off the sand from the beach before coming into the house. The property also had to make the most of the beautiful views at the rear towards the Taw Estuary, which have been encapsulated in the bedrooms, together with large ground floor windows to the living rooms.

Graham and Mo chose high levels of insulation and underfloor heating run by a gas boiler. Additional warmth comes in the form of a woodburner for added comfort, although the reality is that they rarely need to use it. They also specified a mechanical ventilation and heat recovery (MVHR)



WE LEARNED...

HIRE LOCAL TRADESPEOPLE as they will be committed to the area and will want to showcase their best work.

A PROJECT MANAGER is vital if you're working full time, but be sure to choose someone who understands your objectives so you can trust them to act on your behalf when you're not available.

BE ON SITE whenever possible to check finished work is of a high enough standard. If you have the time, think about project managing yourself. If we do this again I'll take on this role as you have more control if things go wrong.

This flight by Stairbox features open risers and glass balustrades, which complement the rooflights to maximise the feeling of light and space



system; a sensible addition for modern homes. "There's only two of us living here so we didn't want the air inside to become stuffy and humid in the bedrooms that we don't use," says Graham. "We thought the MVHR system would be useful to keep the house fresh and draw out the dust, and it's definitely been worth it. At first it was a little noisier than we imagined, but we've now programmed it for lower speeds at night which has reduced the operational feedback."

Initially, the couple thought they would have to build a single-storey house because of the precedent set by the lodge next door. But experience helped Sean liaise with the local authority in a pre-planning meeting, where they agreed the house could be one-and-a-half storey, and consent was given in January 2013.

The Setterfields had hoped they could use the package company's full turnkey service but their site was out of the company's area for this level of involvement, so Potton manufactured and erected the frame, and supplied the windows and doors through Kloeber. They also provided a list of recommended project managers in the region who could handle the remainder of the work.

Trades and rising costs

In March the build commenced with a project manager on board – contracted by Mo and Graham – who drew up a cost schedule based on the couple's £360,000 budget. This included his fee (a percentage of the total) but excluded the £30,000 for external landscaping, which the Setterfields organised themselves. The beauty of choosing a package route is that once underway the build is well-organised;

and work progressed smoothly with Potton's timber frame going up without a hitch. However, things changed when they reached second fix stage and the costs started to inch up, with some of the trades coming in higher than forecast. "An extra £50,000 was justifiable to a point as we changed the spec on a few things like the flooring and kitchen," says Graham. "But I was frustrated because the commitment to the quality of the finish was still a challenge, despite us increasing the budget."

With hindsight, Graham feels that part of the problem came down to not using local tradesmen on the project. "Some of the guys were travelling two hours from Plymouth to work on our scheme and it was a constant headache to get them focused on detail," he explains. "We would have been better off if we'd sourced local people with personal recommendations, who would have had more of a reputation to maintain in the area."

By now a turn of events in Graham's job meant he had been able to take early retirement, and the couple left Brighton to stay locally in a holiday home. "This was fortuitous as I could be on site all the time and check the work," says Graham. "For example, I noticed the wrong plasterboard had been used in the bathroom, and if I hadn't been around it would've been plastered over and we'd have been none the wiser until a problem cropped-up."

Despite some tense times during the final stages, by the end of the year Graham and Mo had moved in while the decorators were making the finishing touches to the couple's new home.

The Setterfield's house was almost complete by the time Christmas rolled around and they threw a big family celebration. Although their journey to this point was far from easy, they're both really pleased with the setup of their new home. "We think that our designer Sean did a great job creating something that worked for us and the planners – last weekend we had four couples come to stay and we didn't feel cramped at all, yet the space also works really well when it's just Mo and I," says Graham. "We look back at our original design and wonder how we came to it! But it was all part of the learning process; this house is just perfect for us."



closer look

Vernacular influences

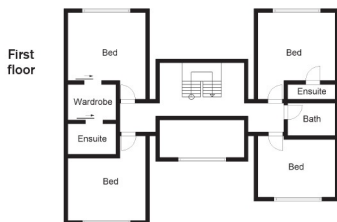
The Setterfields initially wanted an oak frame house. This was rejected at the pre-planning stage for being too overbearing next to the Grade II listed property. The new Pottton design took this into account, and in a second pre-planning meeting, also attended by the heritage and conservation officer, demonstrated how the scale and mass could be reduced. The house and garage occupy 15% of the site with the ridge height at 6.6m, in line with the eaves of the neighbouring property. The house has rendered walls and natural slate on the roof ensuring it's in keeping with the area.



Slate roof



Floor plans



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



TOTAL BUILD COST BREAKDOWN

Elements	Cost m ²	Cost %	Total cost
Project manager, insurances & professional services	£104	5%	£26,000
Groundworks & landscaping	£518	27%	£130,000
Scaffold	£32	2%	£8,000
Timber frame, windows & doors	£574	30%	£144,000
Roofing	£60	3%	£15,000
Electrical (including labour & Lutron system)	£64	3%	£16,000
Plumbing (including boiler & under floor heating)	£64	3%	£16,000
Trades (carpentry & labouring)	£68	4%	£17,000
Plaster & rendering	£100	5%	£25,000
MVHR	£28	1%	£7,000
Staircase	£32	2%	£8,000
Kitchen	£68	4%	£17,000
Bathrooms	£44	2%	£11,000
Flooring	£44	2%	£11,000
Decorating internal & external	£36	2%	£9,000
Utilities	£20	1%	£5,000
Other materials	£48	3%	£12,000
Woodburning stove	£12	1%	£3,000
Grand total			£480,000

Useful contacts

PACKAGE COMPANY Pottton 01787 876400 www.pottton.co.uk **EXTERNAL WINDOWS & DOORS** Kloeber 01487 740044 www.kloeber.co.uk **BATHROOM DESIGN AND BATHROOM FITMENTS** Mayflower Bathrooms 01823 865663 www.mayflowerbathrooms.co.uk **KITCHEN DIY Kitchens** 01977 608418 www.diy-kitchens.com **KITCHEN DESIGN I-design** 0844 414 6044 www.i-designkitchens.com **MECHANICAL VENTILATION & HEAT RECOVERY** Service Vent 01293 404342 www.servicevent.co.uk **STAIRCASE** Stairbox 01782 832555 www.stairbox.com **ELECTRICS** PT Electrical LIGHTING SYSTEMS 01422361357 **ELECTRICAL SUPPLIES** Expert Electrical 01708 860011 www.expertelectrical.co.uk **TILES** Hampshire Tile Warehouse 0333 355 7485 www.htw.co.uk **LIMESTONE FLOORING** My Stone Floor 01509 416557 www.mystonefloor.com **ENGINEERED OAK FLOORING** JF Joinery 01598 740197 www.jfwoodflooring.co.uk **EXTERNAL GLASS BALUSTRADE** Any Weld 01271 860794 www.anyweld.co.uk





POTTON
A KINGSPAN COMPANY

Visit Our Self Build Show Centre



MILCHESTER



WICKHAMBROOK



CAXTON



GRANDSEN

Our stunning show homes will
inspire your imagination.

Four of our stunning self build designs have been brought to life at the Potton Self Build Show Centre in St Neots, Cambridgeshire.



"We visited the show centre and were able to walk around the houses and get a real feel for the design."

Carol & Andy Whitehouse

"After visiting the Potton Self Build Show Centre we loved the look and 'feel' of the Gransden so much, we knew that was the style we wanted to base our new home on."

David Peake



**SELF BUILD
SHOW CENTRE**
ST NEOTS
CAMBRIDGESHIRE
PE19 1RG

**VISIT OUR RUSKIN
SHOW HOME**
AT NATIONAL SELF
BUILD & RENOVATION
CENTRE, SWINDON
SN5 8UB

SHOW CENTRE OPENING TIMES
TUES - FRI:
9AM - 5PM
SAT:
10AM - 4PM

Visit Potton.co.uk/showhomes to find out more

BEAUTIFULLY TAILORED



◀ SIP design
& Manufacture

◀ Full house kits

◀ Extension kits

Sipco have successfully completed over 200 projects to date.
We can provide references on our work and welcome potential clients
to visit our production facility to discuss their requirements with our
technical team.



◀ Contact Information

please visit our website
www.thesipcompany.com
or alternatively email
info@thesipcompany.com
0844 335 3997



0330 0881 189



“ Ultimately, it is our ambition to improve the built environment by incorporating
innovative ideas and sustainable materials, resulting in beautiful architecture and
first class quality.... somewhere you FEEL at home. ”

🏠 FULL TURNKEY 🏠 PROJECT MANAGEMENT 🏠 WATERTIGHT STRUCTURES 🏠 DESIGN & ENGINEERING 🏠 ALL BUILD SYSTEMS

0330 088 1189 |

info@feelinghomes.com |

www.feelinghomes.com



Open up

The **Clarkes** have created a pleasing family home by adding a light-filled rear extension and rebuilding a loft conversion

WORDS JANE CRITTENDEN PHOTOS ALISTAIR NICHOLLS

Rob and Andrea Clarke bought their Hertfordshire home in 2009 in the middle of the recession, and although they're delighted with the house now, it certainly wasn't love at first sight. "There weren't many houses on the market at the time, and in fact we'd seen this one the year before," says Rob. "We deliberated a bit, went back to have another look, and decided to go for it because we really liked the big garden."

At the time, son Ollie was a toddler and Andrea was pregnant with Isla, so the idea of taking on a renovation project seemed like a big mountain to climb. The 1950s house was liveable but not in great condition, particularly as the central heating system was on its last legs. But the biggest problem was that it had been poorly extended.



Large sliding doors allow light to flood in and offer a good link to the outside space



Rob couldn't stand up in the loft conversion, and the rear addition had two poky bay windows either side of patio doors, which stepped steeply down into the garden. "We couldn't see the garden without standing up and looking out of the window," says Rob. "The whole downstairs arrangement just didn't work well at all."

Discovering the possibilities

Soon after Isla was born, the Clarkes started thinking about the changes they might make. It was clear they needed to decorate, renovate and create more space, with a better flow between zones to suit their growing family. But beyond these initial thoughts, they weren't sure how to make it happen – until they visited their friend Neville Morgan, an architect who runs Architecture25.

"Neville invited us to take a look at his house," says Rob. "We really liked his contemporary approach to design and the level of detail he had applied to the finishes in his home. It's similar in layout and age to ours so the visit really opened our eyes to the possibilities of what we could do." One feature in particular attracted the couple's attention: "Neville has an amazing loft space with sliding glass doors overlooking the garden. He also has a separate office leading from the master bedroom and ensuite. I quite liked that idea because I work at home a lot and wanted to have my own space," says Rob.

The couple came away buoyed with enthusiasm and were so confident in Neville's abilities they asked him to remodel their home, without seeing any other architects. "I didn't need to go elsewhere as

Below: Cleverly-positioned rooflights illuminate this modern kitchen and dining zone

THE CLARKE FILE

NAMES Rob & Andrea Clarke

OCCUPATIONS Type designer & solicitor

LOCATION Harpenden, Hertfordshire

TYPE OF BUILD Renovation & extension

STYLE Contemporary update to a 1950s house

CONSTRUCTION METHOD Steel frame & timber studwork extension

HOUSE COST £800,000

BOUGHT March 2010

HOUSE SIZE 250m²

PROJECT COST £420,000

COST PER M² £1,680

TOTAL COST £1,220,000

BUILDING WORK COMMENCED November 2012

BUILDING WORK TOOK 52 weeks

CURRENT VALUE £1,500,000

“The rooflight is incredible – just being able to see the sky all the time is the best feature”



Neville and I got on and saw things the same way," says Rob. This gut feeling paid off, because as soon as he and Andrea saw the first set of plans, they were bowled over by the design.

Neville proposed they completely rebuild the loft area plus demolish the old extension and create something new. There was dead space to the side of the house behind the utility and garage so he suggested an L-shaped design. However the real showstopper was the glazed rooflight that delineates the existing house and extension. "It looks amazing and lets the light in throughout day," says Rob. "Even when it's raining it's bright in here."

Permitted development?

The Clarkes wanted to maximise downstairs floor space for their growing family and hoped to extend out the back of the house by six metres. Planning requirements dictated this had to be done without infringing the right to light for the adjoining properties. Neville's solution was to introduce a 45° angle on one side, which has also stopped the ground floor from feeling boxy.



By now it was summer 2010 but as a designer Rob could appreciate Neville's considered approach and methodical thinking to the plans. He was happy that the process wasn't being rushed. "We're very similar people and we were both very passionate about the project and wanted to get it right," he says.

Neville was advised by the local planning authority to make a separate application for the work at loft level, so he submitted the Clarkes' plans for the extension first. In September 2010 the scheme was granted approval without a problem.

Meanwhile, Neville had been finishing the design for the loft. He was proposing alterations to the roof that meant removing the side staircase dormer, changing the shape from hip to gable, adding a rear dormer and two front rooflights. At the end of October he applied under permitted development (PD) rights for a Lawful Development Certificate (LDC). As the rules for PD can be open to interpretation, the LDC would give the Clarkes peace of mind that the design complied. But the planners refused to issue the certificate on the basis the roof alterations were too big, and the materials didn't match those in the existing house. The LDC was finally issued at the end of September 2011, a year after the ground-floor extension had been approved. Neville prepared the tender document for the whole project and put it out to builders he knew had a good reputation. The couple also had a quantity surveyor cost the project, who calculated it would cost £300,000.

WE LEARNED...

NEXT TIME I would ask our builders to source all the glazing and the kitchen, as that's where we lost the most time and money. Giving someone responsibility for this would have been helpful.

I'M GLAD we decided to use an architect to help us improve the house design as the layout works really well now.

IT WAS IMPORTANT we got the project right for our neighbours as well as for us. If we had fallen out with them then we may have ended up having to move.

"We spent much more than that in the end," says Rob. "But that was because we increased the specification – I would always end up choosing the most expensive products! The contractor was good though and helped us save on items like the flooring, which he found in a similar look and spec for £20,000 less than I'd seen."

Builders on board

Neville recommended contracting firm DA Rowley, as he felt it could produce the high-spec finish that Rob and Andrea were looking for. The Clarkes were given a fixed price of £320,000 (for the construction element alone) and the builder was on board by summer 2012. The agreement was drawn up using the JCT's minor works building contract, with Neville as the contract administrator so that Rob could focus on his job. The project had been a long time coming – but it gave the couple more time to save.

Work commenced in November 2012 when the rear extension and loft were demolished. The family had moved into a rented house, expecting to complete in nine months, but almost immediately after trades started on site, heavy snow arrived.

"We weren't lucky with the weather but the team were fantastic," says Rob. "They kept the site tidy and cleaned the neighbours' cars when they got dirty. I'd recommend them. They made the project very straightforward and never pulled the wool over our eyes."

Initially the scheme was progressing quite smoothly, but then Rob and Andrea discovered they needed a new drainage soakaway at a cost of £4,000. The existing setup wouldn't be able to accommodate the increase in surface water created by the new design, and the local water authority wouldn't permit the couple to divert it to the main sewer.

Then a major problem occurred with the glazing, which delayed the project for three months. Rob says the specialist supplier kept delivering the glass in the wrong size. "It was a surprise for everyone as they had a good reputation, and Neville said they'd performed well on previous jobs with him," says Rob. The delay held up the trades, who needed to finish off inside but couldn't until the house was watertight.

Then around the same time, the kitchen company the Clarkes were using went bust, taking their £10,000 deposit (they managed to reclaim this from the credit card company in the end). Rob had done his homework and was just unlucky. "They were recommended by neighbours and had done a few kitchens in the area," he says. "Neville came to the rescue again and found us another supplier. They did have problems fitting the units around the angle but we got there in the end."

Celebrating the details

After almost five years since the Clarkes bought what was to become their family home, the project is finished. The couple believe that Neville's attention to detail in the lengthy design process has certainly reaped rewards. It's elements like the shadow gaps, the open staircase to the loft and the glazed roof lighting strip that really set this house apart, as they seamlessly bring together the old and the new.

WHAT IS A LAWFUL DEVELOPMENT CERTIFICATE?

Obtaining a Lawful Development Certificate (LDC) is advisable when it isn't clear whether your project falls under permitted development or needs planning permission. Ultimately it gives you peace of mind that your building work is lawful, and it will be invaluable when you come to sell. Feedback from an LDC application can show how plans can be altered to meet permitted development rights requirements or if the owner needs to apply for full planning permission. The Clarkes applied for a LDC for their loft, which to their surprise was refused – they took it to an appeal and it was decided that the council's calculations about the size of the loft had been incorrect. However there was a wider issue about the use of materials and the glazing configuration. In the end the Clarkes changed their design to get the LDC, rather than slow up the project by applying for full planning permission.

The family has gotten used to the space quite quickly but they haven't forgotten what the house was like before. "To say our home has transformed our lives is dramatic, but it has certainly changed the way we live. We like that it's very open and not cold and draughty any more. And the rooflight is incredible – just being able to see the sky all the time is the best feature. People say that walking in here is like coming into a tardis!" says Rob Clarke about the renovated 1950s house he shares with his wife Andrea and children Ollie and Isla. "We love the open-plan design and despite the difficulties with our planning application, we really feel we got as much out of the space as we could."



Neutral fixtures and fittings combine with a well-placed rooflight to help maintain a bright shower zone

closer look

Space saver

The Clarkes have used pocket doors to make their space minimal and clutter-free. Unlike a traditional door that swings outward or inward on hinges, pocket versions slide back into a cavity hidden in the wall. They're a practical option for awkward spaces – small bathrooms or galley kitchens, for example – but can be used anywhere to enhance a clean-lined modern look. The Clarkes' doors, from Portman, are designed to be concealed within a studwork frame, with a track mounted along the top and a channel at the bottom along which the door slides. It is easier to install pocket doors in this type of partition – solid masonry walls will need a section removed before a lintel is installed over the top; a metal cassette forms the cavity.

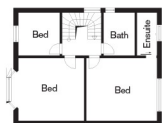


Floor plans

Ground floor



First floor



Second floor



Elecosoft

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



TOTAL BUILD COST BREAKDOWN

Elements	Cost m ²	Cost %	Total cost
Preliminaries	£89	5%	£22,300
Demolition	£58	3%	£14,400
Drainage	£36	2%	£8,900
Foundations & slab floors	£98	6%	£24,600
Structural steel	£49	3%	£12,200
External walls	£109	6%	£27,300
Roof structure & covering	£129	8%	£32,200
Insulation	£92	5%	£23,000
Glazing	£184	11	£46,200
Internal works	£211	13%	£52,900
Joinery & fittings	£180	11%	£45,000
Plumbing & heating	£81	5%	£20,300
Kitchens & bathrooms	£129	8%	£32,200
Electrics	£94	6%	£23,400
Decoration	£61	4%	£15,200
External works	£80	5%	£19,900
Grand total			£420,000

Useful contacts

ARCHITECT **Architecture25** 020 8444 1868 www.architecture25.co.uk STRUCTURAL ENGINEER **C&R Design** 020 8361 6827 www.cr-des.co.uk
PARTY WALL SURVEYOR **Joel Michaels Associates** 01238 822200 BUILDING CONTROL **Thames Building Control** 020 8459 8118 www.thamesbuildingcontrol.co.uk DRAINAGE DESIGN **Infrastructure Design** 01858 411570 www.infrades.co.uk MAIN CONTRACTOR **DA Rowley** 07976 762990
www.darowley.co.uk HEATING/PLUMBING **SW Hunt** 01277 623049 ELECTRICS **JS Williams Services** 01277 654370 GREEN ROOF **Baude** 0845 271 8800
www.baude.co.uk PATIO DOORS **Technical** 01924 292323 www.technical.co.uk KITCHEN **Burbidge** 024 7667 1600 www.burbidge.co.uk LIGHT FITTINGS
Sparks Electrical 020 7263 8007 www.aparksdirect.co.uk INSULATION **Natural Building Technologies** 01844 338338 www.natural-building.co.uk FRONT
DOOR **Urban Front** 01494 778787 www.urbanfront.co.uk POCKET DOORS **Portman** 01462 444466 www.portman-pocketdoors.co.uk TIMBER FLOORING
The Natural Wood Floor Co 020 8871 9771 www.naturalwoodfloor.co.uk UNDERFLOOR HEATING **Nu-Heat** 01404 549770 www.nu-heat.co.uk RADIATORS/
TOWEL RAILS **ZEHNDER** 01276 605855 www.zehnder.co.uk



Traditional

Contemporary

Replacement

Future Proof
Your New Home
Choose Fabric First!

Budgeting ■ Design ■ Planning ■ Building Regulations ■ Fixed Price Build Quote

Freephone 0333 001 5128

www.designandmaterials.uk.com

44 Years of Self-Build Know How



urban|front

steel reinforced
natural hardwood doors

entrance doors
internal feature doors
garage doors
passive house certified doors
made and designed in UK

urbanfront.co.uk
01494 778787

10 YEARS
IN THE
MAKING
2008-2018

oversized doors now available

100%design® visit us at stand e228



Damian Helliwell's straw bale home is testament to what can be achieved with enthusiasm a great eye for design and a dose of true self build grit

WORDS JENNY MCBAIN
PHOTOS MARGARET SORAYA

The power of one



Folk musician Damian Helliwell was brought up on the Isle of Eigg, which is owned by the eponymous Eigg Heritage Trust, a community organisation that oversees the island and ensures sustainability. This was set up to combat years of mismanagement by absent land owners, which provoked the loss of the community's young people as they moved away, leaving many homes neglected. With its remit including land reform and the provision of housing on Eigg, the trust put in place schemes designed to persuade residents to return and help revitalise island life. After living in Edinburgh for over a decade, Damian came across a once-in-a-lifetime opportunity from the trust, which was offering plots to ex-residents on a shared equity basis. This meant that he didn't have to pay for his site, as it remains in trust ownership, although any building on it would legally be his. This spurred his decision to return home and embark on a self build journey.

An alternative route

Innovative in his approach to music, Damian applied this same spirit to his project and chose straw bale as the structural system, even though he'd never actually seen a home completed using this method. "For me, the main reason for building a straw bale house was that it has a low environmental impact compared with many other construction methods, although it is a lot more labour intensive," he says.

In preparation for his project, he immersed himself in books and websites about straw bale and sustainable routes to housebuilding, although reading about the system was only ever going to take him so far.

Damian was very aware that the fabric of the building would need to be robust enough for island life. He knew he had to ensure that his house could withstand the horizontal rain and gale force winds typical of the area. It would also need to resist the elements during construction, when it would be at its most vulnerable. This is because it is vital when building with straw to keep the material as dry as possible while the walls go up. "From the outset, I had to pay close attention to every little detail of the process. I had to run through the principles from the ground up to allow for all eventualities, especially as I couldn't find relevant examples of exactly what I was trying to do," he says.

However, the first step was to come up with an approved design and in true pioneering spirit, this was done without the assistance of an architect. He did however, get lots of advice, especially from straw bale builder Andrew Morrison, whose website StrawBale.com is a vital tool for anyone planning to create a home using this system. "In reality, anyone can design a house as all you really need is a piece of paper. Quite simply you draw what you want your house to look like. The important element is that you need to have a practical mind and a good understanding of the material dimensions, such as the wider wall depths that result from using bales."

Planning the dream

Damian was faced with two main challenges: he wanted to complete the house on an incredible budget of less than £60,000; and was determined to do almost all the work by himself – a desire that underpinned the affordability of the build.

Below: Douglas Fir timber cladding has weathered to a beautiful silvery hue, helping the new structure blend into the rugged scenery

THE HELLIWELL FILE

NAMES Damian Helliwell & Jenny Hill
OCCUPATIONS Musician & composer
LOCATION Isle of Eigg
TYPE OF BUILD Self build
STYLE Chalet bungalow
CONSTRUCTION METHOD Straw bale & post and beam
PLOT SIZE 0.25 acres
LAND COST Trust-owned
HOUSE SIZE 150m²
BUILD COST £59,200
COST PER M² £395
TOTAL COST £59,200
VAT RECLAIM £6,130
BUILDING WORK COMMENCED Dec 2008
BUILDING WORK TOOK Three years



With the drawings done, getting planning permission proved relatively straightforward. The trust was satisfied with the structural engineer's report and were happy with the construction method,



I LEARNED...

DON'T BE intimidated by elements that you don't know anything about; building a house is not very difficult if you break it down into manageable stages.

IF YOU'RE planning to be hands on, find out as much information about your build system as you can before you start.

IF YOU can't find what you want, have a go at coming up with something yourself – many techniques are very adaptable.

especially as it's a system that is both sustainable and affordable, with a low environmental impact.

From his research, Damian learned that there are two principal methods of straw bale construction. One is a load bearing system where the compressed bales support the roof. The alternative is to build a timber frame and use the straw as infill. But Damian felt that neither of these was quite right for him, so he opted for a hybrid system, which he refers to as retrospective load bearing. "I erected a freestanding post-and-beam frame, and then went on to complete

Above and opposite: The post and beam elements, which remain exposed, complement the bespoke wood interior fittings





the roof. From this point the wall could be infilled, with the bales stacked in the same way as they would for a conventional load-bearing straw bale construction. Once compressed they contributed to the structural support offered by the frame, helping to share the weight of the roof and any imposed loads, such as snow," he explains.

Going it alone

The build took over three years with Damian working alone and living in a caravan on site for most of the time. Although progress was slow, it mainly went smoothly. However, it wasn't all easy, as going solo meant he had to come up with new ways of working to complete jobs that would normally require several people. There was one particularly heart-racing moment (not to be tried at home) when it came to putting the three-piece ridge beam in place. Damian had created a block and tackle pulley system, and was inching the timber into place using his car. "As I was doing this by myself I had to repeatedly move the car slightly, get out, climb up to the second storey to check the progress and then repeat the whole thing, until finally the beams were in the right place," he says. "It was a lengthy process, and it could all have gone wrong, but my calculations were spot on and the timbers slotted into place, which was a huge relief."

With the timber frame in position, Damian again came up with a practical solution to his build, and wrapped the entire structure in



breathable plastic sheeting to create a watertight envelope. This meant that he could infill the frame with the bales while ensuring they remained dry throughout the next stage of construction – crucial in an area with notoriously changeable weather.

Unfortunately, one night gale force 10 winds struck and the exposed frame took the brunt of the impact. "I discovered that the whole house had shifted slightly off square. I had to use a manual winch, normally employed for hauling felled trees, and pull the entire frame from one corner to straighten it out, it was a nerve wracking incident but it worked out," he says.

Another complication arose when Damian discovered that he had an allergy to straw, which only became apparent when he started to infill with the bales. But ever undaunted, he donned a mask and carried on, finally completing the walls.

The next stage was coating the surface with lime plaster and render, a process that strengthens them while maintaining their breathability. For this stage, Damian sought professional advice from specialist company, Masons Mortar. Typical of his DIY approach, he undertook the work himself, although he deviated from convention in the type of mesh he used on the interior of the build; a decision that he came to regret. "I decided to use plastic rather than metal mesh, which turned out to be a big mistake," says Damian. Although it's a bit more expensive, metal is much simpler to work with as the

plastic just pulls taut and you can't shape it easily. Metal, however, can be formed around corners and used to create sills and details, making the job of plastering less challenging."

Externally, the house is clad in untreated cedar which, thanks to the weather, has quickly faded to its natural silvery grey, helping the building blend in with the muted colours of the island. This patinated wood, along with the slate roof, gives the property a modest, conventional appearance that belies the degree of innovation and effort that went into its construction.

Inside, the true beauty of the house is revealed in its exposed timber posts and beams, with the warm tones of the Douglas fir complementing the oak floor. The posts define the look of the open-plan kitchen and dining area. This leads on to the master bedroom, bathroom and a second bedroom, which are also on the ground floor. But it is the double-height studio that is the crowning glory of the house, with its tall window that frames a view of An Sgurr, Eigg's highest peak. The roof of the house overhangs the walls slightly at

the front and side, and in the studio this has created a unique wraparound shelf. Above this room is a galleried mezzanine area, containing a third bedroom with double doors opening out onto a balcony. "I spent a long time calculating the angles for the balustrades that surround the gallery in the studio, as I wanted them to form an embrace around the central space," says Damian.

Living in the house has been everything Damian hoped for. He loves the studio, which is filled with musical instruments. "I've used it for recording with Metta, the group I'm in, and the sound quality is faultless. Straw is a highly insulating material, which means it's also excellent for soundproofing. We can be recording an album in the studio but the rest of the house is amazingly quiet," he says.

After immersing himself in his building project for up to 16 hours a day, Damian is now enjoying life in his innovative home, where he now lives with his partner and fellow musician Jenny. "It's such an easy building to live in," he says, "and we have no intention of ever moving away from the island again."

closer look

Well connected...

Eigg is an unusual island due to the trust that runs it, which is made up of the Eigg Residents' Association, The Highland Council and The Scottish Wildlife Trust. The organisation has an extremely sustainable approach and actually owns the island. As well as its innovative land and housing policies, it has also ensured that the community is almost completely self-sufficient in terms of electricity production. Residents pay an initial fee of around £150 to connect to the system, and can then use up to 5kW without incurring further charge. The electricity is produced locally by a 100kW hydro power generator, backed up with smaller hydro and wind generators, all of which have been carefully sited to minimise their visual impact. The power produced is then shared between businesses, households and the general community. Diesel generators provide an extra backup in case of emergency.



Free electricity

£ TOTAL BUILD COST BREAKDOWN

Elements	Cost m ²	Cost %	Total cost
Foundations	£5	1%	£800
Site work	£23	6%	£3,500
External works	£13	3%	£2,000
Post & beam frame	£23	6%	£3,500
Floors	£45	11%	£6,800
Windows	£47	12%	£7,000
Roof	£53	14%	£8,000
Insulation	£33	8%	£5,000
Straw	£7	2%	£1,000
Render/plaster	£13	3%	£2,000
Cladding	£13	3%	£2,000
Timber wall	£4	1%	£600
Plumbing & heating	£13	3%	£2,000
Electrics	£4	1%	£600
Velux windows	£9	2%	£1,400
Decorating	£2	1%	£300
Sound insulation	£9	2%	£1,400
Internal fittings	£10	3%	£1,500
Fixings	£7	2%	£1,000
Freight	£37	9%	£5,600
Fees	£13	3%	£2,000
Electric connection	£8	2%	£1,200

Grand total

£59,200

Useful contacts

STRAW BALE ADVICE Andrew Morrison www.strawbale.com
 Design of Straw Bale Buildings published by Green Building Press
www.greenbuildingpress.co.uk LIME PLASTER Masons Mortar 0131 555 0503
www.masons-mortar.co.uk Eigg Heritage Trust 01687 482486 www.isleofeigg.net

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



Heritage Clay Tiles Ltd

Yesterday's Traditions Today's Choices Tomorrow's Heritage

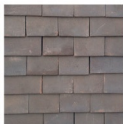
Heritage Clay Tiles are the Leading Manufacturer and supplier of high Quality handmade and hand crafted clay roof tiles.



Clayhall Medium
(Hand Crafted)



Clayhall Red
(Hand Crafted)



Clayhall Dark
(Hand Crafted)



Edwardian
(Hand Made)



Hamlet
(Hand Crafted)



Birchwood Mix
(Hand Crafted)

For samples and expert advice, please call.

To view our extensive range of
other products, visit our website at:
www.heritageclaytiles.co.uk

or email

sales@heritageclaytiles.co.uk

Southern Office
01708 853 953

Northern Office
0121 313 1939



Timber Frame

Design, Manufacture, Install

Call: 0121 314 7735



*“ Building someone's home is a
privilege™ ”*

Timber Innovations are specialist Self
Build Timber Frame manufacturers,
providing the design, manufacture and
installation of Timber Frame, SIPs and
Oak Frame dwellings, bespoke timber
features, roof trusses/panels and
engineered floors.

www.timberinnovations.co.uk

E: build@timberinnovations.co.uk

T: 0121 314 7735

**We've recently moved to larger premises!
Come and see us. Contact us today!**



WB Timber Innovations Ltd
Units 18 & 19, Monkspath Business Park, Highlands
Road, Solihull, B90 4NZ



NATURAL INSULATION



**Healthy,
Odourless,
Economical
& Durable**

Made from
**UPCYCLED
Jute Bags**

Now in stock



ecological building systems



T. 01228 711511

www.ecologicalbuildingsystems.com

Superb Energy Efficient Homes Reduced Energy Costs



Passive Houses are highly insulated, comfortable, cold bridge free structures that require little heating, they usually have triple glazed windows, heat recovery ventilation (HRV) and high air-tightness levels. It doesn't cost extra to build a Passive House using our construction methods, as money saved on a complex heating system pays for better windows or extra insulation.

Specialists in:

- **Passive House**
- **Sustainable Homes**
- **Affordable Buildings**



01 604806169

info@mbctimberframe.co.uk
www.mbctimberframe.co.uk

Your Self Build with CB Homes



With CB Homes you can be certain all aspects of your self build are professionally, reliably and carefully taken care of; from the beginning to the day you move in.

- Design and Build
- Fixed Price Quotation
- Complete Site Management
- Over 30 years of expertise
- Building beautiful homes across the North West
- CB Homes – the name for Award Winning Excellence



Traditional style Build



High spec Eco Build



Cottage style Build



Contemporary Build

For your bespoke Design & Build contact **01829 730244**



enquiries@cbhomes.co.uk www.cbhomes.co.uk

Renovation & building

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT



74



87



93



79



85

74 SELF BUILD GUIDE: MASONRY

Brick and block is still the UK's favourite structural system. Chris Bates takes a look at why you should consider this solid, reliable option for your project

79 CREATING A HOME FOR LIFE

With an inclusive approach, you can establish a living space that suits your family's needs both now and well into the future. Here are 17 design tips to get you started

87 RENEWABLE HEAT INCENTIVE: A PRACTICAL GUIDE

The RHI offers the chance for households to make cashback by installing sustainable technologies. Emily Brooks looks at what systems qualify and how you can maximise your returns

93 POWER TO YOU

Take control of your heating and lighting systems, set the right mood for each room and save on utility bills with Ifeoluwa Adedeji's advice

PLUS: WHY DRY-FIX RIDGE TILES ARE REPLACING MORTAR (PAGE 85) >>

THE ESSENTIAL
**SELF BUILD
GUIDE**

Part 6 Masonry structural systems

If you're looking for a solid, familiar and cost-effective material to form the core of your new home, then building with blockwork could be the way forward. **Chris Bates** looks at the ins and outs of using this construction method

Masonry has played a major role in the UK's built heritage over the centuries, with both brick and stone structures making significant contributions to vernacular architecture up and down the country. While systems such as timber frame can be clad in the same materials, there's something reassuringly familiar about putting these solid units at the heart of our homes – hence brick and block remains the most popular structural option on the market.

The basics

There are a variety of masonry systems available (see the box on alternative products, overleaf, for a quick overview). This article, however, focuses on the most

popular option: cavity walling. This is where two skins of masonry are separated by an air gap. Over time this has come to accommodate a layer of insulation to improve thermal performance. The internal blockwork takes most of the structural loads, while the external leaf predominantly serves as a weather barrier – as well as providing a decorative finish. The two skins are connected via wall ties to manage movement.

This system is solid, durable and surprisingly flexible, allowing for all manner of architectural styles and layout configurations. What's more, it's tried and tested – which means you won't have trouble finding designers and tradesmen who know how to use it to its fullest. So you can be confident you'll get an appealing, individual home that suits your needs.



Above: This contemporary turnkey self build project by CB Homes features an internal leaf of insulating blockwork, followed by 100mm of cavity wall insulation, an external skin of solid concrete block and a render finish. The 262m² house (plus 37m² garage) achieved a high B-rating on its energy performance certificate (EPC), and is fitted with a heat pump, solar panels, underfloor heating and triple glazing

SELF BUILD
Academy

media partner **Build It**



POTTON
CONSTRUCTION

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

Next sessions:

Manage & complete your build 28th August
Make the most of your plot 2nd October

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



Left: This 180m² family home by Design & Materials blends in with the village scene. Built in masonry with solid floors and walls throughout, it achieves a U-value of 0.17 W/m²K for the external walls

The majority of brick and block homes are architect-planned and delivered by a main contractor. There's also a number of design and build specialists (also known as package home companies) to choose from – including the likes of CB Homes, Design & Materials, Feeling Homes and Revolution Homes. These firms will take care of the design and planning stages of your scheme and then either deliver a package of materials (including much of the internal joinery) for your contractors to assemble, or complete some or all of the work for you.

"Because we're builders as well as designers, we're able to guide our customers impartially," says Andrew Edwards, managing director at Revolution Homes, which offers a range of structural systems for its projects. "Sometimes brick and block is the best option; on other occasions the design might lend itself to timber frame or another technique. Our clients actually tend to have a bias towards one form of construction: if they want a solid box, with solid performance and one material, blockwork is a natural choice."

There's one area in particular where Andrew is quick to point out the credentials of building with masonry. "It allows you to use beam and block floor structures at both ground level and for the upper storey, which will provide excellent sound insulation," he says. "For some people, that's the deciding factor between masonry and timber frame."

Design

One of the major advantages of brick and block is that it can easily be adapted to suit a wide range of house designs, floorplans and lifestyles. Whether you're after a faithful Victorian-style house or an ultra-modern home that combines smart finishes with lots of glass, you can achieve it with masonry.

In terms of the external aesthetic, the most affordable option is to leave the outer brick skin exposed, which will result in a durable and low-maintenance finish. You could opt for natural stone, an unusual brick blend or luxurious handmade units to add character. There's huge variety to be had here in terms of the laying pattern (bond) you choose and the

colour and texture of the bricks. Rendering the outer skin (which is usually built in blockwork if you choose this route) will give you the opportunity to completely transform your new home's aesthetic. You can even go for timber cladding, while employing a mix of materials could help you achieve a unique finish.

When it comes to configuring your interiors, the advent of precast concrete floor structures (beam and block) has opened up a number of benefits for brick and block homes. This solid system has reduced the need for load-bearing partition walls; enabling the creation of largely open plan interiors. It's a fantastic match for modern must-haves such as underfloor heating, too.

Coveted features such as wide spans of sliding or bifold doors can also be easily incorporated through the use of fairly standard lintels and detailing or – for more complex designs – structural steels. And there are advantages for fitting heavy furniture and the like, as you can plug and screw pretty much anywhere in the inner leaf of blockwork to provide a solid fixing.

Right: This heritage-style project features Southwold handmade units by Northcot Brick, from £950 per 1,000, which lend the house instant warmth and character



All of this flexibility continues into the build itself, where – unlike with timber frame and other highly manufactured systems – there's plenty of scope for tweaks as work progresses. Internal walls can usually be moved without impacting on the structure's integrity, for example, while openings for doorways and windows can be shifted at comparatively little cost. That said, making late changes will always

have implications for your budget and build schedule.

Sustainability

While its detractors point to this area as a potential weakness for brick and block, in fact the system can make a useful contribution in the quest for an efficient home that offers low heating bills. But as with any building technique, it's crucial to ensure the whole design works

together to achieve the performance level you're aiming for.

One of the key factors, of course, is packing in plenty of insulation. "You could probably get through the regs with a 50mm cavity, but very few self builders want to scrape by at that level," says Andrew. "We typically build with a 100mm void in a 300mm-thick wall. The cavity is then partially filled with a 70mm-80mm layer of board material, such as

Alternative masonry systems

Solid wall construction This system uses a single skin of blockwork, with no outer leaf. Instead, the walls are wrapped in a layer of external wall insulation – usually as part of an integrated render or brick slip system. This creates a continuous layer of thermal protection, which minimises cold bridging (where structural elements cross the insulation, allowing heat to escape) and can offer a high level of airtightness. Because the blockwork remains internally, you still get the thermal mass benefits of masonry construction. Using joint blockwork can enhance the speed benefits of the solid wall systems.

Insulating concrete formwork With the ICF system, LEGO-like polystyrene blocks are stacked to create a formwork for a concrete pour. Unlike with other types of shuttering, the blocks remain in situ afterwards to provide an instant insulating wraparound. This provides a quick route to a highly efficient structural shell, offering good levels of insulation and airtightness straight out of the box. ICF competes well with timber frame in

terms of construction speeds, and is intuitive enough that some self builders have employed it on a DIY basis following short training courses. It is often specified for basements, as it can be relatively easily waterproofed. If you're using a main contractor, an ICF build is likely to cost around 5%-10% more than a standard brick-and-block scheme.

Pre-cast concrete More common for commercial-scale projects than domestic schemes, pre-cast concrete panels offer an ultra-quick route to a weathertight shell. Various systems are available, but the most common involves the use of storey-height, twin-wall panels that can be craned into place on site. When used above ground, the intermediate floors will also be prefabricated, and fixed using special metal pins and bolts – but in most cases it's prohibitively expensive due to the manufacturing and plant hire costs. It is more viable for basement projects as it can be supplied in waterproof concrete, with relatively little work required on site to ensure the resulting shell excludes moisture completely.

Kingspan or Celotex, attached to the inner leaf." There's little to choose between this method and opting for a full fill of insulation in terms of performance, although leaving an air gap will mean that any moisture that does penetrate the brick facing is less likely to migrate into the building's structural fabric.

One option to beef up the system's thermal qualities is to swap dense blockwork for a thin joint inner leaf composed of large-format, aerated blocks – bedded in a skinny layer of special quick-drying mortar. This means the innate weak points – the mortar lines – are narrowed from the traditional 10mm to just 3mm. "We find this improves both thermal and sound performance by around 15%," says Andrew. "Our 300mm-deep walling system achieves a U-value (a measure of heat loss) of around 0.17-0.18 W/m²K, which is ideal for creating a sustainable home with reasonable running costs." This is well inside the Building Regulations threshold of 0.30 W/m²K.

Even better performance is possible, right down to as low as 0.12 W/m²K, but will come at the cost of very thick walls that might encroach on floorspace. For instance, at the Golcar Passivhaus, which you can find out more about via a blog on the Green Building Store's website, the 300mm cavity is filled with two 150mm-thick layers of mineral wool in order to achieve excellent insulation levels.

One of the innate advantages of choosing brick and block over more lightweight structural systems is that it offers built-in thermal mass. The inner concrete leaf and solid floor structures will absorb the warmth from the sun's rays during the day and slowly release it back into the house as temperatures drop. This helps to create a comfortable internal environment with an even heating and cooling cycle – which can contribute to reduced bills.

On the downside, the reliance on site detailing when building with masonry makes good air tightness slightly trickier to achieve than with highly prefabricated methods, such as closed-panel timber frame or structural insulated panels. With cavity walling, air tightness is predominantly achieved using the

wet plaster internal finish – so it's vital that skilled workers undertake this part of the project.

Considerations

While its familiarity means the construction process is pretty easy for self builders to follow, which can be a boon if you're managing the project yourself, there's no doubt that standard brick and block is slow to build with. It can take 20-plus weeks to complete a typical three-bedroom masonry project – and significantly longer should your scheme fall prey to the notoriously fickle British weather (most *Build It* readers' schemes come in at around six to 12 months). That compares to around 12-16 weeks for the quickest timber frame schemes (excluding lead times for fabrication of the panels).

Opting for the thin joint system will slash build times significantly – rivaling off-site manufacture for speed. "We can build more square metres of walling per day this way," says Andrew. "In fact, it's so quick that – while the materials are more expensive initially – thin joint actually works out cheaper overall than dense blockwork simply because you pay for far less labour."

One issue to watch out for at the moment is that the availability of many types of brick has fallen in recent years. Production dropped during the recession and factories are struggling to keep up with demand from a resurgent construction industry.

"Certain bricks are in short supply, but really this just means you need to wait a few weeks for them rather than a couple of days," says Andrew. "We get around it by planning ahead a little more and ordering the units about two months before you want to start on site." Major manufacturers, such as Wienerberger, are in the process of opening more UK sites, so this issue should turn around in the near future – but in the meantime it pays to keep an especially keen eye on your schedules.

Costs

With a vast knowledge base available for designers and contractors to work from, it's no surprise that brick and block is one of the most economical building methods. On

a straightforward project, you can expect to spend as little as £80-£100 per m² (of internal floorspace) on the insulated structural walls – ready to accept the roof and your choice of finishes inside and out. Only timber frame can compete with that in the affordability stakes.

That cost bracket includes labour and breaks down to around £20 per m² for the internal blockwork, £10 per m² for the insulation and £50 per m² for the facing brick, with an allowance for wall ties and other fittings. On top of this, beam and block floors will cost at least £35 per m², while single-leaf block partitions will come in at approximately £20 per m². Prices will rise considerably for higher-quality external finishes: standard facing units start from around £300 per 1,000, but you can expect to pay at least double that for handmade versions – and you'll need to add the bricklayer's fee on top.

CONTACTS

Bovingdon Bricks 01442 833176 www.bovingdonbricks.co.uk **CB Homes** 01829 730244 www.cbhomes.co.uk **Design & Materials** 0333 001 5128 www.designandmaterials.co.uk **Feeling Homes** 0330 0881 189 www.feelinghomes.com **Green Building Store** 01484 461705 www.greenbuildingstore.co.uk **Ibstock** 0844 800 4575 www.ibstock.com **Northcot Brick** 0800 038 9575 www.northcotbrick.co.uk **Revolution Homes** 01323 886401 www.revolutionhomes.co.uk **Wienerberger** 0161 491 8200 www.wienerberger.co.uk

The essential guide to self build

To lead you through the process of creating a bespoke home, this 10-part series will cover everything you need to know to carry out a successful project. Here's a list of what to expect in the coming months:

- 1 Steps to self build success
- 2 Budgets & finance
- 3 Finding the ideal location
- 4 Designing your dream home
- 5 Timber structural systems
- 6 **Masonry structural systems**
- 7 Heating options
- 8 Project management
- 9 Final checks
- 10 Troubleshooting



**Kitchen to Bedroom at
the touch of a button.**

Future proof your house with a home lift.

At Aritco we believe life does not need to be a compromise. With our full turnkey solution the stylish Aritco Home Lift can be installed simply and seamlessly into your home in just 2 days. Not only will your home lift transport you from kitchen to bedroom in seconds, it will help to future proof your home allowing you to enjoy it for many years to come.



For details please contact Platinum Lifts
0800 774 0123 www.platinum-lifts.co.uk




ARITCO™
www.aritcohomelifts.com

Creating a home *for life*



Consider your family's current and future requirements at the planning stages of your project, and you'll be rewarded with a home that can be easily adapted over time to suit your lifestyle

If you're self building or renovating your way to your dream home, chances are you'd like to stay in it for a long time. Indeed, many major projects are undertaken with the goal of not needing to move again for the foreseeable future.

Perhaps you want a house that will grow with a young family, respond to the needs of disabled members of the household or adapt to lifestyle changes as you move into retirement. With good design, you can create something that's flexible and inclusive enough to achieve all of these things and more.

Creating a home for life can be just as straightforward as any other building project – but you will need to have the right people on board. This kind of scheme involves adopting a holistic design approach that takes in a range of criteria, covering everything from accessibility and adaptability through to sustainability and maintenance requirements. So it really will pay dividends to engage a professional designer who's experienced in successfully realising similarly user-friendly living environments.

It may surprise you to learn that inclusive design can be affordable, too. Many features don't have to cost anything at all; they simply need a little thought early in the planning stages. Future-proof schemes run the full spectrum of budgets, with prices primarily dictated by the quality of fixtures, fittings and finishes – just as with any other project. And getting it right now will be much cheaper than making invasive alterations a few years down the line. Indeed, one of the founding principles of the Lifetime Homes standard (see box, overleaf) is achieving good value for money – which

translates to reasonable build costs and low bills in use. So what are the key considerations when creating a living space that will meet your family's needs both now and over time?

1 The regs

The UK Building Regulations set minimum standards across a range of areas, including the crucial energy efficiency (Part L of the regs in England) and accessibility (Part M) aspects. The latter incorporates a number of aspects of the Lifetime Homes model, so every house will have a decent start. But wherever possible – and affordable – it makes sense to raise the bar. Most self builders and renovators aim to improve on the default requirements anyway; after all, part of the reason people take this route is to create a tailored property that you can't buy from an off-the-peg developer.



Main picture and left: Tony and Jean Hills' determination to create an efficient home for retirement led them to build one of the world's first Passivhaus-certified bungalows, with the help of design and build specialists Hanse Haus (www.hanse-haus.co.uk). The scheme involves a wealth of future-proof touches, such as wide doors, spacious corridors and smart heating controls that optimise energy use



Top and above: When Barbara Manson decided to downsize for retirement, she enlisted the help of Makar Construction (www.makar.co.uk) to design and build a low-bills, single-storey home that would leave her mortgage free. The resulting 63m² house cost just £140,000 and features a raft of clever detailing, such as the internal bifold doors in the open plan living space that can be closed to provide space for extra accommodation

2 Sustainability

Good energy efficiency is critical for any home that purports to be future-proof. The first line of defence in keeping utility bills down is to address your building's fabric: the better insulated and more airtight the shell is, the more protection you'll have against rising gas and electricity costs. Aim for the highest level of performance your budget will stretch to, and only look to invest in renewables once you know your home is efficient enough to maximise their potential.

3 Maintenance

If you want to stay in your property for a long time, it makes sense to keep durability in mind when specifying materials. That's particularly true of items such as cladding, windows and other big-ticket items that will prove expensive should they need to be replaced. Ask your designer to ensure that the overall scheme takes whole-life costs into account. For example, planning big roof overhangs and deep-set windows and doors can be a good solution in exposed locations.

4 Services

You can go a long way towards ensuring your home is adaptable by making it easy to upgrade services in future. Providing accessible ducts through which cables can be run is a good start. You can fit additional sockets, switches and controls at various levels to ensure usability for all, too (between 450mm and 1,200mm from the floor is best). Consider opting for underfloor heating rather than radiators.

This low-energy emitter can help reduce heating bills, and will also keep walls and corridors clear of obstacles. Similarly, even if you don't want solar thermal panels now, you could still specify a twin-coil cylinder to facilitate a later upgrade.

5 Smart tech

Clever wireless systems can improve how you control and interact with your home – apps for tablets and mobiles allow you to remotely manage heating and lighting programmes at the touch of a button, for example. But you should still back this up with good, simple design for elements such as the location of light switches. However, modern foil-backed insulations can interrupt wireless signals, so don't exclude the idea of hard-wiring your home. It doesn't have to cost a fortune to get your electrician to run Cat5e network cabling in your walls whilst they install the main circuitry.

6 The approach

It's easy to prioritise the internal space, but you must consider the surrounding landscaping, too. Good design here will be welcoming for everyone, including parents pushing buggies or carrying heavy shopping inside, as well as occupants and visitors who use wheelchairs or have difficulty walking. The route to and from the car or road should be clear, direct and – if there's a rise to the access point – gently ramped, ideally with a level landing just in front of the entrance.

7 Entrances

Front doors and other external access points should offer a clear opening of at least 800mm to allow wheelchairs and double pushchairs to pass easily. Appropriately detailed low thresholds will be smooth to traverse and minimise trip hazards. Door handles should be reachable for all, with a clear area of wall on the pull side to provide purchase for the operator. Look for doors with high-quality hinge or sliding mechanisms that will remain easy-to-use over time.

8 Internal doors

Enlarging internal units from the standard 750mm clearance up to 800mm will make a huge difference to accessibility for wheelchair users. If you don't want to go to the expense of installing larger doors now, it may still be worth designing in an oversized structural opening. This can be cheaply packed out with timber to accept a standard leaf, with trim added to disguise the packing if necessary. This way, if bigger units are fitted at a later date, there shouldn't be any need for major demolition work or the insertion of new lintels for support.

9 Corridors & hallways

A width of 1,200mm will create a valuable feeling of space in these zones, whilst also comfortably accommodating wheelchairs or mobility aids – but if you need the extra floor area elsewhere, aim for a minimum of 900mm.

10 Open floorplans

Open-plan living can work for pretty much any style of home – whether traditional or contemporary. In fact, it's more about practicality than aesthetics: with clever design, these can be functional, light-filled family spaces with the versatility to allow for working zones, entertaining guests and more. On top of that, they largely eliminate corridors and hallways to create inclusive, barrier-free environments.

QUICK GUIDE: THE LIFETIME HOMES STANDARD

The Lifetime Homes concept is based on five principles that maximise utility, independence and quality of life – without compromising other design issues, such as aesthetics and cost-effectiveness. It also seeks to enable solutions that can meet both the existing and changing needs of a variety

of occupants. The five core principles are inclusivity, accessibility, adaptability, sustainability and good value – and these run throughout the 16 full design criteria. Many councils have adopted Lifetime Homes as part of their local housing policies. For more details visit www.lifetimehomes.org.uk.

11 Moveable partitions

Balancing privacy and communal space is a personal thing, so it's worth thinking carefully about how you'll achieve this in your new home. What works for you now may not necessarily suit your family 10 years down the line, so look to make the layout adaptable. Even if you prefer segregated spaces over an open plan, aim for a building with as few load-bearing internal walls as possible and instead use lightweight partitions to divide off individual rooms. This way, it will be relatively non-invasive and cost-effective to reconfigure the room arrangements should the need arise.

12 Staircases

If you're not opting for the convenience of single storey living, then you'll need to provide a way to move between floors. Part K of the Building Regulations intends to facilitate safe use of stairs, covering areas such as the rise (step height), going (tread depth), overall pitch and handrail placement. For example, the individual rise can be 150mm-220mm and the going 220mm-300mm (the Lifetime Homes standard suggests aiming for minimums of 170mm and 250mm respectively to allow optimal access). Consider extending handrails slightly beyond the top and bottom of the flight to allow for a steady transition. Features such as open risers are attractive, but they can be trip hazards – fitting toughened glass can achieve a similar effect, but will add to costs.

13 Home lifts

Even if you don't require one right away, you can still plan to accommodate a domestic lift in the future with minimal disruption. Modern models use worm gear technology, which means that there's no need for hydraulics to be buried beneath the ground floor. All that's required is to designate a landing zone in a suitable size and location that can accept the unit. You could even ask your builder to include a knock-out panel between storeys to allow for easy retrofitting.

14 Kitchen

Many of the principles for this zone will apply throughout the house. Circulation space is important – galley kitchens may suit those who are a little infirm on their feet, for example, but won't provide space for wheelchairs to turn. Siting the three main elements of the working triangle (the cooker, fridge and sink) too far apart will adversely affect usability. If possible,

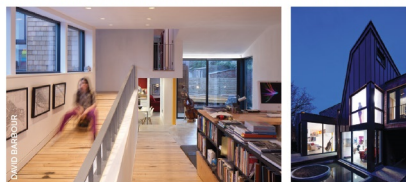
include plenty of shallow low- and mid-level storage (rather than fitting inaccessible shelving right up to ceiling height). Consider varying worktop heights as a design feature that will also make the space more accessible.

15 Bathrooms

Everyone appreciates space in bathrooms and WCs. Try to include enough room to easily turn a wheelchair or walking aid. The ideal



CLOSER LOOK: THE RAMP HOUSE



Architect couple Ian and Thea MacMillan – and their daughters Bee and Greta, who has cerebral palsy – were struggling with the inaccessibility of their two-storey Victorian house in Edinburgh. This proved the spark for them to build a pioneering barrier-free home on a tight brownfield plot nearby.

"We wanted to create a house for everyone founded on the principles of inclusive architecture," says Thea, "so we built our home around a ramp that would enable Greta to play with her friends, just like any other eight-year-old." The resulting spaces are all the richer for their accessibility. The open plan interior has several interesting levels that spiral around the ramp, which moves through the kitchen, living zone and study before reaching the bedrooms and physio area, and ending at the wetroom.

The ramp has become a central feature for whole family. "Bee hangs out with her pals sitting on the window sill and railings, while smaller children enjoy scooting up and down in ride-on cars," says Thea. "When we had a party, our friends were dotted along the ramp chatting. It just shows that accessibility does not need to be about constrictions." The 145m² house, with all its high-quality fixtures and fittings, was completed for £247,000.

scenario is to create a capacious walk-in shower on the ground floor, which can be a stylish and valuable addition to many homes. If that doesn't suit your needs now, consider ensuring that a downstairs space is capable of being efficiently adapted for use as a bathroom. Running extra drainage below-ground during the construction phase of a major project is relatively inexpensive, but could save you a fortune when the time comes to make changes.

16 Glazing

Features such as large windows and sliding or bifold doors are coveted for the fact they can open up views and allow plenty of natural light to filter into the home. They also provide an opportunity for inclusive design; by positioning units in the right place you can frame vistas for everyone, as well as underpin the connection between house and garden.

17 Lighting

Good artificial illumination is an essential part of any self build or renovation project. It should set the right mood for the task at hand and support how you want to interact with the building. Classic considerations include ensuring there's sufficient artificial brightness for safe use of food prep zones in the kitchen, while low-cost extras such as motion-sensing lights can ensure entrances and WCs are automatically illuminated when used at night. Wherever possible, opt for dimmable fittings; too much glare from bright lights can cause difficulties for those with visual impairments.

Left: Designer features such as walk-in showers effortlessly combine style and inclusivity, and can be easily adapted over time with handles and other accessories if required. This space has been given a contemporary finish with Tavo glass penny mosaic tiles from Original Style (originalstyle.com)

CONTACTS

AKW 01905 823299 www.akw-ltd.co.uk Arico 01296 436678 www.arico.com Jeld-Wen 0845 122 2890 www.jeld-wen.co.uk Lifetime Homes 020 7822 8700 www.lifetimehomes.org Terry Lifestyle 0800 247 1229 www.lifestylelifts.co.uk

Hassle Free...

'Easy Fit'

FLOOR HEATING

...for the same price as a kit!

The benefits will change your life forever...



More comfort

'Easy Fit' floor heating delivers even heat throughout your home without cold spots or draughts and is the perfect partner for hard surfaces like tiles - say goodbye to cold feet forever!



More energy efficient

Floor heating uses WARM water to achieve a comfortable living environment compared to HOT water required by radiators - resulting in lower energy bills!



A cleaner healthier environment

'Easy Fit' floor heating eliminates the draughts that circulate dirt, dust, bacteria, viruses and pet hair around the house all winter long - good news for allergy sufferers!



Unobtrusive

There are no radiators to interfere with interior design, allowing you to furnish with freedom - with no hot surfaces for children to touch or bump into!



Send your plans or room dimensions for a free no obligation estimate to:

plans@easyfitfloorheating.co.uk

Tech Support
7 days a week



"Dad said we saved £2000 by installing floor heating in my 50m² flat ourselves - so I've used some of the money to book a holiday. Even better news, my asthma has virtually disappeared!"

'Easy Fit' - a division of **WUNDA GROUP PLC**

easyfitfloorheating.co.uk | 0800 5420 816

DuoWIN - the ultimate combined log & wood pellet biomass boiler

windhager
HEAT WITH VISION



Built with hybrid technology, the DuoWIN sets new standards for combined heating with logs and wood pellets all in one compact unit. Where heating is concerned, the DuoWIN gives you the choice in how to heat your home using both types of sustainable fuels, whilst providing maximum efficiencies in bringing warmth to your home.

- Four outputs available from 33 kW to 56 kW
- Intelligent automatic fuel switching function
- Power Boost function for short term heat demands up to 56kW
- Fuel: Split logs: (500mm), Wood briquettes and Wood pellets 6mm
- Small footprint of only 4.19m² (including minimal clearances)
- Hand feed and Auto feed options for pellet operation
- Easily integrated with myComfort mobile heating app
- High efficiency levels in excess of 93%
- RHI Compliant



Windhager UK, Marshfield, SN14 8SR Telephone: 01225 892211 Email: info@windhager.co.uk

www.windhager.co.uk



revolution homes

The complete design and build company

Full turnkey delivery of your new home

We offer a complete design service for planning and building regulation drawings within our package

We can offer the following build systems

Masonry thin joint blockwork or brick and block

Timber Frame or SIPs

ICF or Insulated concrete formwork

Due to the nature of the build systems we offer, we can design traditional, contemporary or any other look for your home.

We are also **basement specialists** and have a permanent stand at the National Self Build Centre in Swindon.

Head Office: 01323 886401

London office: 03300 882726

Oxford office: 01865 987793

www.revolutionhomes.co.uk

info@revolutionhomes.co.uk



Dry ridge tiles

This mortar-free roofing product is growing in popularity

materials
spotlight:

Installed as part of a mechanical-fix roofing system, dry ridge tiles are designed to be used at the apex of a roof covering and are fitted without using mortar. It's becoming the method of choice in the construction industry as it offers a low maintenance solution lasting up to 30 years.

Why use this system?

Conventionally, ridge tiles have been secured using mortar (a mixture of cement, sand and water) to glue the units together. However, this method is increasingly falling out of favour because it is highly susceptible to moisture ingress, which is difficult to avoid given the UK's wet weather conditions. In addition, mortar is an inflexible material that can crack as homes move and settle. It will eventually fail, and as a result tiles can become displaced or water can enter through the gaps in the seal, potentially causing damp issues.

The traditional route leads to even more problems should the installer incorrectly use a weak mortar mix. Combine this risk with the possibility of rainfall during the job, and the result could be that the mortar degrades a lot quicker than it should do.

Applying a mechanical fix allows you to eliminate the use of mortar and avoid continual maintenance or cracking. What's more, as UK homes are now better-sealed and insulated, the need for improved ventilation becomes more pressing. Without a route of escape warm, moisture-laden air in roof spaces can lead to serious condensation and mould issues. Dry fix systems provide an opportunity to install a ventilated solution that negates much of this risk.

There are a number of other benefits. For instance, dry ridge tiles are easy to install. Once the main roof tiles have been fitted, a membrane or underlay is rolled over the apex. The individual ridge tiles, starting with the end unit, are then secured using a special connector (known as a union) between each piece. This union replaces the mortar and is fixed in place using a screw, clip or plate as specified by the manufacturer.

What to consider

A mechanical fix is not typically considered to be suitable for the



Left: The Sandtoft Universal Ridge system offers an attractive finish for mortar-less ridge tile installations

refurbishment of heritage properties, where planning or listed building restrictions may require you to achieve an authentic aesthetic.

To make sure that there are no compatibility issues, it's best to source the complete roofing system from the same company. If you're mixing products from different manufacturers or using a version not specifically designed for your roof type, then you can encounter problems. This is most likely to occur with unusually-shaped, steeply-pitched or flat coverings – so be sure to get advice from the supplier.

Sandtoft makes a dry fix solution that's compatible with its own brand tile range. The company's Universal works with a variety of profiles, including half round, leg angle ridge and segmental ridge. Marley Eternit's Universal Ridge Fast is a ventilated fibre cement system. It can be paired with its slate and clay units on roofs of

up to 55° pitch to offer a weathertight and maintenance free finish.

Cost

These days, most roofers will offer their customers the same installed price for both dry-fit and mortar-based ridge systems. This is because the speed at which dry types can be fitted makes up for the slight difference in materials costs. Dry-ridge packs are sold according to the size of the roll-out membrane, which is commonly available in 3m, 6m and 10m lengths. Prices start from around £25 for a 3m kit including the roll, seals, screws etc – but you'll need to purchase the ridge tiles separately to suit your roof style.

CONTACTS

Marley Eternit 01283 722588 www.marleyeternit.co.uk
Monier 0870 560 1000
www.monier.co.uk **Roof Stores** 0844 576 6776 www.roof-stores.co.uk
Roofing Superstore 01752 692760 www.roofingsuperstore.co.uk
Sandtoft 0844 9395 900 www.wienerberger.co.uk

INTRODUCING THE FUTURE OF HEATING!

The most efficient air source heat pump in the world is now available in the UK and brought to you exclusively by Ice Energy Technologies*



The NEW AirX air source heat pump from IVT combines innovative design with market-leading performance to provide a total heating and hot water solution for your home.

Rated best in class when tested against 190 other heat pumps, the AirX is:

- 21% more efficient than its closest competitor
- Capable of producing higher efficiency rates than some ground source heat pumps
- Quieter than any of its competitors
- Able to receive Renewable Heat Incentive (RHI) payments
- Provided with an industry-leading warranty as standard for additional peace of mind
- Available with a FREE underfloor heating kit of up to 40sqm

To find out how you could enjoy lower heating bills and generate income from the RHI, call our dedicated sales team on **0808 145 2340**

*In a Danish test of 190 heat pumps.

ICE ENERGY

TECHNOLOGIES

The Renewable Heat Incentive: a practical guide



Above: Pellet stoves are only eligible for RHI payments if they have a back boiler, as with the Toba Hydro from Green Square

Renewable energy has a crucial role to play in lowering the UK's reliance on fossil fuels, and thanks to the government's Renewable Heat Incentive (RHI), domestic consumers can also do their part. Introduced in April 2014 and run by Ofgem, the scheme offers households seven years of payments at a fixed rate for using biomass, air source heat pumps, ground source heat pumps and solar thermal panels.

What is the RHI?

The incentive is principally aimed at existing properties not on the gas grid – those using expensive alternatives such as oil-fired boilers – but one-off new builds still qualify. You will be asked to provide additional proof that you are a self builder, such as an invoice for substantial structural materials or labour.

"The RHI tariff is deemed based on the kWh/yr household heating requirement assessed by an Energy Performance Certificate," says Chris Davis, commercial director at Kensa

The government offers RHI payments for heat generated via tech such as solar thermal panels and heat pumps. **Emily Brooks** outlines how to make the most of this appealing initiative

Heat Pumps. "Self build properties need to be occupied for at least 183 days before they are able to apply for the domestic RHI under the deeming rule. Applications can be made before this time, but this then requires energy usage to be metered. The side-effect of this is that the quarterly payments are variable and no longer guaranteed to be at the same level each year, as your payments will depend on the actual energy consumption. In our experience, most self builders wait until the 183 day period has expired before applying."

Your heating system must be installed by a Microgeneration Certificate Scheme (MCS) approved installer (you'll need to obtain the MCS certificate number in order to apply for the RHI). The individual products themselves must also appear on the

RHI's eligibility list. Once the work has been approved, you'll receive quarterly payments for seven years. For current applications (valid until 30 September 2015), you'll be paid 7.14p for every kilowatt hour (kWh) of heat from biomass boilers; 7.42p for air source heat pumps (ASHPs); 19.10p for ground source heat pumps (GSHPs); and 19.51p for solar thermal panels.

Tariff levels for new applicants are reviewed quarterly and can be reduced if too many people join the scheme – as has recently happened with biomass, which has seen a 20% drop from 8.93p per kWh down to 7.14p per kWh for applications made from 1 July this year. However, once you've joined the RHI, the initial tariff is fixed for the full seven years. The following pages are a brief guide to the four eligible technologies.

Biomass boilers

For the purposes of the RHI, the term biomass covers heating systems that burn wood pellets, chips, logs or briquettes. Standalone stoves are not included in the incentive, with the exception of pellet types that have a back boiler attached.

Biomass appliances can be sited in a utility room or a separate outbuilding, but because of their size most people opt for the latter (you'll need to factor in the cost of insulated underground pipes to carry the hot water to the house). From 5 October 2015, your fuel supplier must be on an approved list to qualify for the RHI.

Fitting a log-fuelled boiler is a good idea if you have reliable access to

well-seasoned wood. Central Boilers' E-Classic model is unusual in that it's a standalone external boiler. "Opting for an outdoor unit removes the need to provide a dedicated housing or utility space for the boiler – allowing more room for living space in a self build property," says Sue Bennett, managing director of Bentley Fire Shop, which supplies the E-Classic. "It has a built in buffer vessel, so there is no need to incorporate a storage tank inside the property."

Expect some maintenance, principally filling up the fuel store (from where it feeds into the boiler) and emptying the ashbin. According to the Energy Saving Trust, a pellet boiler big enough to heat an average home

costs between £9,000 and £21,000, including installation.

Solar thermal panels

This technology uses the sun's heat to generate domestic hot water (DHW) and provide space heating. However, to qualify for the RHI, it must provide hot water only, which rules out systems that include a heat store (for more on this, see the combining technologies section overleaf). The two types of panel available – flat plate and evacuated tube – are both eligible for the RHI.

"The domestic incentive is paid based on an estimate of energy production, so the more people in the house, the larger the calculated

Below: A standalone pellet boiler, such as the E-Classic from Bentley Fire Shop, removes the need to find a garage or plant room to house the unit. Bottom: Manually filling a Windhager biomass boiler with wood pellets. The larger the hopper you install, the less frequently you'll need to top it up



CASE STUDY: HIGH-YIELD BIOMASS BOILER



Living off the gas grid, David Steel was relying on oil to heat his home, a listed 19th century barn conversion in Yorkshire, until he installed a Windhager BioWIN 2 pellet boiler. "Our neighbours did a biomass scheme and we had clients doing it, too – I'm a manager of a rural estate – so that's what triggered us to follow the same path," says David. Yorkshire Heat Pumps' office was nearby, so he used them as his installer. "I rate them very highly; they did a fantastic job in good time because we were trying to get it completed before the tariff fell in January," he says. The 26kW boiler sits in an adjacent garage and has a five-tonne-capacity hopper with an automatic feed; according to David it's used 4.5 tonnes in about six months. The system cost £23,000 and RHI payments have been around £1,900 per quarter.

energy benefit will be," says Stuart Elmes from Viridian Solar. "Typical RHI payments range between £1,500 and £3,500 over the seven years depending on the number of people and the size of the system." That's on top of the bill savings you'll see from reducing demand on your boiler.

Solar thermal systems can provide most of your DHW during the summer months. To achieve this, you'll need plenty of sunny roof space (panels can also be fixed to a frame on a flat roof) and room for a hot water cylinder. Only a handful of combi boilers are compatible with this technology since not all of them accept pre-heated water. Viridian Solar has developed a new RHI-compatible product, The

Pod, which pre-heats water on demand as it flows to the combi, so that the boiler then burns less oil or gas to achieve its outlet temperature.

With costs starting at £3,000 and a typical system coming in at £5,000, solar thermal is the cheapest of the renewable heating options.

Ground source heat pumps

This technology harnesses warmth from below the earth's surface, turning it into useful energy for the home.

The heat is picked up via pipework that's buried in the soil and filled with water and antifreeze. This is then fed through a heat exchanger in the pump to concentrate it, then transferred to a

hot water cylinder, and on to radiators or underfloor heating (UFH).

Although you will use electricity to run the pump, the end result is that, for every unit of electricity used, around four units of heat are produced.

Pipework can be laid horizontally in trenches or vertically via boreholes; the former is more common, and cheaper, but you'll need enough garden space. Heat pumps work best with low-temperature systems – underfloor heating and low-flow radiators – and do not perform well in homes that are poorly insulated or draughty. Expect to pay £11,000–£15,000 to install a typical system.

Below: Worcester Bosch's Greenstore GSHP; you will need to find space to accommodate the pump itself plus any heating controls



This installation by Viridian Solar includes both thermal panels (eligible for RHI payments) and photovoltaics for electricity (eligible for another government scheme, the Feed-In Tariff)



CASE STUDY: BILL-BUSTING SOLAR THERMAL



Georgina Parsons has installed solar thermal panels on a bungalow she is renovating in Honiton, Devon. The existing combi boiler needed replacing, so – with an eye on future hot water needs once the house has been extended – she went for a new Worcester Bosch boiler, plus a 300L cylinder, stored in the loft. "We went for an in-roof solar system, which replaces the tiles rather than sits on them, and it looks a lot better than I thought – the neighbour even thought they were Velux windows," she says.

Local firm Nu-Heat supplied the flat-panel setup and suggested an installer from its network of contacts. The panels cost around £2,000 + VAT and the associated work (moving the boiler, and reinforcing the loft to take the tank) a further £2,000. Georgina is waiting to be approved for RHI payments: "I think it'll only be a few hundred pounds a year, but that's still a good bonus. It's more about saving money on my bills long term."



The ground loop for a GSHP installation by Kensa before the trench is backfilled

CASE STUDY: INVESTING IN A GSHP

Steve Whigham installed an Ice Energy ground source heat pump as part of the refurbishment and extension of his Cheshire farmhouse. "The property doubled in size; two oil boilers would have been necessary in order to heat it, but would have been totally unaffordable," he says. "Our plumber, who had done several heat pump installations in the past, also saw that oil would be a huge cost so we looked at GSHP instead." Ice Energy installed a 22kW system, made by Swedish manufacturer IVT, and also supplied the underfloor heating. "We paid £23,00 for our system and my total investment was around £30,000 with electricians, plumbers, builders etc – but my RHI payments will total more than £38,000," says Steve.

"Wherever possible we would recommend ground source," says Paul Watson at Ice Energy. "It's more efficient than air source, but also more expensive. However, the higher tariff is designed to reflect that."

Air source heat pumps

These pumps work on the same principle as their ground source cousins, but absorb heat from the outside air rather than the soil. They are cheaper, and less disruptive to install, but not nearly as efficient.

You'll need a sunny external wall with plenty of space around the unit to prevent air-flow problems. Like GSHPs, these systems work best with underfloor heating and low-temperature radiators – and a well-insulated, airtight home is an absolute must. Expect to pay between £7,000-£11,000 depending on the size of your home and its heating demands.

Note that the above describes air-to-water systems. Air-to-air systems are also available, but these are not eligible for the RHI.

CASE STUDY: FLEXIBLE HYBRID ASHP

For his Devon refurbishment, Chris Andrews switched from oil-fuelled heating to a hybrid of a Daikin air source heat pump backed up with a gas combi boiler fuelled by LPG, from Calor. "The system really gives me the best of both worlds – the reliability of on-site gas supply should I need an extra boost when the weather is colder, and the greener, renewable benefits from the heat pump," says Chris. "The Daikin selects the best mode for my central heating, using either the heat pump or boiler, to give me the lowest possible running costs and reduced gas use." A typical system like this costs between £7,000-£12,000, and Chris earned more than £100 from RHI payments in the first three months.

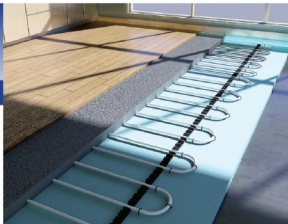
Combining technologies

The fact that solar thermal systems with a heat store – widely considered a sensible, obvious choice to go with something like a biomass boiler – are not eligible for the domestic RHI is a major sticking point for some homeowners and industry experts.

"Combining renewable heat sources can be a very good idea; if we're assuming that the end user is going to ignore RHI handouts and simply go for the best setup available to provide low-cost heating and hot water," says Doug Haigh at Begetube. "The biggest problem with fitting multiple technologies is that the concept is currently alien to the UK, so very few people understand how to do it. To successfully design and install such a system requires an excellent knowledge of electrical controls, hydraulic calculations and design procedures – as well as in-depth insight into the various renewable technologies and a good amount of joined-up thinking."

CONTACTS

Begetube 01463 246600 www.begetube.co.uk **Bentley Fire Shop** 01206 251118 www.bentleyfireshop.co.uk **Chelmer** 01245 471111 www.chelmerheating.co.uk **Green Square** 0333 370 7707 www.greensquare.co.uk **Kensa Heat Pumps** 0845 690 4328 www.kensahheatpumps.com **Ice Energy** 080 8145 2340 www.iceenergy.co.uk **Nu-Heat** 01404 547770 www.nu-heat.co.uk **Windhager** 01225 692211 www.windhager.co.uk **Worcester Bosch** 0330 123 9339 www.worcester-bosch.co.uk **Viridian Solar** 01480 831501 www.viridiansolar.co.uk **Yorkshire Heat Pumps** 0845 050 6539 www.yorkshireheatpumps.co.uk



Underfloor heating designed for you

BIOMASS RADIATORS SOLAR PLUMBING UNDERFLOOR HEATING



www.begetube.co.uk
info@begetube.co.uk



Telephone 01463 246600 Fax 01463 246624

Begetube Heating Systems 14 Carsegate Road
Inverness IV3 8EX

Off Gas?



No worries...
we give away free heat
with an air-source heat pump

heating & hot water | less CO₂ emissions
money back with the Renewable Heat Incentive
350% efficient | 30% savings on heating bills

RHI
eligible



total home
environment

successfully combining sustainable
technology in your home

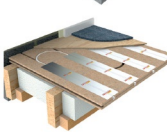
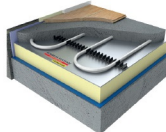
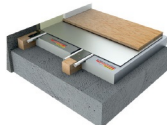
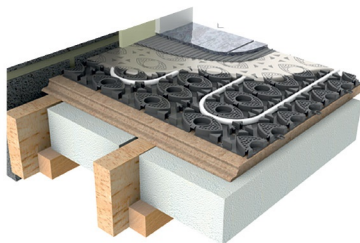
0345 260 0123 totalhome.co.uk

ROBBENS SYSTEMS®

is a part of **FRÄNKISCHE**

Trust ROBBENS SYSTEMS® to design
your next underfloor heating project

- Fully assembled manifolds
- CAD pipe layouts
- 100 year pipe warranty
- Over 23 years experience
- Free on-site consultation
- Price guarantee



FREE QUOTE

Email your plans to:
quotes@underfloorheating.co.uk

underfloorheating.co.uk

Unrivalled support
and technical expertise
from an innovative,
experienced underfloor
heating and renewables
company. That's us in a



Nu-tshell.



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



Take charge of your heating and lighting controls to transform your home into an energy-efficient, easy-to-use sanctuary, says Ifeoluwa Adedeji

With so many things to consider on a major project, often all at the same time, it might be tempting to put off specifying the precise details of your heating and lighting scheme until the very last minute. But it pays to sort these essentials as early as possible, because they will have a huge impact on creating a comfortable ambience and could help you to achieve lower energy bills, too.

There are plenty of cost effective ways to update your scheme; and innovations such as wireless technology mean that improving your home's performance can sometimes be completed in just a few simple steps. When planning your scheme, do try not to overcomplicate the design. There's nothing more embarrassing than not knowing how to turn on a light switch or increase the temperature in a room, so make sure your setup is user-friendly.

So why should you think about trading in your standard on/off switches and installing sophisticated modern controls?

Lighting

The way people use their homes today has changed significantly, with many opting for open-plan spaces – such

as kitchen-diners that lead out to a garden – rather than small separate room configurations. This setup will require different types of lighting – but nobody wants to end up with a huge, frustrating bank of dimmer switches. A wall-mounted smart control hub or remote app on your phone is a much more elegant option. "A lighting designer can help you establish scenes for this hub that are tailored to how you'll be using the space. For example, entertaining or cooking settings can be programmed in so that only your main LED downlights or the task lights over your food prep area come on at the push of a button," says Alex Fry, senior designer at John Cullen Lighting. "By activating scenes, you use your energy efficiently and create the exact same mood each time."

Wireless technology will allow you to control your lighting through movement by integrating motion sensors, which will detect activity and trigger the lights. "This is ideal for transitory areas, such as a hallway or the porch, as artificial illumination will only switch on when you require it, so you won't be left fumbling around in the dark for a wall switch," says Daniel Knight, director at Fibaro UK. "To suit daily routines you can also programme 'whole-house' scenes, where all you'll need to do is push a button (on your phone or computer) on your way out of the property to have the peace of mind that all the lights in the house are off."

Not only can these controls help you cut energy use and save on utility bills, but they can even help with security. "You can set up a holiday scene, which replays a set of sequences that imitate the way you use the lights when you're at home to deter intruders," says Iain Shaw, partner at Brilliant Lighting.

Above: John Cullen Lighting has installed a combination of strip and low watt recessed external lights to great effect in this space. They help illuminate the steps leading from the internal dining room to the garden, allowing the occupants to enjoy the outside zone when the sun goes down

CLOSER LOOK: THE BARN

Brilliant Lighting designed this scheme to allow the occupants of this listed 15th century barn to enjoy the unique space without damaging any of the original features. They incorporated track lighting using custom brackets to secure them in position ensuring minimal intervention.

The system is controlled using Lutron Homeworks, which allows the owners to operate the artificial illumination and blinds according to individual zones or throughout the internal space.

**Heating**

Heating and hot water needs account for 84% of a household's energy consumption. The Energy Saving Trust lists the installation of good controls as one of the main ways you can reduce your energy usage and CO2 emissions.

Building Regulations also state that all modern homes that are larger than 150m² must have at least two separate heating zones. These could be divided into the bedrooms and living areas, so when one space is not being used the heating can be turned off. In order to accomplish this you can install wall-mounted wired or wireless thermostats into each zone; these sense the air temperature and will switch the heating on if it falls below the level you set. In addition, thermostatic radiator valves (TRVs) can be added to individual rooms to control the temperature levels in each space. Bear in mind TRVs should not be fitted in the same room as thermostats, as they'll both try to gain or deny heat from the boiler.

The regs additionally prescribe separate timing controls for space heating and hot water (except on

combination boilers and solid fuel appliances) so that one can be used without the other. Your boiler controls must also allow the system to be switched off when neither the space heating nor the hot water is required.

Smart programmable controllers, such as Honeywell's Evohome system, are now available that can manage both traditional radiators and underfloor heating (UFH). There are also other tools that will take care of your heating and lighting simultaneously. "With the Niko Home Control, you can press an 'all off' function where the lighting and heating can be programmed to run at the optimum economical state throughout the house when you leave. It instructs the lights to turn off and thermostats to require a lower temperature," says Andy Moss, managing director of Moss Technical. "Heating can also be adjusted depending on the lighting scene the occupier selects. If a working setup is chosen, the temperature could be set lower. Likewise, if a relaxing scene is selected, it can increase a degree or so to make you more comfortable and cosy."

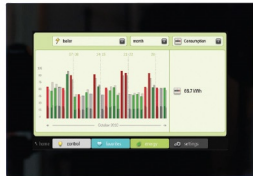
3 of the best HEATING CONTROLS



1 Netatmo thermostat, £199,
www.netatmo.com



2 Evohome thermostat, £249,
www.honeywelluk.co.uk



3 Home Control, £900,
www.niko.eu

CONTACTS

Brilliant lighting 01845 525664 www.brilliantlighting.co.uk **Fibaro UK** 020 3327 1000 www.fibaro.co.uk **Honeywell** honeywelluk.com
John Cullen Lighting 020 7371 5400 www.johncullenlighting.co.uk **Mira Showers** 0844 571 5000 www.mirashowers.co.uk **Netatmo** www.netatmo.com **Niko** www.niko.eu **Nu-Heat** 01404 549770 www.nu-heat.co.uk **Retrotouch** 01293 279428 www.retrotouch.co.uk



Think about it

For energy efficient and clean healthy homes.

- Powerful Central Vacuums by Electrolux
- Energy efficient Mechanical Ventilation with Heat Recovery
 - Clean, healthy indoor air
 - Guaranteed value & quality

Call us for project advice, survey and quotation

BEAM
Vacuum & Ventilation
Built-in brilliance!

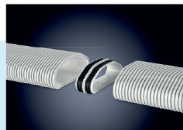
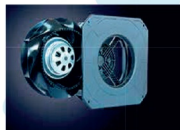
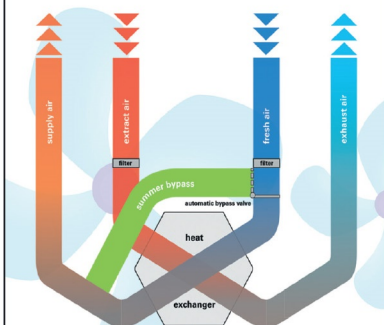
UK: 0800 78 38 231 ROI: 1800 20 10 67
www.beamcentralsystems.com

ROBBENS SYSTEMS®

is a part of **FRÄNKISCHE**

**Home ventilation systems.
Fresh filtered air with heat recovery**

- German manufactured system
- Individual room supply and extract
- Antibacterial flexible ducting
- State of the art fans



FREE QUOTE

Email your plans to:
quotes@underfloorheating.co.uk

underfloorheating.co.uk



Flight Homes

**Flight Homes
Here to guide you**

You choose how big or small a part we play in your project. Here are just a few of the benefits of using us:

- Project Management
- Free Initial Consultation
- Regional Offices
- In-house Design & Engineering
- Bespoke Design Service
- Total Build Budget Costings
- In-house Panel Manufacture
- Closed Panel Val-U-Therm System

No other company offers the same level of service as Flight Homes.

Wellington Building, Earls Colne Business Park, Earls Colne, Essex CO6 2NS
Tel: 01787 222336 Fax: 01787 222359

Creators of truly bespoke homes for over 20 years
www.flighthomes.uk



AN INSPIRATIONAL EVENT ON A **GRAND SCALE**

GRAND DESIGNS **LIVE** BIRMINGHAM

8-11 OCTOBER • NEC

Proudly sponsored by
Anglian
Home Improvements

INTERIORS
TECHNOLOGY
KITCHENS
BATHROOMS
GARDENS
BUILD



8 - 11 OCTOBER 2015 • NEC BIRMINGHAM

2 TICKETS FOR £19*
SAVE 50% QUOTE BUILDITNEC

CALL OR BOOK ONLINE
0844 854 1348
www.granddesignslive.com

Sponsors

Miele


HYDROPOOL
Hot tubs • swimming pools

 **LEXUS**

AIRFLOW
VENTILATION FOR THE HOME

 **eXpress**
INSTALLATION

Headline sponsor


Anglian


A Media 10 Event

*£1.70 transaction fee applies, must have been booked in advance, children fifteen and under go free when accompanied by an adult. Offer valid until 30 August 2015.
Organised by Media 10 Ltd. Grand Designs is a trademark of FremantleMedia Limited. Licensed by FremantleMedia Limited. www.fremantlemedia.com

Expert help

SELF BUILD + RENOVATION + EXTENSION + CONVERSION + IMPROVEMENT



102



122



107

110



98 BUILD IT HOUSE

The structural work on our model project is coming to an end, as the walls are closed in and decoration gets underway

102 ARCHITECTURAL KNOW-HOW: COASTAL HOMES

Architect Julian Owen gives his advice on the major design factors to account for when self building by the sea

107 RENOVATING A LISTED BUILDING

Heritage specialist Alan Tierney shares his top tips on how to go about a sympathetic refurbishment project – and how you can tell whether the work needs consent

110 WHAT IS THE RIGHT TO BUILD?

Local councils could soon be required to satisfy demand for self build plots within their jurisdictions. Planning guru Mike Dade explains how this government-led initiative might work in practice

122 STARTING OVER

Could a crumbling cottage on a rural plot be demolished and replaced with a modern, single-storey eco home?

PLUS:
YOUR Q&As ANSWERED,
SELF BUILD MORTGAGES
& LAND FOR SALE >>

THE Build It HOUSE

PROJECT: Four-bedroom family home
CONSTRUCTION METHOD: Timber frame
NUMBER OF STOREYS: Two (with potential for a loft conversion)
HOUSE SIZE: 155m² (internal floorspace)
BUILD BUDGET: £240,000
COST PER M²: £1,548



11: Plastering & decoration

Our virtual house's walls are closed in and given a lick of paint as **Tim Doherty** explains the costs and work involved in this stage of the project

Over the last couple of articles, we've explored the processes and costs involved in installing the plumbing and electrics for *The Build It House*. In each case, the contractors' work is divided into first fix carcassing – usually completed before the walls are closed in – followed by a second fix stage that's tackled afterward. While this helps in terms of understanding the full cost implications of hiring certain trades, it does mean we've missed out a crucial stage of the process: the plastering.

On timber frame projects, it's quite common to engage a multi-skilled carpentry team. They'll often be prepared to install the insulation and plasterboard, in addition to completing the pure joinery tasks. On larger contracts, however, the task of fitting the plasterboard is usually undertaken by a specialist dry-lining team.

With our model house, we are assuming that the site carpenters will be installing the insulation and vapour control layers (VCLs) into the wall and ceiling cavities, prior to the electrician and plumber commencing their first fix work.

The carpenters will then return to apply the plasterboard. So this is the stage where our virtual building will be closed up, with the wall services sealed.

Fitting the insulation

Using sheet plasterboard makes sense on a timber frame build, where prefabrication of storey-height panels ensures the internal walls are straight, square and level. But before we get to that stage, we must first add the rigid foam insulation that was specified all the way back in article four of this series (when we looked at the timber frame).

Our carpenters will be installing two layers of high-quality polyisocyanurate (PIR) boards to the inside of the external walls: one in between the studwork in the structural panels; and the other fixed over the surface with drywall screws. The roof will be thermally protected in the same way.

As well as treating the external envelope, we also need to pack the internal partition walls and intermediate floor with acoustic insulation to reduce noise transmission. For this we

AN OVERVIEW OF THE BUILD IT HOUSE

This virtual project intends to provide a reliable model that self-builders can refer back to when planning their own home. We've based the project around a young family, but it's flexible enough to be shaped to other schemes. The accompanying articles are an in-depth guide to the processes and materials that would go into our benchmark home.

We've set a construction budget of £240,000 for *The Build It House* (excluding design fees and preliminaries) on the basis that our self-builders have decided to project manage the scheme themselves. This means they'll be hiring in subcontractors, as well as dealing with certain suppliers directly. Some trades will bring their own materials, while some products will be specifically obtained on a supply-and-fit basis – but our self-builders will not undertake any of the physical site work themselves. For advice on how different management options affect costs, visit www.self-build.co.uk/which-building-route.

Our budget exercise works on gross internal area (GIA) rather than gross external area (GEA). It's important to clarify this with suppliers, as the difference between the two can be quite staggering. Our two-storey model house, for example, has a GIA of 155m² (the figure we'll be using for budget purposes). But the GEA would be at least 180m² after accounting for the thickness of the walls. The GIA rate for *The Build It House* works out at £1,548 per m², while the GEA rate is £1,333 per m². It's wise to include a contingency in your budget to cope with unforeseen issues or delays, normally around 10%-15% (so our maximum budget for the project is £276,000).

The Build It House was developed by the magazine's editorial team and designed by Opinder Liddar from Lapid Architects. Log on to www.lapidarchitects.co.uk for more about this award-winning practice.



are using 100mm-thick, 24kg mineral wool which, thanks to its density, performs well in deadening sound.

Plasterboard & skim

We're using a single layer of 12.5mm tapered-edge plasterboard on the internal side of all the external walls. The same product will also be employed to sheath the internal partitions and ground and first floor ceilings. We won't be treating the loft ceilings at this stage because, while this has been designed to support habitable accommodation in the future, we don't intend to use it just yet.

Our Standard Assessment Procedure (SAP) rating suggests using Gyproc Wallboard, but various alternatives are available that perform to the same level. It will be fixed with 40mm drywall screws into the timber studs. Longer screws will be used on the external walls, where we need to take into account the added thickness of a second layer of insulation.

When it comes to finishing the surface of the plasterboard, there are two main options – and much debate about which is best. The first is to apply a traditional 2mm-3mm skim coat of finishing plaster. The alternative – and the route we're taking for *The Build It House* – is to tape and joint the board junctions with a reinforcing scrim and filler. This isn't any cheaper than skimming, so our decision isn't based on price. Rather, we've opted for this method because it uses less water. This means we have another relatively dry construction stage to match the rest of our timber frame build, which – as we'll see later – will speed up the schedule as well as reduce the chance of shrinkage in the plaster. Fundamentally, the tape and joint process involves:

- Sealing joints with scrim (slightly self-adhesive woven tape).
- Taping all external corners.
- Applying a coat of filler over tapered areas and screw holes.
- Lightly sanding the surface when dry and adding a second coat of filler to compensate for any shrinkage.
- Lightly sanding again and then adding a top fill coat, which is a silky smooth consistency.
- Completing a final sand to get the surfaces ready for sealant as part of the decoration work.

There's one other advantage: when fixings are made into the wall of skimmed board, the top surface tends to crack, which adds an extra level of snagging (making good). Tape and joint reduces the risk of this occurring. With both options, reinforcing skim must be run over the board joints. With a skim coat, stainless steel or galvanised beads are also required on the external angles.

Internal finishes

With the plasterboard in place, it will soon be time to give the internal walls a lick of paint. There's a wealth of hues and

What is *The Build It House*?

This virtual project is intended as a benchmark to help you better understand the self build process and get a realistic grip on what it costs to create your own home



An installer fits British Gypsum's Gyproc SoundBloc, an acoustically-insulating plasterboard, to a studwork partition wall

HOW TO FIND A PLASTERER

If you decide to go for a skimmed plaster finish, then you'll need to engage a fully trained professional who has the skills to get the job right. Personal recommendation is the best route to finding a reliable tradesperson: friends, family and neighbours are a good place to start, but other trades on your site are also likely to have handy connections. Alternatively, try one of the review-based websites, such as www.mybuilder.com or www.ratedpeople.com.

The main jobs your contractor will tackle are: bonding (applying undercoat plaster) and skimming internal walls; skimming plasterboard; and applying internal or external render. The process is broadly similar for each of the above, with the mix, type of trowel used and attention to finish quality varying according to the task at hand. If possible, ask for references about work they've done on other sites – and pay close attention not only to whether the finished results were good, but whether they tidied up after themselves (splatters left on surfaces can be difficult to remove).

Many plasterers choose to specialise in external works (using sand and cement) as opposed to internal projects (using gypsum-based products). If you're going for an acrylic render for your cladding, you'll need to find someone specialising in this subset of the trade.

Rates for plasterers vary across the country, but as a rule of thumb expect to pay around £150 per day – plus a further £50-£100 per labourer. Most contractors quote per job rather than explicitly for their time, and they'll typically bring their own tools, mixing utensils and bagged products.

QUICK GUIDE: PLASTERBOARD OPTIONS

To improve acoustic performance, you could add a second layer of plasterboard to each side of the partitions, with the joints staggered. While this reduces sound transmission, it will increase the thickness of the partition by 25mm – encroaching slightly on floorspace. It will also require slightly different detailing for electrical socket and switch boxes. An alternative is to use a dense 'plank' wallboard, which is

thicker and well suited to sensitive acoustic locations (such as party walls or those between living spaces and bedrooms).

It's also possible to purchase wallboards designed specifically for use in wet environments, such as bathrooms and kitchens. There are also versions available for where high fire ratings are required, such as above integral garages or between the first floor and loft conversions.

types available from myriad manufacturers – including some niche brands that make high-quality ranges with corresponding price tags. The choice can seem a little daunting, but in most towns there are now specialist suppliers who will stock both trade and designer collections, with well-

trained staff on-hand who know how to ensure you get the right product for the application.

Generally, colour and sheen are the main considerations when selecting wall and ceiling paints. The former offers endless options (our self-builders are going with a slightly off-white hue to help reflect natural light), while sheens range from matt to satin. For those who want no shine at all there is the flat matt finish, which can be made easy to clean with the addition of a dose of acrylic. Silky satins are also readily washable and have a great capacity to reflect light.

A common mistake when decorating self-build homes and other major projects – especially among DIYers – is the application of vinyl matt or silk paint directly onto a new substrate. Plaster has to be given time to dry out, so while an initial layer can be applied, it should be as permeable as possible. This first coat will be readily absorbed into the plaster, removing the water and – if you've chosen the wrong paint – leaving the vinyl layer behind. It's this that can then easily peel away from the plaster surface. To avoid this, always go for a contract emulsion that contains no vinyl.

As we're using taped joints for *The Build It House*, there's no new wet plaster layer to contend with here. In this scenario we can use a product such as Johnstone's dry-lining paint, which is a flat matt emulsion. Two coats of this should be sufficient for a good finish, but an extra thin-downed initial layer is sometimes preferred. As this paint is water-based, it can be thinned simply by mixing in a small amount of clean water (around 10%-20% of the total volume).

For the woodwork (skirtings, door linings and architraves) the sheen scale typically ranges from matt (eggshell) through to full gloss – with satin as a halfway house. Standard woodcare paints are either oil (solvent) or water (acrylic) based. The advantage of a solvent base is that it's very hardwearing and offers a pleasing depth of finish; but it will leach out volatile organic compounds (VOCs). These carry a strong odour and, in high concentrations, can cause eye and skin irritation. Acrylic products are easier to apply, have quick drying times and are more environmentally-friendly – and as a result are extremely popular. They now account for around 80% of all paint sold in the residential market.

We're selecting a water-based satin for our woodwork (we'll cover the products we're using in more depth in the next issue). This will help distinguish it from the wall and ceiling surfaces. For any feature joinery, such as the stairs, a stain or wax could be used – or you could opt for a lacquer or varnish that will seal rather than penetrate the timber.

Our virtual self-builders could make a considerable saving by taking a DIY approach to painting and decorating – but this often turns out to be a false economy. Not only will a pro complete the job much quicker, but they're also likely to do a better job of achieving a high-quality finish on what will be some of the most visible elements of the finished scheme.

PLASTERBOARD & DECORATION

Building element	Quantity	Cost	Cost per m ² (of floorplan)
Insulation & plasterboard			
Installation of insulation into external wall panels (materials previously purchased)	705m ²	£1,652	
Supply of acoustic insulation (100mm Rockwool)	101m ²	£430	
Plasterboard (12.5mm tapered-edge)	215 sheets	£1,185	
Installation of plasterboard (ceiling)	170m ²	£700	
Installation of plasterboard (walls)	420m ²	£1,240	
Dry-lining of walls and ceilings (supply & fix)	590m ²	£2,925	
Subtotal for plasterboard		£8,132	£52.46
Internal finishes			
Emulsion paint for walls and ceilings (supply only)	104 litres	£434	
Satin paint for woodwork (supply only)	15 litres	£111	
Disposable accessories		£200	
Labour	24 days	£3,840	
Subtotal for internal finishes		£4,585	£29.58

Plasterboard & insulation total £12,717 £82.04

TIM DOHERTY



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

NEXT MONTH Tim explores the costs and considerations for the internal joinery elements of *The Build It House*



Your perfect oak frame home, individually designed and built.

- o Stunning design ideas, unique to you
- o Creating a home for how you want to live
- o Easing the way through planning approval
- o Fully managed project, your involvement, your choice
- o Expert, sensible advice

Watch your new life take shape

Your perfect oak frame home starts with our expert team listening to you. What follows are beautiful design concepts and your entire oak framed home built to meticulous standards with stunning results. The perfect home you've always wanted, fully managed.

The Complete Oak Home

Take the first step, give us a call today on 01249 479 892
start@thecompleteoakhome.co.uk

www.thecompleteoakhome.co.uk

Architectural know-how:

Coastal homes

Seaside plots and properties may be highly desirable, but they're accompanied by some weighty design considerations on everything from weatherproofing to maximising the views, says architect **Julian Owen**



The Bradley's modern self build on the Isle of Man features large glazed panels, which combine with glass balustrades to offer uninterrupted views out across the sea

Coastal living has a special quality: uninterrupted views of sea and sky put you almost at touching distance with nature, facing a changeable scene that can quickly go from deep tranquility to high drama.

While we may be an island nation with many thousands of miles of coastline, the reality is that the UK's planning restrictions mean that the chances of building in a totally undeveloped seaside area are low. One of the few routes to a viable piece of land is to demolish and replace an existing house of a similar size. Even so, plots on the coast tend to be prominent and highly visible, so early discussion with the local planners is essential. Access can be another issue: timescales and costs can easily rise if materials have to be taken in and off site by hand.

Designing for the site

If you're lucky enough to find a plot, its features will have a big influence on the design – so they should be investigated early, before any detailed plan is carried out. On a steep slope, the most successful schemes step down the gradient rather than try to reshape it to allow a standard style to be built. Another strategy is to break up the massing of the building, reducing its impact on the surroundings. The side of the house that faces the sea will offer great views, but the other aspect may be buried into the slope, so rooms that have less need for a window, WCs for instance, can be placed here.

The local geology also needs to be checked, as some types of ground are prone to slip and slide without specialist foundations. Water courses flowing along a hidden path underground as they find their way on a final route to the sea can also cause a problem. If you're lucky enough to have a cliff-top location you have an excellent opportunity for panoramic views but you will need to check whether it is an area of erosion, where the garden will get slowly eaten away by the sea and eventually taking the house with it. If you decide to buy a plot like this – on the basis that the erosion is slow enough to not affect the house in your lifetime – there may still be insurance and mortgage implications you'll have to consider.



MARGARET BOWEN

Sites near estuaries and in low lying areas present different design opportunities and there may be views of the landscape on several or all sides. The main practical problem is often the risk of flooding, which may limit the size of building that the planning department will allow. One solution is

to erect the house on stilts or pillars, which will allow space below to accommodate floodwater and raise the house above the risk level. A recent innovation for the UK is the construction of buildings that can float in the event of a flood and sink back down again once it has passed.

Facing the view

The biggest asset of a coastal house is usually the outlook over the water and the special quality of daylight that results from so much of the sky being visible. So it makes sense for the main living zones to face the sea and to maximise the area of glazing. The best views will likely get the worst of the wind and weather, so high-quality, well-fitted windows are essential.

The internal furniture layouts should be planned so that they allow occupants to enjoy the drama of the changing skies and seascape. Provided that you aren't overlooking private gardens, it is also the perfect opportunity for balconies and some outdoor living connected to the property via bifold doors. There may be a good case for an 'upside down' house, where the bedrooms are located at the lower levels and the main living spaces get maximum benefit of the scenery on the first floor.

Externally the white-rendered modernist style is popular, as it stands

Left: Jimmy Lawson and Hanne Stemann enlisted local firm Hebridean Homes to provide them with a stunning Viking Longhouse-inspired kit home on the Isle of Skye. The striking three-bedroom property conforms to the landscape and capitalises on sea views. Cleverly-designed cladding conceals rainwater goods in order to maintain the property's clean lines. The project cost £307,837



ALEX FINCH

CLOSER LOOK: CONTEMPORARY COASTAL LIVING IN CORNWALL

This demolish-and-rebuild project sits on a clifftop in St Ives, Cornwall, and features a wealth of design features common to coastal properties. Its stepped design works with, rather than against, the steeply sloping location, while the layout is all about maximising the outlook. A bay-windowed living space offers 180° views, for instance, with the upstairs bedrooms facing the sea while bathrooms and ensuites are placed to the rear.

The 232m² home cost £425,000 (£1,832 per m²), a figure that owner Andy Righelato believes was inflated by 30% due to the difficult access (over a railway line, then down a footpath). To counter the challenging conditions the house had to be made from stick-built timber frame, with nothing prefabricated. Everything had to be lifted in by hand, including a 385kg steel



out from the landscape and evokes the spirit of the Mediterranean. A further inspiration for designers is the traditional style of the local area: the builders of the past were very practical and there is a good chance that their materials and methods will stand up to the climate as well as blend in with the surrounding houses.

Typical examples of heritage building finishes include a simple render (which will require regular maintenance), local stone and stained horizontal timber boards that hint at traditional boat construction or fishermen's huts. Unfinished wood that has been left to weather naturally to a charming silver colour has a nautical feel to it and can be used for cladding, joinery, decking and posts. If properly

treated with preservative, timber will even stand up well to constant wetting with seawater.

Salt & sand resistance

It pays to check the suitability of any modern components and

materials if you're building in a coastal location, since problems can be caused by exposure to driving rain and the salt-soaked spray carried by the wind. Structural engineers and architects will automatically allow for the extra wind loads on buildings in an exposed location, but the components used need to be of good quality.

Window frames can be recessed slightly behind the external wall leaf to protect the joint from weathering and the frames, rebates and seals of openable windows should be checked



Above: These Kloeber timber doors in cheerful sky blue were specified for a seaside location. The company recommends that any timber products in a coastal setting are recoated more frequently than ones in a less harsh environment, and it also offers a marine-grade finish on aluminium products for an additional cost

for adequacy. Some suppliers won't guarantee the performance of their standard windows and doors in exposed conditions, so be sure to check the small print.

Because coastal areas in the UK tend to suffer from stronger winds and more storms than inland areas, salt spray is continually present in the air, causing corrosion of metal, while sand can also wear away finishes. Rain will wash away salt that has built up on surfaces, so sheltered zones are counter-intuitively more at risk of corrosion than those exposed to the elements. Salt can damage concrete, bricks, roof tiles, stone, mortar, plaster, render and metals of all types; it can also affect electrical equipment such as air conditioning units and metal fixings. Any harm can be reduced or eliminated by selecting the right materials – check with the manufacturer if there is any doubt about a product's salt resistance.

Specifying materials

In some areas there can be salt in the air up to 10 miles or more from the sea's edge, although the most noticeable effects are within about 200m of the beach. In locations close to the sea, where the droplets from the spray are carried in the air, standard galvanising of the exposed steel elements of a building may be inadequate. Rougher surfaces are

more prone to this risk, so it makes sense for metals to have a smooth, shiny finish in areas close to the sea.

The best metal to use is stainless steel, which is partly made from chrome. The correct grade will last indefinitely provided it is cleaned and maintained regularly. As a comparison, untreated steel will corrode 8,000 times faster than good quality stainless steel. Any exposed metal fixings should also be stainless products. Concrete can be used but must be carefully specified to ensure that any steel reinforcing is well covered.

Lime mortar can be susceptible to damage by sea salt, which can turn it into powder, so it should be avoided. Some bricks are not salt-resistant and will allow salt crystals to build up over time, forcing off the outer face of the brickwork and leaving it vulnerable to further deterioration. Also, using porous bricks will place the wall ties that span the cavity at risk of corrosion. Existing masonry walls that have been damaged in this way are best protected by covering them with a lime render rather than a cement-based one. This is preferable because a lime topcoat is softer, less prone to cracking and will not trap salt-laden moisture behind it. Lastly, you should pay close attention to modern clay roof tiles because the underside is susceptible to damage by sea salt, which can be difficult to spot from the ground.



Above: It's vital to install external lighting that's approved for coastal settings, like Garden Trading's hot-dipped galvanised steel St Ives downlight, £28, www.gardentrading.co.uk

JULIAN OWEN



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

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

Why not **kick start your DREAMS**
... it may be easier than you think!

Bi-fold doors
available in:
aluminium, hardwood
timber, aluminium/timber,
PVCu, glass/aluminium,
glass/timber &
glass/glass

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

Not sure who to turn to? How long it takes or what you require!

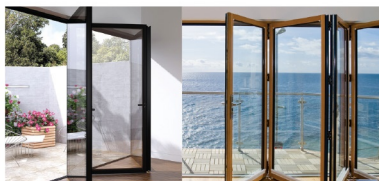
Look no further, we survey, manufacture and install

All covered by FENSA registration in less than three weeks.

Showrooms: The Folding Sliding Door Company, Bradford BD5 8ER.

The National Self Build and Renovation Centre (Stand TV 91)

Lydiard Fields, Great Western Way, Swindon, Wiltshire SN5 8UB.



0845 644 6630
www.foldingslidingdoors.com
sales@foldingslidingdoors.com



The  **Folding Sliding**
Door Company

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

The screenshot shows the homepage of self-build.co.uk. The header features the 'Build It' logo with the tagline 'Making your dream home happen'. Below the logo is a navigation bar with links: 'to self build', 'Plots & planning', 'Homes & design', 'Building routes', 'Products & materials', 'Costs & finance', and 'News & events'. A search bar is also present.

The main content area is divided into several sections:

- Reader's homes:** A featured article titled 'Georgian-style self build home' by Gill and Barry Davies, describing a gorgeous Georgian-style family home with low running costs. A 'Read article' button is visible.
- News & comment:** A list of recent news items, including 'Controversial Eco Home', 'CIL Survey by NaSBA', and 'A typical self builder'.
- Self build explained:** A section titled 'Why self build?' explaining the benefits of self-building in terms of design, budget, and lifestyle.
- Latest Features:** A section highlighting new features like 'What is LED lighting?', 'What is custom built?', and 'Handmade brick'.
- Interactive Tools:** A section promoting various online tools, including a 'Project cost calculator', 'Mortgage for garden self build', and 'Online project management tools'.

On the right side of the page, there are additional links for 'Subscribe now or buy latest issue', 'Get Build It on your iPad', and 'About Build It magazine'.

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

2 Renovating a listed building

In the second of his series on listed homes, Alan Tierney explains why you need to take a sensitive approach to refurbishment projects

In the last issue, I gave an overview of why certain buildings are listed and the fundamentals of how this designation can affect a project. This month, I'm taking a more in-depth look at what you need to consider when renovating a listed property. Specific consent is necessary for any alteration that might affect the special historic or architectural interest – or the significance – of a house or other listed structure. With that in mind, there are two key questions that need to be answered. Firstly, does the proposed work count as an alteration; and secondly, will it affect the building's significance?

Alteration or repair?

In simple terms, repairs do not require listed building consent (LBC) but alterations do. The difficulty comes in deciding which category your proposed work falls into. Sometimes the dividing line is obvious. Extensive remodelling of the layout or removal of architectural elements is clearly alteration, for example, while redecorating joinery or repointing brickwork will generally be classified as a run-of-the-mill repair.

Often, however, it can be much more difficult, as very similar work could fall into either category depending on the circumstances. Technically, for something to be repaired it must be damaged or defective in the first place – but it's not always easy to differentiate between a fault that needs repair, and the natural ageing and patina that is an inherent part of the character of an old house. Sometimes even original construction details can appear to be defects to the modern eye.

The scale of the work doesn't have any bearing on the definition. For example, re-rendering an entire building might be a necessary repair – whereas replacing a single pane of glass that's in good condition might

be an alteration. Remember that past changes and additions will have become part of the house and, if they existed at the time of listing, will be covered by the same process. Removing these – even if they appear modern or inappropriate – will require consent if it impacts on the building's historical or architectural interest.



Effect on significance

Whether an alteration will have an adverse impact depends very much on the particular features and importance of the individual house. Every listed building is unique and so are the factors that make them special. The starting point is to fully understand the property by establishing a detailed knowledge of its history, form of construction and style of architecture. This will give a strong indication of what contributes to its significance.

Some buildings, such as groups of estate cottages, may be important

only for their external appearance and how they relate to each other. In such cases, even quite extensive internal alterations may not require consent. On the other hand, a house with a nondescript facade may have an important internal decorative scheme for which any redecoration would need consent. Furthermore, some buildings are important because of their association with a historical figure or event. This might lend great significance to a feature that would be of little value elsewhere.

For any alteration it is always best to check with your local conservation

Above and inset: The owners of this single-storey forge were initially keen to replace the old hearth with an inglenook – but with some sensitive conservation by their specialist builder, the couple have come to love the characterful and quirky fireplace

“A good, experienced listed buildings expert will be able to advise you on whether work is likely to require consent – and give you a good indication on the probability of that consent being granted”



Above and right: This cottage is part of a world heritage site, set within a conservation area and listed to boot – but Alan Tierney and his team still managed to achieve a high-quality renovation that balances modern life with the building's original character; and reinstate some lost features along the way

officer whether permission will be required. In some cases, for very common kinds of modification, the need for consent is waived subject to you accepting to follow prearranged guidelines. This often happens with changes to services, where an agreed method statement and drawings are likely to be sufficient.

Pre-application tactics

A good, experienced listed buildings expert will be able to advise you on whether work potentially requires LBC – as well as give you a realistic indication of the probability of that consent being granted.

You should work together on developing a detailed understanding

In almost all cases a proportion of the work involved will require LBC. Many of the decisions about whether this is required – and whether it should be granted – will be specific to the individual circumstances. Inevitably there is a degree of subjectivity to contend with; hence early engagement with the local conservation officer to discuss your basic ideas will be very beneficial.

An element of negotiation is often necessary and you will need to be prepared to compromise on some points. The better you understand the building, the more you can show that you have taken its needs into account. It follows that the stronger your justification for the planned work, the greater your chances will be of reaching an agreement.

Making an application

The process for obtaining listed building consent is very similar to that for seeking planning permission. Application forms can be obtained from your local planning authority or you can submit the scheme online using the Planning Portal website (www.planningportal.gov.uk).



of the building. Combining well-researched background knowledge with a technical appreciation of the structure and its performance is essential if you're to work up an appropriate renovation scheme. Taking this route will help to ensure that the final plan provides what you need from your home, while also protecting its unique character and contributing to its long term survival.

The completed form must be accompanied by site plans, drawings, photographs (if appropriate) and a design and access statement. You also need to provide a heritage statement assessing the relative significance of the different parts of the building and detailing how you intend to protect them. Once the application has been registered the planning office has eight weeks to decide whether it



Above: Re-rendering two elevations of this traditional cottage was designated as a repair rather than an alteration, so did not need listed building consent

should be granted. At some point during that period, it's likely a site visit will be made to assess the scheme.

If consent is given it will almost certainly be accompanied by a number of conditions. These may require you to secure additional permissions for specific materials, submit further detailed drawings or allow for additional inspection – among other potential stipulations. You must comply with the conditions, otherwise you will be in breach of the planning or listed building approval. It pays to stay on top of discharging these conditions to avoid disrupting your project schedule – and remember that non-compliant work could result in criminal charges.

Starting the project

Once it is clear which elements of your scheme do not require consent, there is nothing to stop you getting underway on them. With a renovation project, this will usually allow much of the initial stripping out to be done while you wait for the LBC to be granted. It is essential to know where the dividing line is with the work that requires consent to avoid unwittingly committing an offence. Remember, breach of listing matters is covered by criminal rather than planning law.

Key principles

One of the potential pitfalls of the listed building consent process is that

it's easy to focus only on what's formally protected and use this as your sole guide for what you should preserve and protect during a renovation. In this sense, the entire process is something of a blunt instrument for retaining character. Much of what is truly special about old buildings is tied up in a multitude of small details; many of which can seem insignificant in isolation.

During the course of a project – at both the design and construction stages – you will be faced with hundreds of decisions about what should be kept or lost. If you do not pay close enough attention at these crunch moments, you will find that much of the character and value of the house erodes over the course of the renovation. To counter this, it's worth taking on board these three basic renovation principles:

- Make as little intervention as possible in order to achieve your objective.
- Retain as much historic fabric and as many heritage features as you can.
- Aim to make your work reversible, so that if you do get it wrong you can turn back the clock.

Follow these maxims and you'll stand the best possible chance of creating the home you want while simultaneously conserving the individuality and charm that first attracted you to the property.

UNCOVERING HIDDEN GEMS

A renovation project can provide the opportunity to add character by uncovering features that have been hidden by past generations or misguided alterations. Understanding where these might be and carefully exploring or opening up these areas creates the possibility of rediscovering a valuable asset. Here are a few potential finds:

Early wallpaintings Up until the end of the 17th century, most new-build houses of any importance featured extensive painted decoration on walls, beams and even ceilings. As fashions changed they were usually just covered over and they sometimes survive under layers of wallpaper, plaster and paint. In old buildings, strip any modern finishes with care and keep your eyes open – if you find something, call in a professional conservator.

Fireplaces Large open fires, burning loads of wood, were inefficient and unfashionable. They were often filled in with smaller coal fires that in turn were concealed when central heating became the norm. Investigate behind modern fireplaces or boarded up chimney breasts to see what survives.

Original joinery High quality softwood joinery was a prevalent feature of pre-20th century houses. Its use was, however, superseded by a Modernist desire for clean lines and flat surfaces. Often attractive panelled doors, turned balusters and mouldings were simply boarded over and can be brought back to their former glory.

Tiled floors These were common in the past, but later generations have thought them cold and antiquated. Modern finishes such as carpet, lino, vinyl, laminate or even cement screed could hide 17th century quarry tiles, 18th century patchwork clay flooring or even ornate Victorian encaustics. Unfortunately the originals are frequently badly damaged by such intervention – but occasionally it's possible to uncover a beautiful floor intact.

ALAN TIERNEY



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

What is the Right to Build?

Self builders and community groups could soon be given the right to buy serviced plots for their projects through this innovative proposal, says **Mike Dade**



Above and above right: Hannah Jones and Theo Hodnett took advantage of Shropshire council's 'build your own' initiative to get a foot on the housing ladder with this £122,500 new home. A local precursor to the Right to Build, the scheme was designed to boost the availability of low-cost properties in the region by allowing self builders of up to 100m²

Currently under trial with 11 vanguard councils, the Right to Build is a government initiative that intends to increase the availability of plots for one-off schemes (whether for individual self builders or groups). It also aims to deliver greater certainty on planning permission and costs to encourage more lenders into the market and help to grow the sector. So, what exactly is the right and how will prospective self builders be able to take advantage of it?

Background

Councils have long been charged with delivering an adequate supply of housing land by allocating suitable sites via their Local Plans. Unfortunately for those of us looking to create bespoke homes, the big developers have dominated this costly and time-consuming allocation process. They identify and purchase likely sites, promote them to the councils and push for their inclusion in Local Plans. As a result, self builders have often been left to try to find odd infill plots or existing houses to demolish and rebuild.

All of this started to change in 2012, when the government's new National Planning Policy Framework (NPPF) was released. It stated that councils must cater for the needs of different groups in the community, including those wishing to build their own homes. It's worth noting that the government defines a self builder as someone who directly organises the design and construction of their home, while custom build involves using a specialist enabler or developer to deliver a significant portion of the scheme.

Fundamentally, the thinking is that the custom build industry can make a big contribution to solving the UK's housing crisis; not to mention that delivery of more individually-tailored homes will encourage small and medium builders back into the market. And one of the biggest stumbling blocks is the availability of land.

The Right to Build will take councils' duty to identify an adequate supply of housing land a step further. It will achieve this by requiring them to specifically assess the demand for self build in their jurisdictions – and to fulfil

that demand by offering serviced plots at market value to both individuals and groups who want to custom build.

Trials with the 11 vanguard authorities commenced in 2014 and a piece of enabling legislation, in the form of the *Self Build and Custom Housebuilding Act*, was granted royal assent in March this year. The proposed Right to Build has since been incorporated into the government's new housing bill, as announced in the Queen's Speech following May's general election.

Basic provisions

The *Self Build and Custom Housebuilding Act* provides the legislative framework to bring forward the Right to Build. It places a duty on local authorities (LAs) to keep a register of individuals and community groups who have expressed an interest in acquiring land to bring forward self and custom build projects.

The wording is that councils must 'have regard' for this demand – so they need to take it into account when developing their housing initiatives and Local Plans. The Act is short and only

sets out broad-brush requirements for LAs to adhere to. How the registers – and ultimately the Right to Build – will work in practice will no doubt vary from council to council, but will be shaped by the experiences of the vanguards.

How the Right to Build might work

The intention is that all presiding authorities will have to maintain a register of people and groups seeking to self-build in their area. South Cambridgeshire, one of the vanguards,

is achieving this via a simple online form that asks for details of your needs, budget and local connections. There's not yet a clear picture as to whether the fully-fledged Right to Build will only allow you to register in your local area. However, it seems likely that councils will try to restrict the numbers of self and custom builders they have to cater for by introducing some kind of eligibility criteria based on local credentials.

Once councils have a register of self builders, they'll be required to ensure that adequate opportunities exist to

meet the level of demand. The emphasis in the Right to Build consultation has been on provision of serviced plots, meaning that essentials such as access, water, electricity, broadband and drainage are laid on.

Once land is allocated for self and custom build, it still requires planning permission. Developers or enabling councils might obtain consent for the layout and infrastructure – or perhaps even develop an overall design code – but individual self-builders would need permission for their specific scheme.

LAs would be able to deliver these plots via a variety of means. Land owned by the council itself could be utilised, for example, or plots might be provided as part of a larger site being developed by a volume housebuilder (who might not necessarily be involved in designing or delivering this aspect of the scheme). The Right to Build consultation, which closed at the end of 2014, suggested that allowing developers to count custom build obligations could make the latter option a viable proposition.

Alternatively, councils could simply allocate land for self building just as they do for conventional housing. This

Below: Specialist custom build firm Igloo (www.homemadeheartlands.co.uk) worked with the Homes & Communities Agency to develop the Heartlands scheme in Cornwall, which includes 54 custom build projects. Six home manufacturer partners have been selected for the project, with work on site expected to begin later this year



Right to Build vanguard councils

Local authority	Flagship scheme
Cherwell District Council	Graven Hill (1,900 homes)
Dartmoor & Exmoor National Park Authorities	Local, affordable homes
Oldham Council	South Werneth (37 homes)
Pendle Borough Council	Individual self build plots
Sheffield City Council	Individual self build plots (21 homes)
Shropshire Council	London Road (42 homes); Affordable custom build
South Cambridgeshire District Council	Northstowe (50+ homes)
South Norfolk District Council	40-60 custom build plots
Stoke on Trent City Council	Penkhull (6 homes)
Teignbridge District Council	Policy to implement 5% self build on sites of more than 20 dwellings
West Lindsey District Council	Individual self build plots on previously-developed public sector land



Above: The Graven Hill self build site near Bicester in Oxfordshire is the UK's largest custom home scheme, with 1,900 plots being made available for one-off and collective projects. For more details visit gravenhill.co.uk

land would need to be purchased, outline planning consent obtained, the site divided up and services laid out prior to the individual plots being offered to self builders. This could be done by a developer alone (whether a specialist custom build company or a volume housebuilder) or via a joint venture involving the council, a developer and/or a social landlord. As the sector grows, no doubt innovative mechanisms will evolve to help councils meet demand.

Current schemes

A look at what the vanguard authorities are doing on the self build front reveals

some exciting opportunities. Cherwell council, in north Oxfordshire, is in the midst of developing arguably the country's largest custom home scheme at Graven Hill, near Bicester. The site could deliver up to 1,900 self builds, along with a range of community facilities including a primary school, employment space and shops.

At the other end of the scale, Shropshire Council has adopted a policy where planning permission can be granted for single plots as an exception to normal planning policies. This is designed to enable houses to be self built to meet local need for affordable housing. Dartmoor and Exmoor National Park Authorities are also looking at how the model can deliver affordable custom homes.

In Stoke-on-Trent the council is working to identify surplus sites that it owns and bringing them forward for self builds. A scheme involving six serviced plots has already gone ahead with all the sites sold. Similarly, Oldham Council is earmarking land in its ownership for

self build projects and is also seeking developer-led plot provision on a number of existing housing sites.

Elsewhere it is clear that momentum is gathering, with a substantial self build scheme in Buckinghamshire taking shape and the Homes & Communities Agency pursuing 10 enabled developments across the country, each delivering between 10 and 120 plots.

Moving forward

This has the potential to be a game-changing piece of legislation, but the process of reviewing and updating planning policies takes a significant amount of time. Consequently even if it is made law during this parliament, the speed of councils' responses to the Right to Build will vary considerably.

The key to maintaining the momentum in land delivery is for anyone thinking of self building to approach their council and express their interest in obtaining a plot. Unless LAs are aware of the level of local demand, they can't be expected to cater for it. If your council already maintains a register, sign up – and if it doesn't, email or write to them asking when they will be starting one.

It's not just the vanguards who are taking action: authorities in Bristol, Chelmsford, Inverclyde and Rotherham – to name but a few – are all inviting expressions of interest. If you're unsure about approaching them directly, try www.localselfbuildregister.co.uk, which offers an online route to connecting with your local council.

Keep an eye on *Build It* magazine and www.self-build.co.uk for updates as the legislation takes shape.

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.



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 Design (CAD) service available
- Free quotation provided with detailed breakdown of costs
- Supply only or supply & Erect
- Extensive range of products Including External & Internal Joinery Packages
- All designs individually certified by a qualified Structural Engineer
- All components supplied to NHBC requirements
- Delivery Program to suit your Build



Individual Service
Technical Excellence
Precision Manufacturing
Quality Products



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



Are you planning on starting at Extension, Renovation, Conversion or New Build in 2015?

Don't forget to protect your project with the right insurance!



SITE INSURANCE

Can you really rely on just your Builder's Insurance? Protect Your Investment with the Site Insurance.



STRUCTURAL WARRANTY

Protects your project for up to 10 years against defects in design, materials and workmanship.



SITE SURVEYS

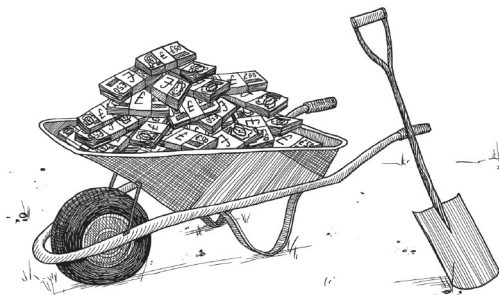
Get all your survey needs in one place, from Building Control to Technical Audits!

Our Site Insurance covers you, your employees and the project during the build process and our 10 Year Structural Warranty protects it on completion

For more information or to obtain a quotation go online at

WWW.SELFBUILDZONE.COM or Call the Self-Build Zone team on **0845 230 9874**

Smart self builders & renovators always have the materials they need to hand...



...and that includes the money

The BuildStore Difference

- Borrow up to 85% of your land and build costs
- Stay in your current home until you have finished your new one
- Receive your money when you need it to pay for materials and labour
- Negotiate better deals and keep workmen on site by having the cash to pay your bills
- Choice of leading lenders, products and competitive rates
- Advance stage payments available

The trouble with most self build mortgages is that they're not designed to suit the needs of self builders and renovators.

BuildStore's highly experienced self build mortgage advisers have access to exclusive mortgage schemes individually tailored to suit you and your project, whatever your financial requirements. For example, if you don't have a large amount of cash sitting in the bank to fund the early stages of your project, our exclusive Traditional and Advance Stage Payment mortgage schemes with their higher lending percentages on land and build costs will help you get started. Quite simply, you'll have more money, enhanced cashflow and greater flexibility during your project.

Funds can be released at the beginning or end of each stage of your build to suit your circumstances and we offer a choice of leading lenders and competitive rates.

To find out more about our exclusive mortgage schemes and for expert advice, contact us now.

Call 0345 009 2234

BUILDSTORE
Mortgage Services
www.buildstore.co.uk

Your home may be repossessed if you do not keep up repayments on your mortgage.

For arranging self build and custom build mortgages, we charge a fee of £595. £95 is payable on application and a further £500 on offer. For all other mortgages, we charge a fee of £295 which is payable on offer.

Self build 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 (available from www.buildstore.co.uk)							
Bath Building Society (Accelerator)	85% (OPP)	80%	Six	DPP & Building Regs granted	4.99%	England/Wales	0345 223 4647
Hanley Economic (Accelerator)	85% (OPP)	80%	Six	DPP & Building Regs granted	5.79%	England/Wales	0345 223 4647
Hanley Economic (Accelerator)	85% (OPP)	60%	Six	DPP & Building Regs granted	4.69%	England/Wales	0345 223 4647
Melton Mowbray (Accelerator)	85% (OPP)	75%	Six	DPP & Building Regs granted	4.89%	England/Wales	0345 223 4647
ARREAR STAGE PAYMENT MORTGAGES							
Cumberland Building Society	75% (DPP)	75%	Flexible	Flexible	Call branch	Branch operating area	0845 601 8396
Dudley Building Society	50% (DPP)	75%	Six	Damp proof course	4.99%	Postcode restricted	01384 231414
Ecology Building Society	85% (OPP)	85%	Flexible	Flexible	4.90%	National	0845 674 5566
Furness Building Society	66% (DPP)	80%	Eight	Excavation	5.99%	Local	0800 781 4311
Hinckley & Rugby BS	No	80%	Four	Footings	5.64%	England/Wales	01455 894083
Loughborough Building Society	75% (OPP)	75%	Six	Foundations	4.99%	England/Wales	01509 631950
Newbury Building Society	66% (DPP)	75%	Flexible	Foundations	4.95%	Postcode restricted	Contact local branch
Norwich & Peterborough BS	80% (DPP)	80%	Seven	Foundations	4.89%	England/Wales	0845 300 2522
Progressive Building Society	No	75%	Four	Wall plate	Depends on scheme	Northern Ireland	Contact local branch
Scottish Building Society	80% (DPP)	80%	Flexible	Foundations	5.99%	Scotland	0131 313 7700
Vernon	75% (DPP)	80%	Four	Wall plate	4.95%	England/Wales	0161 429 6262
ARREAR STAGE PAYMENT MORTGAGES (exclusives available from www.buildstore.co.uk)							
Chorley Building Society	85% (OPP)	80%	Six	Foundations	5.99	England/Wales	0345 223 4647
Darlington Building Society	80% (OPP)	80%	Six	Foundations	4.99%	England/Wales	0345 223 4647
Furness Building Society	75% (OPP)	80%	Six	Wind & watertight	4.99%	England/Wales	0345 223 4647
Furness Building Society	75% (OPP)	80%	Six	Foundations	5.20%	Mainland Scotland only	0345 223 4647
Hanley Economic BS	75% (OPP)	80%	Six	Foundations	5.69%	England/Wales	0345 223 4647
Holmesdale Building Society	85% (OPP)	80%	Six	Foundations	5.29%	England/Wales	0345 223 4647
Ipswich Building Society	75% (OPP)	75%	Six	Foundations	4.99%	England/Wales	0345 223 4647
Loughborough Building Society	75% (OPP)	75%	Six	Foundations	4.99%	Central England	0345 223 4647
Mansfield Building Society	80% (OPP)	80%	Six	Foundations	4.99%	England/Wales	0345 223 4647
Newcastle Building Society	80% (OPP)	80%	Six	Foundations	5.25%	Eng/Wales/Mainland Scot	0345 223 4647

Hassle Free...

'Easy Fit'

FLOOR HEATING

...for the same price as a kit!

We bought comfort and saved over 50%

Heating is a big decision and we thought long and hard about the type of heating for our dream home.

In the depths of winter we purposely visited a friend who had floor heating. Their tiled floors were warm and really, comfortable whereas ours were freezing cold, even with the radiators turned up. That extreme contrast was the decider, a cold floor could never compete with the luxurious feel of floor heating.

There was no more talk of radiators - it was going to be floor heating all the way!

With the help of 'Easy Fit', we've achieved our dream.

DIY was not for me but 'Easy Fit' helped me project manage from start to finish - I sent my plans and they took over - we really were in safe hands. We also took advantage of their interest free credit option.

We're so happy we made the right choice and chose floor heating!



INTEREST FREE CREDIT

24 month credit example*:

System cost **£1500**

Deposit **£150** • 24 monthly payments of **£56.25**
(0% apr Representative)

Total cash price **£1500** • Total credit price **£1500**



Enjoy peace of mind, by dealing with an established, highly rated company

Send your plans or room dimensions for a free no obligation estimate to:

plans@easyfitfloorheating.co.uk

Help & Advice
7 days a week



They saved £9000 by project managing the floor heating for their 205m² house themselves, £6000 on the system and £3000 on the labour!

'Easy Fit' - a division of **WUNDA GROUP PLC**
easyfitfloorheating.co.uk | 0800 5420 816

Ask the EXPERTS

Essential advice on your problems with building, budgeting, DIY & planning from the most experienced names in the selfbuild 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. He is one half of Speer Dade consultants (www.speerdade.co.uk).



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 deals with a diverse portfolio of lenders across the whole market as well as on exclusive self build and renovation mortgage products.



CONSERVATION

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.



UNDERFLOOR HEATING

Heather Oliver is the product development manager at Nu-Heat (www.nu-heat.co.uk). Prior to working with the UFH specialists, she spent 15 years working in civil engineering on both infrastructure projects and domestic housing schemes.



BUDGETS

Tim Doherty was the founding MD of the National Self Build & Renovation Centre and a founding member of NaCSBA. He runs Dobanti Property Consultants (www.dobanti.com), a specialist surveying & building consultancy for the residential and commercial sectors, including surveys and site appraisals, project management and custom build solutions.



SELF BUILD

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



DESIGN

Opinder Liddar is a director at Lapd Architects (www.lapdarchitects.co.uk). The practice specialises in residential projects from extensions to new build, making him the ideal person to answer all your home design questions.

PLANNING

Can we build in the countryside?

My partner and I have purchased three acres of land that I believe falls outside of the local development plan, but is located partly within a flood zone due to its proximity to a river. We were wondering whether there's potential to build our new home somewhere in the low flood risk part of the plot.

There are currently two gates located on the site that are used for access: one onto the main road but close to a bend (and in the high risk flood zone) and the other onto the lane, which services five other houses. I imagine the second access onto the lane would be more suitable.

Broadland District Council have verbally told us there is no hope of obtaining approval for a self build project – but don't planners always say this? I have also been told the previous owners had their application rejected many years ago. If we went down the route of outstanding architectural design, do you think this would change the situation? We are keen to build something striking and contemporary and I'm also considering whether it is better to employ a local architect or to bring in a specialist from further afield.

The land comes with an uplift agreement, so if we were to obtain approval to build, we would have to pay 50% of the uplift in the plot's value.

The key issue here is the fact that the site is remote from the development boundary of the parish of Buxton with Lamas, and is situated in the countryside for planning purposes. Given these issues, policies of strict restraint will apply and few exceptions are allowed. A cutting-edge design might be accepted, but this is also couched in the terms of government guidance, which states that the property should:

- Be truly outstanding or innovative, helping to raise standards of design, more generally, in rural areas.
- Reflect the highest standards in architecture.
- Significantly enhance its immediate setting; and be sensitive to the defining characteristics of the local area.

It's fair to say that the bar is set extremely high for this type of proposal, so gaining approval won't be easy. You'll see it's not enough to have an outstanding or innovative design, and the requirement to 'significantly enhance its immediate setting' is almost impossible to fulfil where, as here, the site is located in attractive countryside. As a result, only a handful of such proposals succeed nationally, every year. To embark on such a project must be regarded as a big gamble.

The flood risk issue is one that looks like it is something that could be satisfactorily dealt with, but that doesn't change the suitability of the land in principle.

QUESTION
OF THE
MONTH

SELF BUILD

Can I live without mains services?

I have recently viewed a detached three-bedroom bungalow on a 1.4 acre plot, which is a slightly sloping site with good views. It does not have access to mains gas supply and it has a cesspit. Although it is being marketed at a higher price than I would consider paying, I am drawn to it, mainly because of the vistas.

In an ideal world what I would like to do is demolish the bungalow and replace it with a five-bedroom house, with an annexe. I am considering approaching the local authority (LA), to ask if in principal they would allow me to do this. The house I'd like would have: a 'half basement' (primarily for the soil's natural insulating properties) built into the slope; ground and first floor; and a habitable loft area (there will be four floors in total).

However, my main concern is living off mains gas and the inconvenience of not having a street sewer connection. How could I negate the higher cost of energy bills? The garden is south facing, so would lend itself to solar panels. As there's plenty of land, I would also definitely consider installing a ground source heat pump and rainwater harvesting system.

Would I need to submit detailed drawings to the LA for a decision in principal? Or will a simple sketch suffice?

I suggest that you commission some basic drawings of what you would propose to put on the plot to replace the bungalow. You can then arrange a pre-application meeting with your local planning authority to discuss what could be acceptable – but be prepared to pay around £250 for the privilege. A basic sketch would suffice at this stage, together with photos of the plot and a simple site plan showing the scale and location of the new dwelling. Speak with any neighbours and let them know what you are proposing and do what you can to gain their support, too; having them onside from the outset will very much help your cause.

I don't think being off mains drainage is an issue. Rather than keeping the cesspit, I would install a treatment plant, which is a special vessel that uses aerobic and anaerobic bacteria to digest virtually all the waste. It's like a septic tank, but has a powered rotating paddle inside to introduce oxygen. Costs are very reasonable and I'd budget £5,000-£6,000 for installation. Ground conditions need to be suitable for percolation of liquids and some infrequent tank emptying will be required. You also need to be careful what detergents go in so that you don't kill off the 'good' bacteria. Overall, I doubt that you'd notice that much of a difference to having the house connected to the sewers.

As for alternatives to gas, you have all sorts available to you. Oil prices have come down of late and are not that much higher than gas – plus they come without the capital expenditure associated with heat pumps. But if you want to avoid fossil fuels, as I suspect you do, then heat pumps or biomass boilers could well be the answer. The Renewable Heat Initiative (RHI) will help you balance out the higher cost of installing this kind of tech and Feed-In Tariffs (FITs) are still available to offset micro generation schemes; while the rates have reduced, this is evened out by the cheaper cost of the hardware as it becomes more mainstream. Both of these will help reduce future energy costs. However, if you go for a heat pump, correct sizing and installation is critical. Get this wrong and the promised efficiencies suffer dramatically, so make sure that you choose a reputable installer.

DESIGN

What do I need to consider when extending my period property?

We bought our terraced house five years ago with a view to making it bigger. We have a large garden that we could comfortably extend into without losing the sense of space.

What we'd like to do is create a seamless transition from the old to the new. How can we ensure that the new addition works well with what's already there?



You need to think about what the seamless look really means to you: do you want the exterior to match the original; or are you more interested in the way the internal spaces flow? If it is the latter, you can design the new zone to incorporate the same internal materials, floor coverings and wall finishes, for instance.

Externally I don't think the two have to be the same. For example, older properties tend to have relatively small windows, but most people want extensions to flood their homes with natural light via bigger openings. However, a more classic look could also be achieved by adding a traditional orangery.

WIN! A SET OF HI-TECH BOSCH TOOLS

These state-of-the-art tools are perfect for keen DIYers who want the right tool to aid them when completing those niggling odd jobs around the home. Eliminate the risk of drilling or knocking into gas pipes and live wires with the Bosch PLR 10, worth £279.99, which detects these before any damage is done. Record ceiling heights and measure in the knowledge that your calculations are correct with the Bosch PLR 15 laser, worth £49.99. Hang pictures and install shelves with ease using the Bosch PSR 1080 LI, worth £69.99, as your trusty assistant. Finally cut your tiles and even concrete blocks with the Bosch PWS850-125 angle grinder, worth £59.99. It features an anti-vibration handle that makes it easy to control when in use.

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

Worth
£250



ANY QUESTIONS?

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



Dear Reader

Whether you choose to go it alone or not, you'll still be heavily involved in specifying your new home – and a regular copy of *Build It* will give you the inspiration and advice you will need at each stage of your project.

Have you thought about subscribing? There's no need to trek to the shops to get your latest copy, each issue will be delivered to your door – meaning you receive your copy before it hits the shelves, and at half the cost.

This month if you subscribe, you will receive **12 issues for just £24 plus 12 digital back issues free** – meaning you can gain an extra 12 months' worth of expert advice and inspiration.

Chris

CHRIS BATES, EDITOR



SAVE
50%

- Order today to guarantee this offer www.self-build.co.uk/suboffer
- or call 01442 820580 quoting 'BISEPT15'
- or complete and post the order form opposite

GREAT REASONS TO SUBSCRIBE

► *Just £2* per copy*

► *Never miss an issue*

► *Get every issue
delivered to your door*

► *12 digital back issues
FREE*

► *Subscribers receive
free tickets to their
nearest Build It Live
worth £24*

► *Exclusive reader day
invitations*

► *Join our self build
community*

► *Free educational
guides*

SUBSCRIPTION ORDER FORM



SUBSCRIPTION FORM

Build It, Unit 8 The Old Silk Mill, Brook Street, Tring, HP23 5EF

Mr/Mrs/Ms/Miss _____ Name _____ Surname _____

Address _____

Postcode _____ Telephone _____

Email _____

£24 for 12 months (inc 12 digital back issues) by Direct Debit

**DIRECT DEBIT PAYMENT IS ONLY
AVAILABLE FOR UK RESIDENTS WITH
A UK BANK ACCOUNT**

Instruction to your bank or
building society to pay by
Direct Debit



Name and full postal address of your bank or building society

To: The manager _____

Bank/building society _____

Address _____

Postcode _____

Name(s) of account holder(s) _____

Branch sort code _____ Bank/building society account number _____

Banks and building societies may not accept Direct Debit Instructions for some types of account

Originator's Identification Number **4 2 7 0 4 9**

Reference (official use only) _____

Instruction to your bank or building society Please pay Webcribe Ltd Direct Debits from the account detailed in this instruction subject to the safeguards ensured by the Direct Debit Guarantee. I understand that this instruction may remain with Webcribe Ltd and, if so, details will be passed electronically to my bank/building society.

Signature(s) _____ Date _____

Castle Media Ltd will use your information for administration and analysis. If you prefer NOT to be contacted by POST, TELEPHONE or FAX with regards to products and services which may be of interest to you, from Castle Media Ltd or other carefully selected organisations, please tick here ☐ If you would like to receive E-MAILS or TEXT/PICTURE/VIDEO MESSAGES with regards to products and services which may be of interest to you, from Castle Media Ltd or other companies, please tick here ☐

Or to pay by credit card, please fill in the form below:

Please debit my card for £28.00

Prices apply to UK residents only. Residents of other countries, please call us for prices.

☐ Mastercard ☐ Maestro

☐ Visa debit ☐ Visa credit

Card number

Expiry date

____/____

Issue number

Security code

(last 3 digits on signature strip)

Valid from _____

Please include cardholder's name and address if different from delivery address

Account holder name _____

Address _____

Signature _____ Date _____



*offer £24 direct debit, £28 by credit / debit card. Savings are compared to 12 issues at £4.35, costing £52.20. Offer ends 22nd August 2015. If you sign up to the direct debit offer you may cancel your subscription order at any time. Unless you cancel, your subscription will continue automatically at the special rate of £19.92 every 6 months, saving 20% off the usual price.

PLOT WATCH:

Mike Dade *investigates*

Starting over

Jessica Freeman has spotted an old cottage on a rural plot close to her family's stomping grounds. Could it be knocked down to make way for a modest, eco-friendly replacement? Planning guru **Mike Dade** takes a closer look

WHO Jessica Freeman

WHAT A dilapidated cottage on an overgrown, country lane plot that could offer potential to replace the existing bungalow with a small sustainable home

WHERE East Sussex

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



Jessica Freeman is looking for a rural plot, close to the village where she was brought up, on which to build a modestly sized eco home. She's cottoned on to the fact that replacing a rundown or unappealing existing house might be a good way forward, but the cost implications of a demolish-and-rebuild project can be punitive. She's recently spotted a near-derelict cottage by a country lane. Could it support her self build dream?

The opportunity

The property is a small timber bungalow, shrouded in ivy and almost hidden behind the roadside hedge. In fact on first inspection it's only the chimney that suggests this might be a dwelling as opposed to an old farm building. The site is badly overgrown and the single-storey cottage is in very poor condition, albeit the walls and chimney are mainly intact.

The house sits in the corner of a field in open countryside. A few overgrown fruit trees to one side indicate what once must have been garden, but otherwise the house is quietly merging back into the landscape.

Jessica is uncertain how to move forward with a project on this site. Should she try to find out who owns it, and establish whether they'd consider selling, or should she explore its development potential first? In this case there are some significant questions to answer on the planning side. A number of preliminary investigations could be done simply and without cost, so this might be the best place for Jessica to start.

Planning basics

The council's Local Plan (which sets out its planning strategy) contains a policy that allows for the replacement of one countryside dwelling with another, subject to a variety of criteria about the size of new house and its position on the plot.

The key issue here, though, is whether the structure currently on site can reasonably be described as a dwelling. The courts and planning inspectors have considered this issue at appeal on many occasions. Out of this process has come the concept of a building – and consequently its use as a dwelling – being abandoned. Jessica needs to establish whether the residential use of this former cottage has been abandoned.

The courts have come up with a number of parameters on which to test a property's status, notably: the period of vacancy; the condition of the building; whether there has been any intervening, non-residential use; and the intentions of the owners.

Where a house's recent history is hard to pin down, it's sometimes possible to establish the course of events by trawling through Google Earth. This has a facility that allows you to turn back the clock to see the site in former guises. In this case, there are pictures dating back to 2003 – but unfortunately they don't reveal a great deal and the property appears to have been even more overgrown 12 years ago. There are signs the surrounding vegetation was briefly cleared a few years back, but it has since grown back.

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

Jessica could also check the council's records to see whether there have been any planning applications on the property. This can unlock clues to its history and viability – but on the face of it this old bungalow seems to have been unoccupied for at least 20 years. While this is a considerable amount of time, this alone may not be a killer blow to the site's development potential. There are cases where longer periods of vacancy haven't led to a conclusion of abandonment.

The condition of the building is pretty poor. There are no windows or doors, parts of the roof are falling in and the wall cladding is missing in places. This doesn't conclusively point to abandonment but does give cause for concern. If the building had been occupied, then running repairs could have kept it going almost indefinitely – but the bungalow isn't a substantial building and one could argue that it has simply come to the end of its natural life.

My guess is that the council might consider it too far gone to be classed as a dwelling – but if it was never the owner's intention that the building should deteriorate, there may still be a chink of light for this site. At the moment we can only speculate as to their intent, so tracking them down will be crucial.

Planning details

The fact that Jessica wants to replace the bungalow with a fairly compact eco home could count in her favour, as the scale of the development should give the planners no cause for concern. Often small cottages are replaced with much larger houses, but Jessica would be happy with a single storey home no larger than the existing building. She likes the idea of timber cladding and a green roof, which would be ideal in this rural location and would sit equally as unobtrusively as the existing bungalow in the landscape.



If the planners were uncertain about whether to allow any kind of replacement at all, then her plan to take a modest, environmentally friendly approach could help get them on board. Even if the planning officer was concerned about the principle of any development being allowed on this site, councillors could still prove supportive. If she comes to make a planning application, Jessica should lobby her local councillor to canvas support. Local connections and humble aspirations tend to play well with planning committees.

Jessica could test the waters with the planners by seeking pre-application advice, but she'd need to have plans drawn up to give the scheme some context and there would be a small fee involved. It would probably make better sense to find the owners at this stage, before any money is spent. Alternatively she could scour local planning records for any similar replacement applications, which might reveal the council's attitude to semi-derelict properties.

Finding the owners

Whenever the ownership of a property changes, this is recorded in the Land Registry. In a case like this, where there's no obvious address, you can submit an enquiry by pinpointing the plot on a map via www.landregistry.gov.uk.

Unfortunately, if a property hasn't changed hands for many years then it's likely that it won't have been registered – which makes tracking down the title holder a good deal trickier. An alternative route would be to check the council's planning records, where ownership can be picked up from any past planning applications. Beyond that it's probably a case of having to get on with some good old fashioned detective work – in other



words asking around at the local shop, pub or knocking on near neighbours' doors.

Moving forward

If Jessica can track down the owners, then she'll need to ask if they would consider selling. It would be naive to think that the property could be purchased for next to nothing, so Jessica should think about what sort of offer she might make. Any proposal would have to be made subject to gaining planning consent – in other words, it should be a conditional contract. This inevitably carries the risk that the owners, suddenly alert to the site's potential, might try to get planning permission themselves and sell the plot to the highest bidder.

Jessica's strong point is her local family connections and she should stress this, along with her desire to build something very unassuming in scale. This should mark her out as a serious buyer who's more likely than most to succeed with a planning application. Another possibility worth considering would be an option contract, where Jessica would pay the owners a nominal amount to secure the right to buy the property for an agreed sum, subject to her gaining planning permission for the house she wants.

Both option and conditional contracts need to be drawn up by a solicitor familiar with such agreements, so Jessica should ensure her legal representative has the right expertise.

The verdict

This is an uncertain proposition involving the replacement of a bungalow that might be just too far gone to be viable for redevelopment in planning policy terms. However, there's plenty Jessica can do to find out the prospects for success – and whether owners might sell – without incurring expense. As the property is potentially the right thing in the right place to suit her needs, it's well worth exploring, just in case the opportunity comes good.

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

BUILDSTORE

PlotSearch

PlotSearch is the UK's premier land finding resource with over 8,000 genuine building opportunities, all with planning permission guaranteed. The plots collated here are a hand-picked selection, but you can find plenty more in the online database. **Build It** readers can now carry out unlimited searches for plots across the UK with a **FREE** six month subscription. To find out more visit the website at www.plotsearch.co.uk/myfreetrial or call 0345 223 4499

Land FOR SALE

Location

Warwickshire

Price

£495,000

Plot number

127463

Description

This plot is offered with outline planning for the construction of two stone built, four-bedroom detached luxury houses. Each of the proposed two-storey properties will have its own attached garage. The site extends to approximately 0.49 acres and has access to mature gardens and grounds, which include a tennis court that belongs to the adjoining bungalow.



Agent

Sheldon Bosley

Location

Oxfordshire

Price

£400,000

Plot number

127366

Description

Outline planning permission has been granted for the change of use of this former chapel into a three-bedroom house with a detached double garage. The existing property is composed of a reception room with vaulted ceiling, bathroom, WC and two bedrooms. The proposed design would include an additional bedroom, a new living room-diner, plus a separate utility room.



Agent

Davis Tate

Location

Yorkshire

Price

£225,000

Plot number

127180

Description

This plot comes with detailed planning permission for the construction of a five-bedroom residential property. The proposed dwelling will be arranged over two floors and will extend to approximately 242m². Key features of the floorplan include a study, master bedroom with an ensuite shower, plus front and rear gardens and a detached double garage.



Agent

Tudor House

Location

Orkney

Price

£95,000

Plot number

127316

Description

This plot comes with detailed planning permission for the construction of a large house on a 0.25 acre site. The land is located close to the popular village of Finstown and offers panoramic views of the sea and surrounding countryside, with the main town of Kirkwall and the Northern Isles in the distance. A connection to electrical services is available nearby.



Agent

Amazing Results

Location

Powys

Price

£125,000

Plot number

127134

Description

Outline planning permission has been granted for the construction of a detached property on this site. The plot is situated on the edge of Llanidloes adjacent to the popular development of Rhos Y Maen Uchaf. Llanidloes is an historic market town that has a real sense of community and offers many amenities including a doctor's surgery, dentist, primary and high schools.



Agent

Mccartney's Residential

Location

Cheshire

Price

£300,000

Plot number

127169

Description

Available with outline planning permission to construct a detached dwelling is this 385m² plot. Set in the picturesque village of Lymm, it has access to a number of specialist shops, including a small supermarket as well as the M6/M56 and M62 motorways. Both Manchester and Liverpool international airports are also within reasonable commuting distance.



Agent

Meller Braggins

IN FOCUS

KITCHEN & BATHROOM products

SHAW'S OF DARWEN CLASSIC ROUND SINK

The Shaws Classic Collection is made in England and designed to appeal to contemporary kitchen styles. Sinks are available in white and biscuit finishes and the Classic Round is manufactured to be either inset into a worktop or under-mounted in any solid work-surface such as granite, slate or wood. It is an ideal sink for central island units.

This beautiful, cool to touch round sink has a central 3½" waste outlet suitable for basket strainer or waste disposer plus a round overflow.
Tel: 01254 775111
www.shawsfordarwen.com



ABODE Brompton single lever mixertap

A modern reflection of the classic themes of vintage design. This architecturally tall, imposing style will grace all kitchens from progressive modern to enduring classical with a simplicity of form. Brompton is manufactured in chrome and pewter finishes and is also available in dual lever and dual lever bridge mixer taps along with an optional Hendon Handspray which sits alongside the tap on the back of the worktop.

Tel: 01226 283434
www.abode.eu



ShowerSelect Thermostats Now Feature a High-Quality Glass Surface

White glass and gleaming metal emphasize the clear design language of the latest 'Select' shower products from Hansgrohe.

A high-quality glass surface, elegant design and intuitive operation make Hansgrohe's new concealed ShowerSelect thermostats an attractive addition to any bathroom. Their timeless and clear design blends well with modern architectural trends and the white glass surface fits harmoniously into every bathroom environment.



For stockists contact Hansgrohe.
Tel. 01372 465655 email.
enquiries@hansgrohe.co.uk
www.hansgrohe.co.uk

hansgrohe



The new Spectra SP462 Double Door Recess option from Aqata, features hinged inward opening doors allowing easy access to the shower. Characterized by 8mm toughened clear glass and polished chrome finish profiles, it offers a simple and practical solution allowing a maximum showering area where space is limited.

The Spectra SP462 is available in four sizes: 760, 800, 900 and 1000mm and offers a generous enclosure height of 2000mm.

For stockists contact
Tel. 01455 896 500
E-mail: sales@aqata.co.uk
www.aqata.co.uk

AQATA®

P3 Comforts - perfect comfort that is perfectly cool

Created by Duravit and Phoenix Design, P3 Comforts is a complete bathroom range that modifies simple geometric forms to render them aesthetically calming and extremely comfortable to use. A characteristic feature of the design is the raised tap platform on the basin and bath which separates the wet and dry areas. The range also features baths, shower trays, toilets and bidets.



For stockists contact Duravit.
Tel. 0845 500 7787
email. info@uk.duravit.com
www.duravit.co.uk

DURAVIT



mira
SHOWERS

Precision

With its tall body and elegant form, the Mira Precision monobloc brings a distinctive new dimension to the realm of bathroom taps. Precision alignment of the body and lever and the combination of the ultra-smooth surface, crisp edges, curved sides and compact shape make this head-turning design beautiful from any angle - the perfect fit in any contemporary bathroom.

Tel: 0844 571 5000
www.mirashowers.co.uk

Build It

Making your dream home happen

Your essential guide to choosing quality products and services for your new home

HINTON COOK Architects

Winner of the 2014 AVDC Highly Commended Design Award!



Inspired to build your very own bespoke home?
Contact us to transform your **Wish to reality...**



Contact:
8 Linford Forum
Rockingham Drive
Linford Wood East
Milton Keynes
MK14 6LY

"We pride ourselves in designing exceptional, innovative dwellings and promoting sustainable architecture"

Tel: 01908 235544 | E-mail: info@hintoncook.co.uk | Web: www.hintoncook.co.uk

istereos.co.uk
Built-in-music
Self-builders get Wholesale prices
SONOS iQ916
01206 731 236 istereos@hotmail.com

Antique Buildings Limited
The Leading Company in the UK specialising in ancient oak framed buildings
We have extensive 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 200177
www.antiquebuildings.com

aSba architects

Building dreams

Get all the help you need from your local RIBA chartered architect specialising in domestic and housing work. For a professional service always use a fully qualified architect and check for registration with the Architects Registration Board - www.arb.org.uk



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

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



freephone 0800 387310 www.asba-architects.org



VOYSEY & JONES

Award winning front doors,
delivered nationwide



A sensational front door can transform the look and feel of any home. Voysey & Jones is a company specialising in the design, production and installation of handmade front doors. The company was born out of a passion for British period aesthetics and a commitment to outstanding front door design. We deliver beautiful front doors throughout the UK.

Tel: 020 8347 9041
www.voyseyandjones.co.uk

Build It
Making your dream home happen
0203 627 3251

To advertise a product in this section please call
Classified sales

Clavell Static Caravans
Our caravans range in price from £200 to £25000 for the latest top spec models.
All our caravans are fully equipped i.e.:
• fitted kitchens including appliances
• upholstered seating areas
• shower
• toilet
• plumbed for hot and cold water
• heating (minimum gas fire)
• 240 volt electric hookups
Contact
Alan **07912 582208**
John **07971 530408**
CLAVELL CARAVANS LTD
www.clavellstaticcaravans.com

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**

Fantasia Ceiling Fans

Propeller - Brushed Nickel

Ceiling Fans are the cost effective alternative to Air Conditioning. Consider Fantasia Ceiling Fans for your project.

Viper - Pewter

Spun - Silver

New Range of Retro Desk Fans Now Available!

@FansByFantasia
fantasiaceilingfans.com
Facebook.com/FantasiaUK 01959 564440

Super**FOIL** Insulation

Planning for the new 2014 regs?



SF60
Premium
Multi-Foil Solutions

01636 639 900
www.Super**FOIL**.co.uk



Self Build Academy



Looking to self build but unsure where to start?



What is self build?	How do I make the most of my plot?
Where do I start my build?	How do I successfully complete my build?

...Join our Self Build Academy for the answers to YOUR questions

WWW.SELFBUILDACADEMY.CO.UK

BHFUnlimited.co.uk

Insulation Underfloor Heating Heat Recovery Ventilation

Underfloor Heating Systems



From as little as **£135.80**
Inc VAT and Delivery

Cost effective solutions

For Residential & Commercial Buildings

Large Stocks & Next Day Delivery

Price Match Guarantee!

Free Phone Quotes!

01636 639 901



FULL SYSTEMS FROM **£328**
Heat Recovery Ventilation

For competitive quotes email
sales@bhfunlimited.co.uk

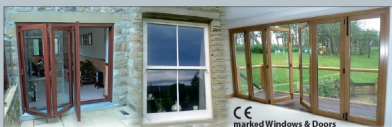
IRON CURTAIN POLES



**Siddington
Smithy**

www.smithyironworks.co.uk/buildit.htm Tel. 01260 224362

At Siddington Smithy we specialise in producing bespoke iron curtain poles, both in traditional and modern styles and a wide choice of finishes. As all poles are made by us, we can cater for the more unusual window or solve problems where a particularly long pole is required, with minimal support! Poles can be supplied with standard brackets; alternatively we can make bespoke brackets to suit your individual circumstances.



CROXFORD'S
Joinery Manufacturers & Woodturners

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 Craftsmanship • Ideal Fire Escape

T. 01484 850892 E. info@croxfords.co.uk
www.croxfords.co.uk

Metham Joinery Works,
New Street, Metham,
Holmfirth, HD9 5NT



HEB HOMES
Architecturally designed kit homes

www.hebrideanhomes.com 0141 550 7360

ICYNENE THE FIRST NAME IN SPRAY FOAM INSULATION



28 YEARS OF LEADERSHIP
ICYNENE



The Icynene Insulation System is a series of soft, flexible, vapour open spray foam insulation products. When sprayed in place Icynene expands to completely fill all cavities and voids creating a sealed building envelope eliminating air leakage.

Unlike other foams, Icynene is 100% water blown and therefore contains no harmful blowing agents, volatile organic compounds, HCFCs, HFAs, HFCs or formaldehyde.

Icynene has been successfully tested and certified for application directly to the underside of breathable and non-breathable roof membranes and recently received BBA certification for this application.



Greentherm Solutions Ltd.
sales@icynene.co.uk
www.icynene.co.uk
Tel 01229 716039

CanaSip Homes

**Zero Carbon Homes consume no energy
= No energy bills**



Buildings like these are affordable - our efficient quick build system means the cost of labour is reduced to half that of a conventional build...

If you would like a brochure or more information please contact us.

email: sales@canasiphomes.co.uk

Tel: 01361 883917

Mobile: 07432631743



THE BARCOMBE - Offer expires 30/9

TODAY'S DESIGNS TOMORROW'S HERITAGE

Oak Frame garages ideal for self assembly or by our expert team

- Free Site survey subject to location
- Over 480 designs in our Acorn range
- Free planning drawings with every order from our Acorn range

*Prices include oak posts, eave & tie beams, braces, softwood soleplates, studwork, rafters, weatherboarding, stable stones & 1 pair softwood doors. Excludes groundworks, bricks, roofing, assembly, delivery & VAT.

Traditional & Contemporary
Oak Framed Buildings

01273 400 411 | oakdesigns.org



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
- Painting and priming of units now available

PANELAND FURNITURE LTD

Visit our website www.pineland.co.uk Email sales@pineland.co.uk
or call our offices CLEOBURY MORTIMER, SHROPSHIRE 01299 271143
NORTHWICH, CHESHIRE 01606 41292

CIVIC TRUST AWARD 1985
Lochdhu Cottages Ltd



**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

SHORTLISTED
**Build it
AWARDS
2014**



Did you know?

If you are building a new house, converting a property or adding a glazed extension you will require SAP thermal calculations to comply with Part L of Building Regulations. Contact Pebble Energy for expert guidance

- SAP & EPC
- Air-Testing
- Water Calculations
- Energy & Sustainability Statements

Tel: 01892 506 940 www.pebble-energy.com
info@pebble-energy.com

FOR SALE

A superbly located, mature waterside plot for a new 3,000ft² detached house, extending to about half an acre on the edge of the popular North Cotswold village of Blockley with gardens running to the brook and attractive views.

Contact Knight Frank

T 01789 297735

stratford@knightfrank.com



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.

ADVERTISE YOUR PLOT WITH

Build It

Making your dream home happen

0203 627 3246

elivate
intelligence in building

Plan your build project with ease

Track your build project at a glance

Save time & budget on build projects

Putting you in control for total peace of mind

A unique online building service that helps you plan, track and deliver successful domestic building projects.

FIND OUT MORE!

www.elivate.uk.com
Hawkhurst House, Woodley, RG5 4SZ
Email: info@elivate.uk.com | Tel: 01189 666 616

THE SUSSEX RANGE



**100% Stainless Steel
Towel Rails & Radiators**

Tel: 01444 831200
www.sussexrange.co.uk

FLIGHT DESIGN

STAIRCASES | BALUSTRADE | ARCHITECTURAL FEATURES



WWW.FLIGHTDESIGN.CO.UK
13A CHAPMAN ROAD, LONDON, E9 5DW
020 8980 1000

agadon
heat & design
DESIGNER RADIATORS

We now bring you the very latest FAR infrared-powered designer radiators

SALE NOW ON!
Sale prices starting from only £175.99.

Standard, glass and mirror options

Call **0845 450 5160**
www.agadon.co.uk

Build It*Making your dream home happen*

To advertise a product in this section please call Classified sales

0203 627 3246**Industry Beating Performance from Solar PV**

Top Quality Panels & Inverters
Energy Generation Guarantee
Market leading Warranties
Honest Impartial Advice
Save & Earn £000's

See How NW Solar Boosts Returns by up to 30% or more!
Using our **UNIQUE** Performance Boosting Technologies

Accredited SuperGreen Fitter
The World's ONLY Infra-Red Boiler
Super-Low Running Costs
Zero Maintenance
10 Year Warranty

nw solar
SOLAR ENERGY SOLUTIONS LTD**0800 195 8600****nw-solar.co.uk**SOLAR SOLUTIONS
SOLAR SOLUTIONS LTD


Farmhouse Flagstones
recreating the past

Specialists in hand crafted, reconstituted flagstones and natural stone flooring.

To send for our free brochure or to see our full product range please visit our website

www.farmhouseflagstones.co.uk

or

Telephone: 01531 822 556
Mobile: 07710 513 582





Maintains the natural colour of the wood and limits the greying process

- > Prolongs wood lifetime
- > Algae and fungal decay protection
- > Transparent 425 Oak finish and 428 Cedar finish now available



Call or visit the web for stockists.

+44 (0)1296 481 220
www.osmouk.com



osmo

Delivering your energy efficient dream home using the latest timber technology



Frame Technologies have a flexible approach to our customers' requirements, we understand that every self build project is unique and our services are designed to meet your individual needs. Through a wealth of experience gained over two decades in the industry, the Frame Technologies team can help you through every stage of the design and construction journey - turning your vision into an energy efficient new home.



FRAME TECHNOLOGIES

SELF-BUILD TIMBER SOLUTIONS

Frame Technologies Limited
Broadaxe Lane, Presteigne, Powys, LD8 2LA
T 01544 267124
E enquiries@frametechnologies.co.uk
W www.frametechnologies.co.uk

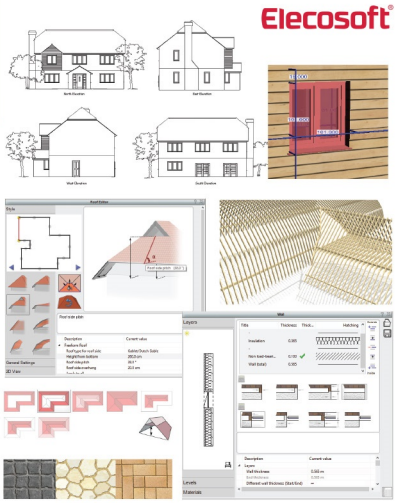
3D Architect

Home Designer Software

The All New 3D Architect Solution for Home Design

Self-builders • Home Improvers • Renovators

Whether you are a self-builder or home improver, 3D Architect Home Designer software is a simple solution for designing your own home, extension or complex renovation. The toolset includes the ability to produce scaled accurate house floor plans and elevations required for planning submissions together with realistic 3D models for visualising your design.

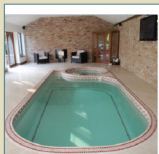


www.3darchitect.co.uk • Tel: 01252 267788 • E-mail: arconsales@eleco.com

Build It

Making your dream home happen

The self-builder's guide to specifying and sourcing products

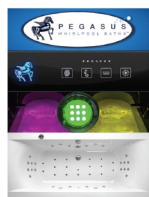


Spa De La Mare Ltd

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



Pegasus whirlpool baths

Design your own bespoke whirlpool bath online with the latest technology, features and performance from the UK's premier manufacturer. Bespoke positioning of Pump, Jets and Controls, Chromotherapy lighting, Glass touch sensitive wall mounted control, 4th Generation total draining 'silverline' pipework. Not all whirlpool baths are built the same!

01633 244555
www.pegasuswhirlpoolbaths.co.uk



Heat Recovery Ventilation

Established company offering wide range of HRV units and ducting immediately available from stock.

Choice of several different heat recovery ventilation units including high efficiency Passivhaus certified units from Brink Climate Systems.

Stockists of the easy to install HB+ radial ducting system.

Tel: 01491 836 666
www.cvcdirect.co.uk



Central Vacuum Cleaners

Comprehensive choice of vacuum units ranging from compact units to twin motor commercial models.

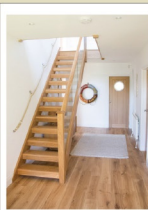
Wide choice of accessories and hose lengths.

Simple and easy to install.

Free planning and technical support.

Next day delivery.

Tel: 01491 836 666
www.cvcdirect.co.uk



STAIRBOX

We specialise in bespoke timber staircases with a massive choice of balustrades and stair styles. Delivering throughout Great Britain in as little as 7-10 days our experienced advisors are always happy to help. From a simple loft conversion to grand central staircase, nothing is ever a problem. Using StairBox you can instantly receive a quote and process your order within minutes.

Tel: 01782 832555
Email: Hello@StairBox.com
StairBox.com



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



ANYWELD

If you require a safety barrier, then glass balustrades are now the most popular option, and you can see why.

We have won awards for our glass balustrades. All of our balustrades are bespoke designed & made with various finishes, and styles, to suit your exact requirements. Balustrades can be installed on patios, balconies, decking areas, roof terraces and staircases, internal and external.

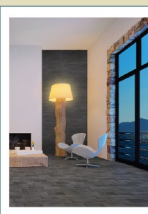
Tel: 01271 860794
Email: enquiries@anyweld.co.uk
Web: www.anyweld.co.uk



Beautiful timber bifold doors

Available in softwood, hardwood and Oak, in bespoke or set sizes, excellent U values, various thresholds and a wide variety of factory finishes from a range of stains or painted any RAL colours. Kloeber's timber folding sliding doors have Secured by Design Accreditation. Complimentary windows and other glazing solutions available.

www.kloeber.co.uk
Tel: 01487 740044
info@kloeber.co.uk



BARGE TILES

"If you have a new build or house extension project starting to take shape, come and browse around our tile showroom and be inspired. We are happy to help you with ideas and lend out brochures and tile samples for your project, even if it's just a revamp for your loo! Bring along your plans and we can help guide you through our myriad of choices."

www.bargetiles.co.uk





ARITCO

Aritco are the Home Lift Specialist. Providing a total turn-key solution to future proofing your home. Specialist in this lift type with over 20 years experience, knowledge and happy customers. Installing a Home Lift into your beautiful home will ensure support and comfort for years to come, eliminating the need to move to a one storey home.

Our units arrive flat packed from Sweden and can be installed within 2 days.

For details please contact Platinum Lifts
Tel: 0800 774 0123
www.platinum-lifts.co.uk



Wooden Spiral Stairs

British Spirals & Castings offer a stunning range of Grade A solid timber spiral stairs all hand built here in the UK and designed specifically for you. From traditional blondes such as Oak and Ash to darker woods like Sapele, Cherry and Walnut, you can be sure that your new staircase is built to suit your every taste and requirement. With a choice of timber, metal, cast aluminium and glass panels, the balustrade options can again add individuality to a design as well as the option of an open or closed tread. Tel: 01663 750716
www.britishsc.co.uk/spiral-stairs



Floors of Stone Ltd

We are the leading UK wholesaler of premium graded natural stone and porcelain tiles for walls and floors. With regular price checks we remain the cheapest, our large range of tiles start from as little as £12/m² (ex vat). Based in Leicestershire you can see before you buy or request free samples to be sent out to you, we always have a large quantity of stock available for immediate collection or delivery.

Tel: 01509 234000

Web: www.floorsofstone.com

Email: enquiries@floorsofstone.com



LET THERE BE LIGHT – Made to measure roof lanterns from DALE

Roof lanterns are a great way of creating a beautiful, bright and stylish space, allowing natural light to flood in.

Dale, the UK's leading timber window and door manufacturer has introduced a range of nine, made to measure timber roof lanterns delivered, fully finished and ready to fit in just 3 weeks. Available through its network of 500+ builders merchant outlets across the UK prices start at £3,500+VAT. Tel: 0845 652 7399
Email: sales@dalewindows.co.uk
Web: www.dalewindows.co.uk



SIT BACK AND ENJOY THE VIEW WITH KINGSPAN OPTIM-R

The Kingspan OPTIM-R Balcony & Terrace System has been installed as part of the refurbishment and expansion of a detached, four bedroom villa on the beach front in Bognor Regis.

The slim-line OPTIM-R panels can achieving thermal conductivities up to five times better than other commonly used insulation products, avoiding the need for a step-up onto the balcony. Tel: +44 (0) 1544 387 384
e-mail: info@kingspaninsulation.co.uk
www.kingspaninsulation.co.uk/optim-r



A hint of Nuance – JB Kind Doors

Thanks to the increasing popularity of painted timber effect doors, JB Kind has introduced an additional new painted door range, inspired by the current trend for neutral colour tones. Whether you prefer a touch of grey or a natural hint of colour, Nuance's six door styles, including glazed options, are the perfect complement for a modern interior. Enhanced with a stylish grooved panel design, the innovative painting technique achieves a superior finish and delivers excellent value for money.

www.jbkind.com Tel: 01283 554197



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

To guarantee your issue each month, just fill in this form and take it into your local newsagent, who can then place a regular order for you. Your copy of

Build It will then be held

for you to collect, meaning

you don't even have to search the

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

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

Build It

Making your dream home happen

SELF BUILD + RENOVATION + EXTENSION + CONVERSION



Please reserve/deliver* a copy of
Build It + Home Improvement on a regular basis.
*delete as appropriate

Title/Mr/Mrs/Ms

First name

Surname

Address

Postcode

Daytime telephone number



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
and a competitive
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

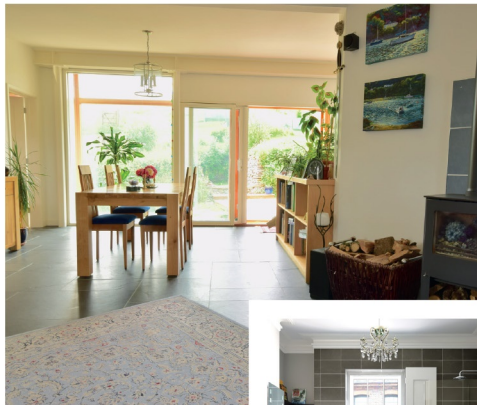
Rega Ventilation Limited
21/22 Eldon Way, Biggleswade, Beds SG18 8NH
fax: 01767 600487 email: sales@rega-uk.com

next month...

October issue on sale 26th August

READERS' HOMES →

For the Brayziers, green was the order of the day when they took on an eco-friendly self build that blurs the boundaries between indoors and out



BATHROOM → DESIGN IDEAS

Create a stylish suite that balances practicality and luxury with our top tips



EXPERT GUIDE TO ↑ LOFT CONVERSIONS

Architect Julian Owen gives his advice on how to maximise space and value



PLUS UNDERFLOOR HEATING, KITCHEN COSTS, CHOOSING RAINWATER GOODS & MORE

The *Build It* team

EDITORIAL

Editor Chris Bates
Homes & design editor
Ireoluwa Adediji
Assistant editor Rebecca Foster
Art editor David Flint
Contributors Emily Brooks, Mike
Hardwick, Mike Dade, Tim Doherty,
Julian Owen, Alan Tierney
Contact 020 3627 3243

BUSINESS DEVELOPMENT

Business development director
Sarah Wilcock 020 3627 3247

ADVERTISING SALES

Advertising manager
Nick Gillam 020 3627 3245
Account manager
Chantelle Lewis 020 3627 3251
Account executive
Rick Howley 020 3627 3246

PUBLISHING

Managing director Calum Taylor
Finance director Katherine Taylor
Marketing director Claire Drakeford
Accounts Natasha Skidmore
020 3627 3248

SUBSCRIPTIONS

Tel: 01442 820580
Email: buildit@webscribe.co.uk
Address: Build It, c/o Webscribe,
Old Silk Mill, Tiring, HP23 5EF
Published by Castle Media Ltd
Head office: Castle Media Ltd,
Peasemore House, Newbury,
Berkshire, RG20 7JH
Tel: 020 3627 3240
Fax: 0872 331 5207
www.self-build.co.uk
Distributed by Seymour

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.

IMAGES: ALEX PRATT; BATHROOMS.COM; VELUX

focus on:



This month we speak to Invisible Homes creator, **Deramore Hutchcroft** about mobilising self builders to buy land together and helping to design low cost sustainable housing

What does Invisible Homes do, and why did you create it?

I have an architectural background, and it all came from when I was designing 'hidden' homes – houses that were undetectable in the landscape with features such as green roofs, but also invisible in regards to their carbon footprint on the earth. A lot of people would contact me saying that they really wanted one, but they had no land, which is the biggest problem facing self builders. Developers can purchase a huge site and put 12 houses on it for the same price as a couple of single plots. Everyday people just don't have funds to buy these big sites, however, they can acquire them as a group.

What sort of progress have you made?

We're currently working on a nine-home self build project in Oldham called Laureates Place (pictured), which has received planning permission. We're now setting up another group to buy a 27-acre brownfield site in Grotton, also in Greater Manchester. If we find eight people to buy that site for £240,000, the plots will cost £30,000 each. We're also developing a plan for Husteads Valley in Saddleworth, where we will be working on 40-60 bespoke homes and creating a new village-style development there. We are still looking for enthusiastic self builders for that location.

How do you minimise the risk for buyers so they know they'll get planning permission and a mortgage?

It's all about finding the right site. I'll identify land that I think is suitable, do a little bit of initial consultation with the council and if I think it's a goer I'll advertise it and get a group together. We've developed a relationship with Ecology Building Society. So what

happens is that one of their representatives will come to have a look at the site to make a decision about whether they're comfortable lending on it. This happens before anyone has bought any land.

Once the plot has been bought, what sort of houses do you design?

Things like earth ships (earth-filled tyre buildings) and straw bale homes. I honestly don't think these methods will be seen as 'alternative' in the future and it makes much more sense to have rendered insulating materials than a panelised timber frame, a cavity and a brick facade. We've teamed up with Straw Works and SMS Timber Frame to develop a super-size structural system where the self builder can install the bales themselves. We're also using 1m² tyre bales as a building material, employing them as back retaining walls when we build a house into the hillside. Normally these materials are shipped overseas to be burned, but they've now been given a British Standard so they can be used in the construction industry, which means they get through Building Regs.

The government is championing custom build schemes like yours, have you felt a trickle-down effect at local level?

Yes definitely. Since we've been working with Oldham local authority they've become a vanguard self build council and have appointed an officer to promote the projects. I'm now working on something in the neighbouring borough of Tameside, where I had attempted a similar scheme five or six years ago. The planners initially dismissed it back then, but now it's going to become a reality, so I do think that the support is definitely having an effect.

For more information visit www.invisible.build



The National Self Build & Renovation Centre

Where dreams begin...

Self Build Educational Zone

Renovation House Tour

Plot Finding Services

Financial Planning

FREE Advice & Support

Exhibitors Trade Village

Latest Technologies

Café with FREE WiFi

**FREE
ENTRY**

Tuesday - Sunday
10am - 5.30pm

FREE PARKING



Trade Village



Renovation Tour
Checkatrade.com



Plot Finding



Expert Advice

The UK's only permanent exhibition centre with everything you'll need under one roof!

The National Self Build & Renovation Centre
Lydiard Fields, Swindon, Wiltshire, SN5 8UB.
Swindon M4 (Junction 16)

0845 223 4455
www.nsbrc.co.uk

klöeber®



Bespoke glazing solutions *in timber aluminium & composite*

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

- folding sliding doors
- sliding doors
- french doors
- single doors
- windows
- shaped glazed screens
- entrance doors
- roof lights



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



*Visit our showrooms in London, Cambridgeshire
and Buckinghamshire, see website for details*

telephone

01487 740044

info@kloeber.co.uk

www.kloeber.co.uk