

EXTENSIONS | SELF-BUILDS | RENOVATIONS | CONVERSIONS

Homebuilding &Renovating

*Britain's
Best-Selling
Self-build
Magazine*

**THE SECRET
TO BUILDING
ON TIME &
ON BUDGET**

**CREATE
A UNIQUE
HOME FOR
£95,000**

**EXPERT
ADVICE**

- Wood Flooring
- Home Security
- Updating a 1960s Property
- The Solar Home — no Fuel Bills for Life
- Floor Structures

**Oak Frame
Self-build**

**A Charming Family Home
Built for Modern Living**

**Extensions
The Ultimate Guide**

- Save thousands by managing your own project
- Clever design ideas and inspiration
- 20 top tips for success

origin

DOORS AND WINDOWS

Match the handle colour to the frames or choose an elegant brushed metallic finish

Choose from over 150 different colours, including a dual colour option

Manufactured in Great Britain from a premium grade aluminium for a secure, visually exquisite and maintenance free window

It's in **our DNA...** Create yours with Origin



Upgrade to the revolutionary Aerogel for astonishing thermal efficiency, capable of achieving an A++ Energy Rating and U-Value of 0.9



Stunning internally and externally flush casement. Its timeless, classic finish makes it perfect for any property type

For your nearest showroom, please call **0808 168 5816**, email **info@origin-global.com** or visit **[origin-global.com](https://www.origin-global.com)**

Bi-fold Doors

Windows

Blinds

Made in Germany

schüller[®]
kitchens for life

Made in Germany



THE LIFESTYLE YOU LIVE THE KITCHEN YOU WANT

UNCOMPROMISED GERMAN QUALITY COMES AS STANDARD

“PROBABLY THE BEST KITCHENS IN THE WORLD!”

LOOK OUT FOR YOUR LOCAL SPECIALIST'S WINDOW





NEW HF410 OAK Composite PASSIVHAUS WINDOW

- U-Value as low as 0.70W/m²k
- 7 Oak or Ash Internal Finishes
- Patented iCore Technology
- Sound Reduction up to 46dB
- 4 Aluminium Clad Design Styles
- Only 9% uplift on Softwood



A large, modern building with a wooden shingle exterior and large glass windows, situated in a lush green landscape with trees and a blue sky with clouds. The building has a balcony and a set of stairs leading up to it.

**ecoHaus
Internorm**

**INTERNORM'S
MOST
COMPETITIVE
GUARANTEED**



**INTERNORM'S NO1 UK PARTNER
2013-2015**

**SALES, SURVEY &
INSTALLATION – NATIONWIDE**

tel: **0800 612 6519**

web: **www.ecohausinternorm.com**

email: **sales@ecohausinternorm.com**

Architects – PAD Studio Ltd



JamesHardie



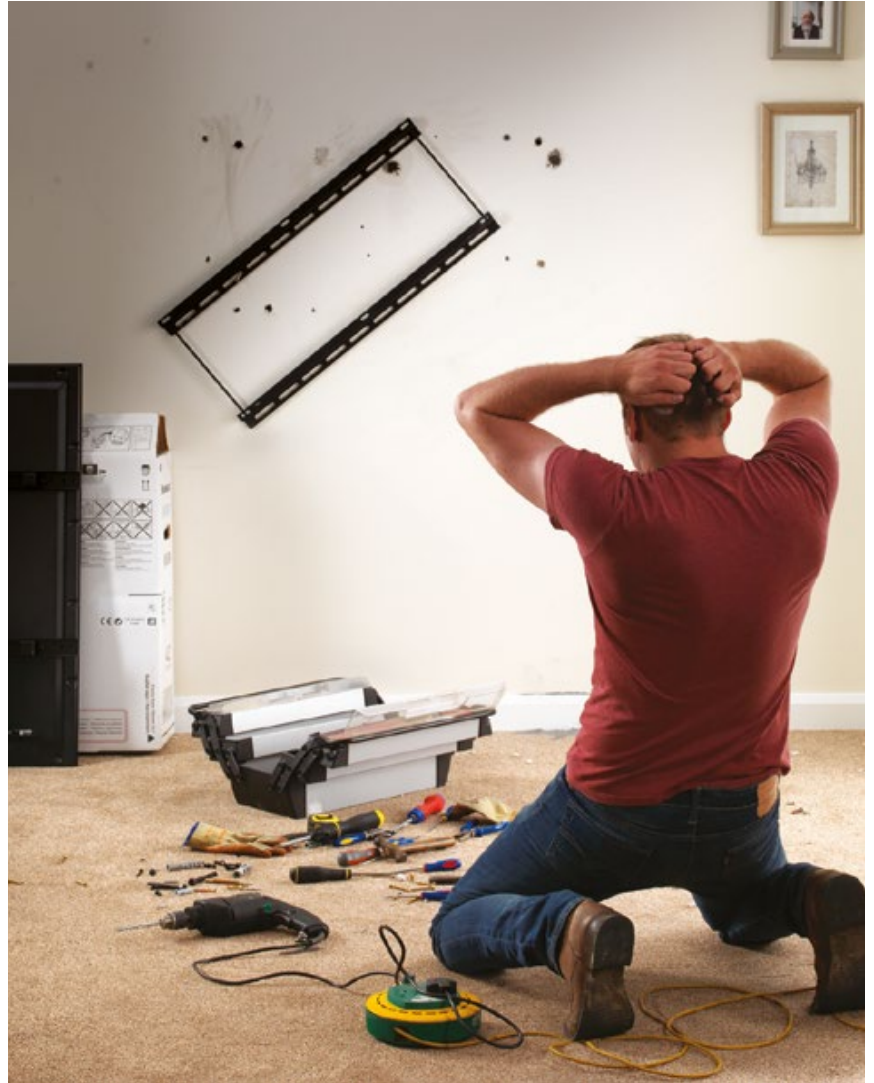
Looks like wood,
strong as cement™

HardiePlank® fibre cement cladding

For more inspiration check www.jameshardie.co.uk



JamesHardie A Smarter Way to Build™



Gyproc Habito makes light work of hanging heavy items.

Gyproc Habito is raising the standard in more ways than one.

Part of the Rooms Made For You range, Gyproc Habito's unique high strength enables you to hang items simply by screwing directly into the surface of the wall. It's capable of supporting as much as 15kg off a single screw, which makes it ideal for fixing larger, heavier objects such as mirrors, paintings, curtain poles and even flat screen TVs.

With its superior performance and durability, Gyproc Habito is also exceptionally resistant to everyday knocks.

For more information, please call us on **0115 784 2354** or visit **roomsmadeforyou.co.uk**

Homebuilding &Renovating

19 **Share Your Views**

Your projects, views, letters and blogs

21 **Upfront**

The latest news, events, and products — plus, follow our experts as they embark on their own build projects

50 **Building a Home on Time and on Budget**

Why modern methods of construction and prefabrication could be the secret to success

60 **The Solar House**

Is it possible to run your home entirely on solar energy — with no fuel bills for life? We look at three homes testing this theory

71 **Smart Solutions for Home Security**

A guide to managing your home's key risks — plus the latest smart home systems revealed

77 **Building New Floors: The Choices**

Our expert explains the options for constructing new floors at ground and first floor level

87 **Why Your Project Needs a Warranty**

David Snell explains why taking out a warranty for your self-build project is a smart idea

91 **Extending Your Home: The Ultimate Guide**

A 20-page dossier providing everything you need to know about designing and building an extension

124 **A Unique Home Created for £95,000**

A redundant youth club near Exeter is transformed into a unique two-bed home on a budget

136 **A Characterful Oak Frame Self-build**

One couple realise their dream by building a family home in the New Forest

148 **A Contemporary Cornish Cliff-Top Home**

A stunning self-build designed to make the most of its dramatic sea views

160 **A Contemporary Larch-Clad Self-build**

From a rundown bungalow to a modern single storey home in the green belt

172 **A Stylish Woodland New Build in Yorkshire**

194 **My Big Idea: The Internal Window**

One architect shares his favourite design concept



Bring your home into balance...

With insect screens and shades that appear when you need them and vanish when you don't, Centor Integrated Doors let you enjoy inside-outside living all year round.

Sliding Doors now available!



reddot design award
winner 2015



For more visit centor.com

centor®

WELCOME JUNE 2016

Behind Every Door

Claire Lloyd is the Editor of *Homebuilding & Renovating*

Visiting readers' homes is without a doubt one of the most enjoyable aspects of working for *Homebuilding*. Pen and pad packed, Sat Nav at the ready, and on the road we go. It may be a five-minute commute (as our Features Editor, Daisy, recently discovered when she visited a straw bale self-build quite literally 'down the road'), or a four-hour drive. The destination is always different but united by a common theme — when we tap on the front door it's safe in the knowledge that there's a homeowner inside with a story to tell.

After all, creating an individual home tailored to your family and lifestyle is not always an easy journey; there are sometimes sacrifices to be made on your time and relationships, sleepless nights over finances, and if like me you live in the midst of building work, there's



a pile of 'I owe you' cards dished out to friends who have hosted dinner yet again at their (finished, warm, dust-free) homes. But, as all of the owners who proudly show the *Homebuilding* team around their homes are testament to, the rewards more than make up for it.

This month I had the pleasure of visiting a couple who'd transformed a youth club into their first home. They'd completed most of the work themselves over a two-year period, and the result is completely unique. The finished house is also worth almost double what the couple spent on the project — always a bonus.

Alongside said conversion, and highlighting the broad range of projects which we embrace within the fold, is a contemporary self-build designed to maximise its breathtaking cliff-top views, a new

oak frame family home built after a long planning process, and a single storey dwelling which reinvents the British notion of the 'bungalow'.

Elsewhere in this issue, Mark Brinkley investigates 'modern methods of construction' (p.50) — is prefabrication and taking much of the legwork off-site the secret to achieving a new home on time and on budget? Chartered surveyor Ian Rock delivers an in-depth masterclass on building a new floor (p.77), while eco expert Tim Pullen asks whether powering a home entirely on solar energy is possible (p.60). Plus, we've dedicated 20 pages to the topic of extending your home — lining up project managers and architects to reveal how to do it and their top tips for a successful project (p.91).

On a concluding note, if you've recently finished your project, we'd love to see it — it just might end up on *Homebuilding & Renovating's* next cover. **H**

@ClaireLloydHome
homebuilding.co.uk

facebook.com/homebuildingandrenovating
homebuilding@centaurmedia.com

SUBSCRIPTION
OFFER

Subscribe to Britain's best-selling self-build magazine

Just £6 for 3 issues*

£2 AN
ISSUE



Visit homebuilding.co.uk/subscribe and enter code/june16 Call the subscriptions team on 01527 834484

Office hours: 9-5pm Mon-Thurs, 9-4.30pm Fri

*£10 every quarter thereafter

JUNE 2016

Contributors



WILL BROCKLEBANK

The founder of building data company Shepherd, Will Brocklebank is also a former director of CEDIA (Custom Electronic Design and Installation Association). Will's piece on smart solutions for home security can be found on page 71



PETE TONKS

Pete Tonks is *Homebuilding & Renovating's* design expert and has been designing homes for over 20 years. Read his design masterclass to building an extension on page 92



IAN ROCK

Chartered surveyor Ian Rock MRICS is the author of eight popular Haynes House Manuals, and a director of Rightsurvey.co.uk. This month he delves into the world of floor structures on page 77



Member of the Audit Bureau of Circulation

Jan – Dec 2015: 24,891



Centaur Home Interest

A Centaur Media Company. Sugar Brook Court, Aston Road, Bromsgrove, Worcestershire B60 3EX. Tel: 01527 834400



www.homebuilding.co.uk

Although every effort is made to ensure the accuracy of material published in *Homebuilding & Renovating*, the publishers can accept no responsibility for the veracity of claims made by contributors, manufacturers or advertisers. No guarantee can be made of the safe return of unsolicited text or photographs. Copyright for all materials published in *Homebuilding & Renovating* remains with the publishers. Designed using Apple computers. Printed by Wyndeham Group. Distributed by MarketForce. *Homebuilding & Renovating* ©2016 is published monthly. ISSN 1471-5791. Competitions: By providing your details you are consenting to receive information, news and offers from *Homebuilding & Renovating* and its parent company, Centaur Media. If you would prefer not to receive this information, please state 'No contact' on your entry. Occasionally, we may pass on your details to other carefully selected companies. If you would prefer not to receive this information, please state 'No other companies' on your entry.

EDITORIAL

Editor **Claire Lloyd**
Associate Editor **Natasha Brinsmead**
Features Editor **Daisy Jeffery**
Chief Sub Editor **Alison Wall**
Senior Web Editor **Lindsey Davis**
Homes Editor (Digital) **Kathleen Spriggs-Bush**
Shopping and Products Editor (Digital) **Jacob Ingram**

EDITORIAL PRODUCTION

Content Production Editor **Melanie Griffiths**
Senior Art Editor **Billy Peel**
Contributions by **Emily Smith** and **Karen Lawson**

SUBSCRIPTIONS AND MARKETING

Head of Marketing **Melanie Graham** 01527 834452
Group Marketing Manager **Eve Mulvaney** 01527 834445
Direct Marketing Manager **Anjuman Tariq** 01527 834493
Marketing Designer **Karen Lawson**
Senior Marketing Executive **Helen Troth** 01527 834483
Marketing Executive **Vicki Lees** 01527 834409
Marketing Executive **Alicia Maragh** 01527 834402
Subscriptions Manager **Alex Worthington** 01527 834435
Customer Services **Jayne Everton** 01527 834484

ADVERTISING AND EXHIBITIONS SALES TEAMS

Print and Digital Sales Director **Jackie Sanders**
01527 834426 jackie.sanders@centaurmedia.com
Key Account Manager **Helen Fox**
01527 834491 h.fox@centaurmedia.com
Key Account Manager **Lucinda Clarke**
01527 834404 lucinda.clarke@centaurmedia.com
Key Account Manager **Debra Greer**
01527 834424 debra.greer@centaurmedia.com
Account Manager **Samantha Broome**
01527 834427 samantha.broome@centaurmedia.com
Account Manager **Jessica Harrison**
01527 834427 jessica.harrison@centaurmedia.com
Business Development Manager **Keri O'Conner**
01527 834472 keri.oconner@centaurmedia.com
Classified Account Manager **Kay Dhillon**
01527 834496 kay.dhillon@centaurmedia.com
Exhibitions Sales Director **Hellen Roche**
01527 834418 hellen.roche@centaurmedia.com
Exhibitions Account Manager **Josh Mortimer**
01527 834497 josh.mortimer@centaurmedia.com

MAGAZINE AND WEB PRODUCTION

Head of Production **Bill Griffiths**
Digital Production Manager **Tom Burbridge**
Email Production Manager **David Lloyd**
Print and Digital Production Executive **Alice Sullivan**
Production Assistant **Aimee Bradley-Davies**
Digital Production Assistant **Nicholas Robertson**

HOMEBUILDING.CO.UK

Digital Sales Executive **Elena Gill**
01527 834494 elena.gill@centaurmedia.com
Digital Sales Executive **Kelly James**
01527 834471 kelly.james@centaurmedia.com
Trade Sales Executive **Simone Adams**
01527 834481 simone.adams@centaurmedia.com
Head of Digital **Gill Dawson**
Web Services Manager **Alison Nash**
Web Services Technician **Laura Sturgess**
Social Media Editor **Sarah Handley**

PUBLISHING AND EXHIBITIONS MANAGEMENT

Managing Director **Steve Newbold**
Commercial and Events Director **Nick Noble**
Head of Content and Product Development **Michael Holmes**
Editorial Director **Jason Orme**



STRAIGHT ANSWERS ABOUT THE COST AND FEASIBILITY OF YOUR PROJECT

Our multi-disciplinary team of architects, engineers, construction specialists, cost experts and project managers work closely together from the start of your project to ensure the house we design and build comes within your budget.

We have been creating award winning oak frame homes for over a decade and always with outstanding, dedicated and personal service.

Our complete turnkey planning, design and build service includes everything you need for your dream oak home, designed and built for you.

CALL US FOR A FREE PHONE CONSULTATION
ON THE FEASIBILITY OF YOUR PROJECT



PLANNING | DESIGN | BUILD

01249 479891

thecompleteoakhome.co.uk



sash timber windows

Sash timber windows, exceptional quality at exceptional prices.



Beautiful timber sliding sash windows with weights and cords or spiral balances.

Fully finished with a high quality Teknos 4 coat system in any RAL colour.

Modern glazing with a centre pane U-value of 1.2 as standard other glazing options available.

Price guide 1000 x 1600 with cords and weights £960 + Vat.

Full range of windows and doors available including flush sash, storm sash, tilt and turn, entrance doors, bi-fold doors, patio doors and French doors.

Shapes, gothic's, arches and swept heads all available.

Nationwide delivery and fitting service to most areas.

Delivery is around 7 weeks from order.

**Please call 01274 607711
or visit www.sashtimber.co.uk**

Quotations are usually within 24 hours.



Why Choose Us?

- ✓ Savings Guaranteed
- ✓ Trade discount on building materials
- ✓ £5 Million Public Liability



Construction, Advice and Project Management

Providing tailor-made construction and self-build guidance for both large and small projects

“The SBA advice and guidance was invaluable and I would recommend the company to all my family and friends.”

Self Build Assistance, tailor-made to suit your needs

Call: 0207 889 2013 Email: info@selfbuildassistance.com

www.sbaconstruction.co.uk

Self Build Assistance Ltd, 88-90 Hatton Garden, Holborn, London EC1N 8PG



SBA Construction

With unrivalled build costs and trusted professionals, we build, manage, and finish your project, however big or small, at costs to suit you.



Self Build Advice

Procure trusted contractors, unravel planning and building regulations, hit your budgets and build stages, and have professionals working for you.

Homebuilding & Renovating *Show*

Sponsored by

VELUX®

Dreaming about building your own home?



2 FOR 1
TICKETS*
QUOTE
HBRJUNE

Visit the Homebuilding & Renovating Show to get all the information you need in one day, under one roof

21-22 MAY
SECC GLASGOW

To claim **2 tickets for just £12***
call **0844 858 6754****

25-26 JUNE
SANDOWN PARK SURREY

To claim **2 tickets for just £12***
call **0871 230 1086****

Alternatively, visit homebuildingshow.co.uk,
choose the show you'd like to attend and quote **HBRJUNE**

*£1.50 transaction fee applies. **Calls cost 7p per minute plus network extras for Glasgow and 10p per minute plus network extras for Surrey. Offer ends 3pm on 20 May 2016 for Glasgow show and 3pm on 24 June 2016 for Surrey show. Children aged 16 and under go free.

FAMILYSPACE

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

Make space for the things that matter

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





BLOGS

We catch up with Joe Shimbart, who's building an energy-efficient oak frame house in Hampshire using natural materials.

The lead up to the Carpenter Oak glazing team's arrival was a challenging time, as with the constant winter rain and gales, the thin plastic sheeting covering the recently erected timber frame and window openings was wearing fast and required constant maintenance.

Once the carpenters from Carpenter Oak were back on site, they started to prepare the frame for the glazing. The site was very muddy, but ground was claimed back with scrap boards and pallets to make it a little easier to work, and the carpenters remained enthusiastic about the job. It made a real difference, and the care and attention to detail was evident from the start.

Glazing directly to an oak frame is not an easy process. The finished product hides the complex underpinnings and detailing. I commissioned Carpenter Oak for both the green oak frame and fixed glazing system. This meant that the cover boards were cut and prepared to match the green oak frame precisely at the workshops in Devon at the same time as the main frame was manufactured. Needless to say, I am very pleased with the quality of the finish.

The plan now is to complete the woodwork, finish the external western red cedar cladding, remove the scaffolding and also to start on first fix internally.

For more updates on Joe's project, visit homebuilding.co.uk/blogs

LETTERS

DEAR EDITOR,

After a year of living in our three-bed detached house in Winchester, my husband and I are finally due to start work on site next month, giving the property a large two-storey side and rear extension, and whole-house renovation. Every month I scour the newstands for homes magazines to take ideas from and like to pick up a copy of *Homebuilding & Renovating* for its up-to-date information, advice and inspiration, and we have collected snippets from our favourite featured houses to build up moodboards for what we want for our own project.

Wanting to improve the existing house rather than demolish and rebuild, we have decided on a drastic overhaul of the external materials, going for a more contemporary look with render and cladding to the original house, and new brickwork to the two storey side extension, rear addition and a large amount of glazing to brighten up the internal rooms and make the most of the views.

Internally, the majority of the walls on the ground floor will be removed and left open plan, and the new extensions will allow for a kitchen/diner downstairs and a large master suite above. We can't wait to get started and will be continuing to keep up with the magazine's articles for advice on our project.

Mrs Bates, Winchester

Win a Dremel 3000 Multi-Tool Kit When You Write In!

Dremel is offering *HB&R* readers a best-selling Dremel 3000 Multi-Tool when their letter is published in the magazine. Worth £49.99, the kit comes with a range of accessories for a host of applications from cutting, polishing, sanding and grinding (dremel.co.uk).



TOP TWEETS



"Well this is exciting! AR Design Studio's Paragraph 55 house receives planning permission!"
@ARDesign_Studio



"Want a #selfbuild plot? You can now register with your council. Visit the NEW @nacsba site: righttobuildportal.org"
@JasonPOrme



"If we build too cheaply and too fast then quality goes out the UPVC window. We then have a problem in 50 years' time"
@MrGeorgeClarke

FOLLOW



Great news! *Homebuilding & Renovating* has a brand new Instagram account. Be sure to follow us on:
@myhomebuilding

SHARE YOUR VIEWS



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



ORDER BY 8PM
GET IT NEXT DAY



FREE DELIVERY
OVER £45*



FREE RETURNS
WITHIN 30 DAYS



MINIMUM
5 YEAR GUARANTEE



LOW
TRADE
PRICES

DOWNLOAD OUR FREE APP



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



ONLINE Shop 24/7!

IronmongeryDirect.com

FIND US ON ►



*Ex VAT



MATERIALS

Latest products and design ideas — plus our buyer's guide to wood flooring

P.23

DESIGN DIGEST

International new builds and renovations to inspire

P.30

BEFORE & AFTER

A dramatic transformation in Buckinghamshire

P.33

OUT AND ABOUT

Why the age-old tradition of the 'topping out' ceremony is still important when building a home

P.34

THE LATEST

Breaking news, and events

P.37

DIARY OF A SELF-BUILD

David Snell shares his wisdom as he embarks on his fourteenth self-build

P.39

DIARY OF A REMODEL

Former Editor Jason Orme shares his tips as he remodels a 1960s home

P.41

ON SITE

Real people, real projects

P.44

CHOOSING BRICKS

What you should consider when specifying bricks for your project

P.47



FASSACOUCHE

Colour therapy for buildings



**Homebuilding
&Renovating Show**

SANDOWN PARK SURREY
25-26 JUNE 2016

STAND No 424

A class OC2 one layer plaster which acts as both
base and coloured finish coats

01753 573078 | info.fassauk@fassabortolo.com | www.fassabortolo.com

Fassa UK Ltd
344 Edinburgh Avenue
Slough SL1 4TU

**FASSA
BORTOLO**
QUALITY FOR BUILDING

MATERIALS



NEW KITCHEN

DEVOL'S *REAL SHAKER KITCHEN*

Offering a handpainted traditional-style kitchen, and starting at a reasonable price of £8,000, the Real Shaker Kitchen by deVOL features both fitted and freestanding furniture to suit your kitchen space — and in a range of colours, too. In this project (above), the island has been painted in

deVOL's Mushroom while the rest of the kitchen is painted in Putty. The Shaker cabinets have been topped with honed black granite worktops. An undermounted sink, chrome Shaker cup handles and ball knobs complete the picture. (devolkitchens.co.uk)



BEAUTIFULLY DESIGNED FOR ANY ENVIRONMENT

TRIPLE GLAZED
A+ ENERGY
RATED

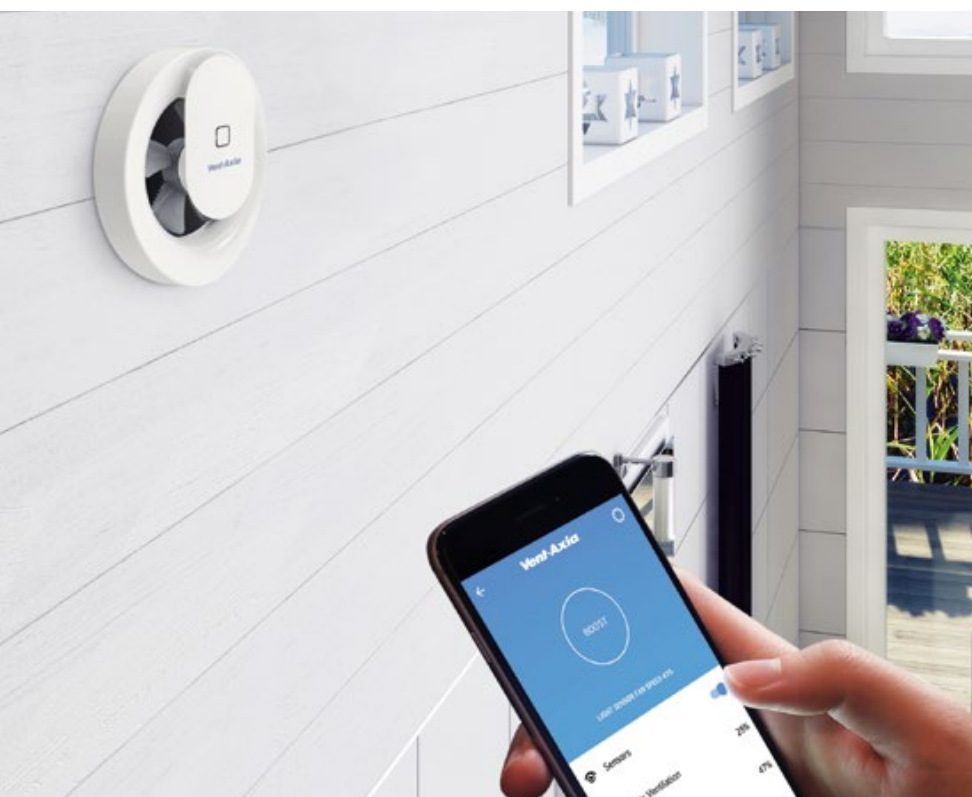
Natural beauty and outstanding quality make JELD-WEN timber windows the perfect choice. Made in the UK, the Stormsure Energy+ range is triple glazed and has an A+ rating to help keep your bills down and your home warm. They give such great performance they're relied on all over the world, from England to Antarctica.

With a 40 year softwood frame guarantee, and 10 year guarantees on hardware, glass and paint, you can be assured of the quality. They are fully made to measure with a choice of bar designs and any colour including dual colour.

To view our full range, see our videos or find your local JELD-WEN retailer, visit www.jeld-wen.co.uk



MATERIALS



VENT AXIA'S *SVARA SMART VENTILATION FAN*

New to the market – and a first for the UK – Vent Axia has launched its Bluetooth-enabled Svara unitary fan, which can be controlled remotely by a free-to-download app. While the fan is available factory set, there are three speed settings, including a boost, to choose from to adjust comfort and indoor air quality. The Svara also features an effective humidistat which reacts to sharp changes in humidity, for instance when the shower is turned on, to help control damaging humidity levels that can lead to condensation and mould. Furthermore, the fan also comes with a light sensor to detect when someone is in the room, as well as silent scheduling and an automatic cycle. POA. (vent-axia.com)



ELECTRIC RADIATORS DIRECT'S *HAVERLAND SMARTWAVE RADIATOR*

The new Haverland SmartWave radiator from Electric Radiators Direct uses advanced motion sensor infrared technology to monitor movements and adjust itself according to your changing routine. The radiator will start heating your property 30 minutes before you are scheduled to arrive and also switches itself off when you leave. The SmartWave also comes with the optional addition of the SmartBox which connects to your WiFi; enabling full heating control throughout your property whenever you want via a free, user-friendly app. Helping you to save energy, the radiator also features a high-precision thermostat which accurately keeps your room at the correct temperature. Prices for the SmartWave start from £259.99. (electricradiatorsdirect.co.uk)



EVOLUTION WINDOWS' *STORM 2*

The Storm 2 handcrafted Georgian casement window in white from Evolution Windows measures (H)1,250x (W)1,300mm. Made from PVCu, the wood-effect window comes in 10 standard colours, as well as a range of 200 RAL colour options. Priced from £1,000. (evolutionwindows.com)



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



**Homebuilding
& Renovating Show**
SANDOWN PARK
25-26 JUNE 2016
**STAND
820**



WB Timber Innovations Ltd

Units 18 & 19, Monkpath Business Park, Highlands
Road, Solihull, B90 4NZ

Reasons to Beam cheerful

1

Heat Recovery Ventilation
for energy savings and clean,
fresh air.

2

Central Vacuum Systems by
Electrolux for powerful and
convenient cleaning.

3

35+ years experience
with 70,000 customers
in Ireland and UK.



BEAM

Vacuum & Ventilation
Built-in brilliance!

Call us for project advice, survey and quotation

UK: 0800 78 38 231 ROI: 1800 20 10 67

www.beamcentralsystems.com



1926

TRADING COMPANY LTD

Bespoke and Leading
brand hardwood flooring
and designer doors
Full range of accessories,
glues and underlays

Hardwood Flooring

Kährs

BERRYALLO
PARQUET

Designer Doors

JB/Kind
DOORS

SANRAFAEL
spain

www.1926trading.co.uk 0800 587 2027

MATERIALS

B&Q'S COOKE & LEWIS MINIMA CHROME BATH SHOWER MIXER TAP

From B&Q's Cooke & Lewis collection, the Minima bath shower mixer tap is suitable for all baths with high and low pressure water systems, and features an easy-to-use quarter-turn operation. The tap is made from brass with a chrome finish and ceramic cartridge valve. The tap also comes with a 10-year guarantee and costs £92. (diy.com)



VICTORIA PLUM'S LIMITED EDITION ROLL-TOP BATH

VictoriaPlum.com has launched a collection of limited edition coloured roll-top baths, including Victoria Rose, Silver Birch, Russet, Bluebell, Dove Grey, Perfectly Plum and Champagne. These baths are sprayed in liquid vinyl, using technology from the automotive industry, and hand-finished in the UK by local craftspeople. POA. (victoriaplum.com)



LAURA ASHLEY BATHROOM COLLECTION'S MONOGRAPH RANGE

Inspired by mid-century styles, Laura Ashley Bathroom Collection's new Monograph range of bathroom furniture comes in two on-trend finishes of Light Clay (shown) and Gloss White, and can be wall-mounted to free up valuable floor space or fitted with coordinating, elegant legs to create a statement freestanding look. Measuring (H)540x(W)800x(D)375mm, the Light Clay basin unit costs £549 and is complemented by a ceramic basin, which starts from £400. (lauraashleybathroomcollection.com)

ENGINEERED WOOD FLOORING *EXPLAINED*



HARVEY BOOTH

Harvey Booth is the country manager (UK and Ireland) for flooring company Kährs

HB&R: What are the pros and cons of engineered wood flooring compared with solid wood?

Harvey Booth: While the purist may only consider a solid wood floor, there are many advantages to a quality modern engineered design. All wood species swell in a warm, humid environment and shrink when it's cool and dry. This natural movement can cause gaps to occur between boards or for flooring boards to become concave or convex.

As an engineered board is constructed in layers to minimise movement, it expands and contracts as a complete floor, rather than as individual boards, making it more stable. Combined with a quality locking joint, like Woodloc, this eliminates the risk of any gaps or problems associated with humidity. An engineered floor also only uses sustainable hardwood in the surface layer, and fast-growing softwood, like spruce and pine, below so it's also more eco friendly.

What are the benefits of specifying boards with a thicker wear layer?

Boards that have a thicker wear layer can be sanded more often. However, a quality wood floor in a domestic setting generally won't need renovating for many decades and will be offered with a guarantee of around 30 years. Bear in mind that any wood floor – be it engineered or solid – can only be sanded down to the joint, so both offer the same longevity in this respect.

There are plenty of finishes as well as plank widths — are there any current trends?

Single plank floors are always popular. Less knotty grains are becoming more popular too. Tactile surface finishes and colour hues are also very sought after.

In terms of finishes, lacquered finishes tend to be easier to maintain, as the finish doesn't



Above: Kährs' Oak Kinda one-strip oak wood floor has a brushed, hand-scraped finish, saw marks, bevelled edge and natural oil pre-finish. It costs £98.40/m²

Top Right: Kährs' Oak Herringbone patterned wood floor is from the Studio Collection and features a smoked finish and a matt lacquer pre-finish. Prices start from £68.40/m²;

Bottom Right: Ecora's Oak White Oiled engineered floor starts from £54.85/m²





need to be topped up like oil. But modern oiled refreshers are really easy to apply, as you just mop them into the surface. Some people prefer the matt texture of oil, while others prefer the higher sheen of a lacquered finish. In either case, a quality finish will provide good durability.

If you have underfloor heating, are there any species which should be avoided?

Engineered wood floors work really well with underfloor heating, because the multi-layered construction minimises movement and creates a surface that is 70 per cent more stable than solid timber. The only species that should be avoided are beech and hard maple, as they are more sensitive to humidity.

Do you have any tips for installation?

The ideal time is at the end of a project, so there's no risk of the floor being splashed with paint, etc. Glueless joint systems, like Kährs' Woodloc, promote a fast and accurate installation. The boards are easy to align and lock together. The joint also ensures that the boards don't gap over time and, because they aren't glued in place, they can be unlocked and repositioned if necessary. Kährs' engineered boards don't need to be acclimatised either and can be laid directly from the packaging.

Prices can vary dramatically — what should homeowners typically expect to pay?

You'd normally pay between £30 and £90/m² for a quality brand. Generally, plank or one-strip designs are more expensive than two-strip or three-strip wood floors, as the surface layer is sawn from a single log. Designs with surface treatments – such as metallic finishes, stains, hand-scraped, bevelled and brushed finishes – tend to be more expensive, too. But bear in mind that a quality wood floor is an investment and one that will increase the resale value of a home.

Useful Contacts:

Kährs.....kahrs.com
 Ecora.....ecora.co.uk
 Olestone Oak.....orlestoneoak.co.uk
 1926 Trading.....1926woodflooring.co.uk

DREAM HOMES

INTERNATIONAL
DESIGN INSPIRATION

DOWN UNDER

Designed by practice Signature Custom Homes, this luxury three storey 1,100m² home in Perth, Australia, is packed with wishlist features — from a games room and cinema, to a gym, sports bar, wine cellar and outdoor swimming pool.

Entering the home through the pivot entry door, you are greeted by a formal living/dining space with double-height ceilings. To the rear, a kitchen, informal dining and casual living space offer views of the river and city skyline, while a lower level plays host to a guest suite and entertainment rooms. On the upper level, a kids' activity space and passageway connects the four-bed children's wing and the master suite (the latter featuring a private balcony and large en suite).

The exterior features a low-pitch tiled roof with huge eaves. External finishes include rubble-style dry-jointed stone cladding, render and polished plaster. Cedar and burnt ash timber were chosen for the external ceilings and eaves linings.

JOEL BARBITTA, D-MAX PHOTOGRAPHY



5 FRONT



A Luxury Mansion
Described by designer Signature Custom Homes as a "modern resort-style mansion", this towering contemporary pad in Perth, Australia, sits high on its 2,000m² plot and could be mistaken for a hotel



VictoriaPlum.com

your bathroom

Freestanding
baths
from only
£199

Great design @ great prices



LOW PRICE GUARANTEE



REQUEST A FREE BROCHURE

Visit us online at **VictoriaPlum.com**

Call us on **0344 804 48 48**

BEFORE & AFTER

A home in Buckinghamshire receives a dramatic facelift



PAUL CLIFFORD IMAGES

Before



KATHRYN MANSI
Kathryn Mansi is project director at London-based practice Model Projects (modelprojects.co.uk)

The existing property had been extended previously but failed to maximise on the fantastic views the site had to offer. The internal layout consisted of rooms of disproportionate sizes that didn't work with other spaces, as well as rooms which led into one another with no central corridor — even one of the bedrooms on the first floor was only accessible through another bedroom.

We worked with the clients on the design, and there were a lot of iterations going back and forth. Initially, they were after something more traditional with red tiles; however, this slowly developed into a more contemporary look.

In order to maximise space and create a more functional layout, we added a side and rear extension, as well as a front porch extension, moving the entrance across to allow for a new central staircase and atrium with a void leading all the way up to a Velux rooflight. These additions allowed for a new kitchen-diner, a cosy living space with log burner, and a luxury hotel-style master suite with walk-through wardrobe. The internal garage has also been relocated and we built into the large loft space to provide additional accommodation, too.

The existing solid brick elevations have been clad in external insulation and then rendered for a modern finish, with new windows throughout. The clients are now so proud of their house.

THE TOPPING OUT CEREMONY: AN AGE-OLD RITUAL



When the self-builders are involved in the project, it takes on a rather magical feeling”

From appeasing the tree gods to homeowners offering cake, beer or a BBQ to the building team — we lift the lid on this traditional rite of passage

Known as a builders’ rite, the ‘topping out’ of a building dates back to the dawn of construction, with evidence suggesting that even the Egyptians carried out some of the various forms of ritual that exist in today’s modern building traditions. But what exactly is topping out, and why does it still hold a significance in the world of homebuilding? “It goes way back, and is part of different traditions as a way of appeasing the ‘tree gods’,” begins Nik Sheppard, production manager of Carpenter Oak. “The topping out of a building marks the completion of the frame, when the carpenter nails a live sprig of oak to the top truss [the highest point of the frame] as a way of keeping evil spirits at bay, and also symbolising growth.

“The whole ritual is incredibly superstitious — the recognition being that the fate of the inhabitants relies on the offering and sacrifice of food to those who have built a stable structure. In order to live happily inside, they have to appease the spirits, gods, nature, whoever, and so traditionally the homeowners will provide food and drink as part of the ceremony,” says Nik. “Traditionally, building in oak, and building your own house in general for that matter, has



OAKWRIGHTS X 4; CARPENTER OAK (TOP LEFT)



A Community Celebration

Bringing families, builders and trades together, the topping out ceremony is a celebration that marks the end of the construction of a building's frame. Many in the world of homebuilding still maintain this tradition — particularly oak framing companies

always been seen as a community-style affair where the clients were quite dependent on members of the local area for help and support on site, and as a way of thanks they would provide a feast, or even just a beer, at the end as a way of repayment and to thank everyone involved."

While the tradition has been around for years, it is carried on by different people in different ways, and extends to buildings in glass and steel, too — the World Trade Centre, at the time of being built, had a whole tree lifted to the top, and the Empire State Building had a party some 30-storeys high when the last white steel beam was craned to the top of the building.

From nailing sprigs to the top truss to carving names and symbols into the timber, there are many variations of the ceremony. "In some cases you'll find that the carpenters will draw symbols on the timber, and they all have their own symbols. It could be a symbol of their on-site nickname, a marking representing the locality — all sorts," says Bill Keir, director of operations at Oakwrights. "In some cases, the tradition even extends as far as placing coins with the current date on in the mortice of the first post for good luck; it's a way of recording the event should the house ever be taken down. Oakwrights also carries the tradition of placing an Oakwrights pewter plaque somewhere on the building (usually high up); however, this is often in consultation with the homeowner."

The tradition of topping out is not without some humour. "Over in France and Germany they have these traditions deeply rooted into their trade, and we've heard stories in the past from Germany where if the clients didn't turn up to celebrate then the carpenters would play all kinds of pranks on them, including nailing a fish to the truss instead of a sprig," says Nik.

The ceremony is, however, all about celebrating with the clients, and today many companies are keen to make a special effort to involve the homeowners where possible. "In the world of building we don't always have time to mark every occasion, particularly if we are only contributing something small to a building, but for clients such as self-builders who really take an interest on site we make the effort to go all out. It really is the cherry on the cake for us, for the client to have a connection with the team and for us to build a friendship — it means something," adds Nik.

Bill agrees. "The homeowners are usually thrilled to be involved with the topping out of the building," he says. "Especially if they've been living on site, it's such a big thing for them to have the main structure of their future house in existence, after spending so many months in a caravan in the garden, that they're more than happy to provide cakes, beer or a BBQ — it's great."



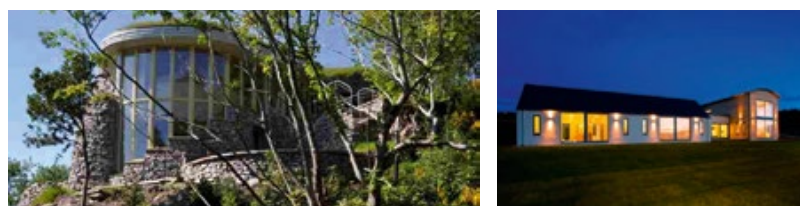
rational®

High Performance Joinery Products for the Scottish Climate



Architectural Doors and Windows (ADW) in partnership with Rational offer a comprehensive range of timber and aluminium clad timber windows and doorsets to suit all your specific requirements. Whether your project is a new home, extension or commercial property, ADW can provide elegant design solutions, manufactured to the highest Danish and UK standards with full certification. We can provide standard or bespoke windows and doors in a range of colours and finishes with all of our timber responsibly sourced from Northern European forests, fully complying with FSC certification.

Architectural Doors and Windows have fully equipped showrooms at their offices in Cumbernauld, Glasgow and Sauchen, Aberdeenshire where the range of products can be viewed in a welcoming environment, with fully trained technical staff on hand to advise you. For more information please see our website www.adwlimited.co.uk



Architectural Doors & Windows Ltd
9 South Wardpark Place, Wardpark South
Cumbernauld, Glasgow, G67 3HX
Tel: 01236 780022 Fax: 01236 780021
Email: info@adwlimited.co.uk www.adwlimited.co.uk

Woodside, Kirkwood Business Park
Sauchen, Aberdeenshire, AB51 7LE
Tel: 01330 830115 Fax: 01330 830065

Secured by Design
Official Police Security Measures

CUTTING
CARBON
CUTTING
COSTS
CUTTING
EDGE



Solar • Underfloor Heating • Biomass • Plumbing • Radiators

At Begetube our innovative heating panels are completely copper based – no aluminium fins, this allows for a more effective heat transfer making the panels more efficient.



For more pioneering products give us a call

Tel 01463 246600 • Email info@begetube.co.uk

www.begetube.co.uk

Begetube Heating Systems • 14 Carsegate Road • Inverness • IV3 8EX



...exactly how you imagined it

Design your dream home and build a beautiful life with WeberHaus, German house builders since 1960. From start to finish creating your home is a truly personal and enjoyable experience. Our bespoke, luxury homes are custom designed, lovingly crafted, perfectly engineered and beautifully built.

weberhaus.co.uk

WeberHaus
— build a beautiful life

Inspector Dismisses Appeal for Self-build Exemption

While self-builders are usually exempt from paying the Community Infrastructure Levy (CIL), an inspector has dismissed one family's appeal against Croydon Council's decision to refuse exemption after finding they had already started work on site before the council had confirmed their qualification for exemption.

Michael Holmes, Chair of NaCSBA (National Custom and Self Build Association), says: "The inspector's decision must be a huge blow to the family involved. Self-build budgets are usually tight, so this extra unexpected burden resulting from them starting on site too soon is likely to have been very difficult to absorb." NaCSBA has advised self-builders to read the rules for the exemption carefully, especially the definition of commencement which can be found at legislation.gov.uk/uk-pga/1990/8/section/56.

REMINDER: Following the passing of the Self-build and Custom Housebuilding Act through Parliament, which began taking effect from 1 April 2016, local authorities in England must now maintain a list of those interested in building their own home. To register interest in your local area visit righttobuildportal.org/build-your-own-home.

Zero Bills Home Launched at BRE Innovation Park

A new home opened at the BRE Innovation Park in Watford could provide a solution for future housing. Zed Factory, the RIBA award-winning zero-carbon pioneers, has launched the Zero Bills Home — a concept for a home without energy bills.

Utilising a clever, affordable and easy to build design — which costs approximately £1,350/m² — the Zero Bills Home is built of steel frame with timber wall panels. Its low-energy requirements are met by a roof-integrated photovoltaic panel and energy storage system which can also generate enough power to service a small electric vehicle.

In order to eliminate home energy bills, the Zero Bills Home is heated by a small air-source heat pump that recycles heat recovered from stale air via means of a mechanical ventilation heat recovery system. The heat pump also heats the water for the home's underfloor heating — a woodburner offers back-up heating during the winter months too.

The Zero Bills Home is also heavily insulated in the roof, walls and ground floor to meet Level 6 of the (now-defunct) Code for Sustainable Homes.

Bill Dunster of Zed Factory, the architect behind the concept, said: "SME builders are key to delivering the 250,000 homes per annum we need across the UK — the Zero Bills system is an off-the-shelf solution for SMEs that could really drive the market in the right direction."

BRE's chief executive, Dr Peter Bonfield OBE, who opened the new house at the Watford site, added: "Zero Bills represents new thinking and a fresh approach to the significant challenges and opportunities we face in the housing market."

Zed Factory's concept has led to the creation of the Zero Bills Homes Company which offers six customisable, fully designed and costed house types to choose from depending on solar orientation, house size and access requirements.

For more information, visit zerobillshome.com.



**Homebuilding
&Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 652

**Homebuilding
&Renovating Show**
SECC, GLASGOW | STAND
21-22 APRIL 2016 | 306



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 Europewide 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

Email info@hanse-haus.co.uk

Telephone 0800 302 9220

www.hanse-haus.co.uk

**HANSE
HAUS**

Genau mein Zuhause.



To Buy One Plot, or Two?

WE FOLLOW SERIAL SELF-BUILDER **DAVID SNELL** AS HE EMBARKS ON HIS FOURTEENTH PROJECT — SHARING HIS TIPS ALONG THE WAY

In last month's column, I explained how we liaised with local estate agent Glen Webb, and spent two days searching for a plot to build our fourteenth self-build, after my wife Linda and I decided to move back to the Forest of Dean from Kent. We finally found a parcel of land which we liked. Straight after Glen had shown Linda and I this particular plot on Friday, we drove to meet designer Kevin Cooper who'd drawn up the plans and handled the planning application for the plot. We knew him as he'd drawn up our last three self-builds and was happy to give us the particulars for this plot.

I couldn't help but feel a trifle smug: it had taken us just two days to find our latest plot, putting the lie to my boast that, once I put my mind to it, I'll find a plot in a fortnight. I had to remember that the plot wasn't ours yet though — we hadn't even set foot on the land. We'd yet to make an offer, let alone have it accepted, and so it was with a sense of relief that Glen called the following morning, advising us that the owner would be pleased to see us on the plot on Monday.

The plot in question was one of two, and Glen had already told us that the plots would be sold together for £210,000. He had mentioned that the vendor might accept separate offers for each plot. There were problems with this, however. Firstly, it would mean the plots staying in the public eye for longer, allowing builders and others the opportunity to jump in over us. Secondly, an intrusive mining survey had been attached as a condition of the planning permission — neither property could be built independently without it.

I phoned the surveyor who'd originally carried out the non-intrusive mining survey for the planning consent to find out more, and the cost of the intrusive survey required. He

"It was fabulous — better than anything we'd hoped for or expected"



Above: The New Plot

Embarking on their fourteenth self-build, David and Linda have found the perfect plot in Berry Hill in the Forest of Dean, with endless countryside views

quoted £1,350 plus VAT. I obviously wasn't going to commission that until or unless we got the plot. "Do I have anything to worry about here?" I asked. "Not really. I don't think so," he replied.

On Monday we drove to the plot and were met by Glen and the vendor, Les Day. He ushered us through his garden and through a raised fence panel on the boundary with his home and then on to the plot.

It was fabulous — better than anything we'd hoped for or expected. The land was clear, apart from an old stone pigsty. To the rear there was just the forest with a gate providing access. To the front the views looked over rolling countryside to the Malvern Hills.

Could we buy both plots and then sell off one to take it off the market? We'd have to dip into the piggy bank but it seemed the sensible thing to do. Linda agreed. "We'd like to buy both plots for your asking price of £210,000," I said, and Les merely extended his hand and shook mine.

"Well, we'd better go back to the office and sort out the necessary paperwork," Glen said and, once we'd said goodbye to Les, we followed him back to his office.

● **Next month: David enters into the legal proceedings of buying the two plots**





BURCKHARDT'S
SORGLIDE
EXCLUSIVE TO ECOHAUS

CREATIVITY
NEEDS NO
BOUNDARIES

BURCKHARDT'S GLIDE IS A
NEW GENERATION FRAMELESS
SLIDING DOOR SYSTEM

TEL: 0800 612 6519

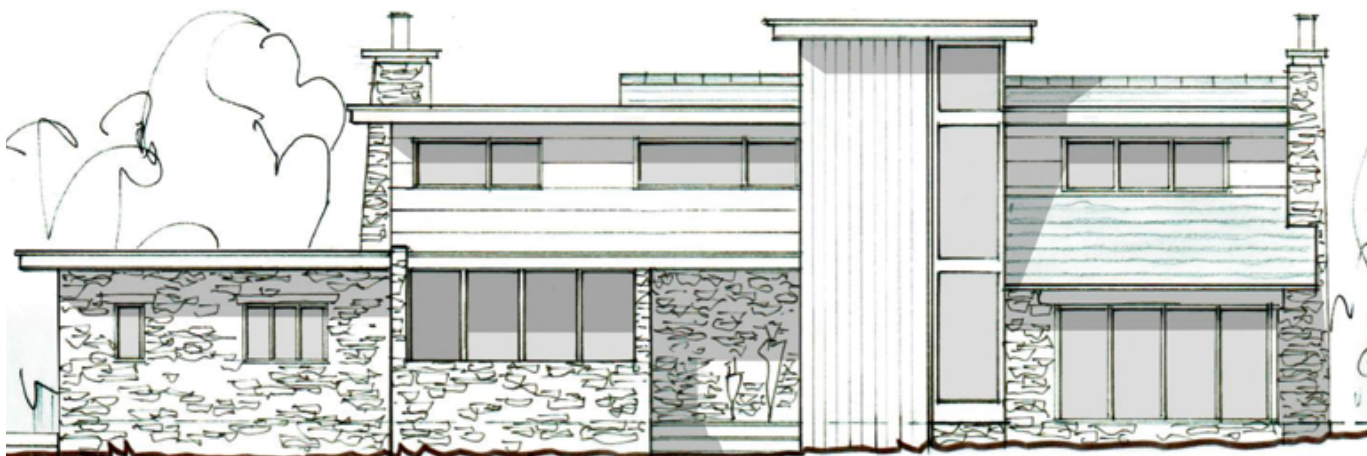
WEB: www.burckhardtsglide.co.uk

EMAIL: sales@burckhardtsglide.co.uk



Getting the Design Right

IN HIS NEW COLUMN, FORMER *HB&R* EDITOR **JASON ORME** SHARES HIS WORDS OF WISDOM AS HE EMBARKS ON THE RENOVATION AND MAJOR REMODEL OF HIS 1960S HOME



One of the biggest mistakes that many homeowners make with self-build or renovation projects is rushing into the build itself — eager as they are to start seeing things happen. It usually ends in tears, with either a design that has not fully evolved, insufficient detailing on the plans (if indeed they exist at all), or a spiralling cost base. Some 18 months into the process of extending and remodelling our own 1960s

“One designer alone would probably not be able to provide everything we needed”

house and we’re yet to so much as furtle a fascia — we certainly can’t be accused of rushing in. Instead, my wife Sarah and I have taken our time on the design. It is, after all, going to be the home our children grow up in for the coming decade or two — the most important home we’ll live in — and it’s worth spending a bit of time exploring the options before lifting a hammer.

After finding our new project in the Staffordshire countryside, we started off by looking at the main project objectives: to add another bedroom (the house had four,



Before and After: Front Elevation

After advice from three designers, the final drawing (top) for Jason’s remodelled and extended home has been worked up — the new tower addition is a defining feature of the front elevation

but one of these, with its own en suite, was downstairs); make the upstairs space feel more generous and luxurious; provide a more attractive kitchen and dining area that would connect better with the lovely garden; achieve better flow between the different parts of the house; and generally improve the architectural appearance of the home from the outside. Mark Brinkley, a long-time contributor to *Homebuilding & Renovating* magazine and ever one for a good line, called the house ‘Frank Lloyd Wrong’ and while both Sarah and I liked its mid-sixties eccentricities, it had faded over the years, and some elements were just plain ugly. We wanted a scheme that both achieved the space we required, and gave us a house that was attractive again.

We spent a lot of time doing our own research, both online and using magazines

GREYS ARTSTONE REPRODUCTION SLATE



FREE
SAMPLES

Visit www.greysartstone.co.uk
or call 01484 666400
for a **FREE** Sample Pack

✓ 25
YEAR
GUARANTEE



All the characteristics of natural slate
with all the advantages of a modern
building material.

Greys Artstone reproduction stone and slate roofing products are hand crafted to give an authentic roofscape. Detailed moulding, a choice of colours and a range of sizes create a coursed and diminishing stone slate roof. An easy to lay format and a range of compatible products including: ridges and in-line ventilation systems, create an extremely versatile and cost effective alternative to natural products.

ADVANTAGES

- Light weight construction saves on labour and timber costs
- Construction allows easy cutting without cracking or breaking
- Looks like stone and slate when cut
- Weathers like stone and slate not concrete



WE'RE HERE TO HELP

Call **01484 666400**
to speak to our sales team



Ground Floor



First Floor

— and of course my own personal back catalogue of the brilliant homes I'd visited during my 12 years as editor on this title. We then took the view that one designer alone would probably not be able to provide everything we needed, and in the 18 months since we have engaged with three different designers, all of whom have added significantly to the scheme using their own individual strengths.

Pete Tonks (PJT Design), the renowned designer of oak frame homes, has a particular interest in 1960s architecture and he and

“We'll have spent around 10-15 per cent of the final build budget on the design itself”

I share a love for American architect John Lautner, so we engaged him to come up with concepts to achieve the key objectives and see the project through the planning process (more on which next issue). His amazing solution to the problem of the pokey upstairs spaces — building a new tower on the front elevation and reworking the stair position — was the single biggest step forward with the project. Next up, Aaron Chetwynd, a hugely talented architect local to us in Staffordshire who had a proven track record in being able to 'realise' contemporary schemes and, with

A Reworked Floorplan

Following first designer Pete Tonks' suggestions of a tower extension to the front and moving the staircase, the new layout (above) allows for more generous accommodation with better flow between rooms

a background in film set design, ensured the necessary level of architecture was injected. Critically, he was able to co-ordinate key issues like the joinery and stone detailing.

Then, as we began to worry about the potential budget becoming less achievable, we spoke to a local builder about the scheme who recommended local designer Jon Grew to do some further constructional detailing and, more importantly, reappraise the project to carry out a value-engineering exercise. He's been the 'critical friend' that the project needed — very much a 'do we need' approach that I'm sure will be massively valuable down the line.

As a process, it has been time-consuming and felt a bit more expensive than we would have liked. We'll have spent somewhere around 10-15 per cent of the final build budget on the design itself — which, I'm told, is about right. It just feels a lot. So what does that level of investment (in time and thinking, as well as money) get you? I'm hoping it means that the usual dramas and mistakes that others make by rushing in and scrimping on design will be avoided. We'll see.

● Next month: The planning process

NEW PROJECT

“IT’S AN EXCITING CHALLENGE”

Simon and Karen Coulson are hard at work renovating and extending their 1960s bungalow in Ipswich...

“We’re exactly where we want to be,” says Simon Coulson, as he describes the project he and his wife Karen have taken on to remodel and extend a rather drab bungalow in Ipswich. “We bought the bungalow in August 2015 (although we’d been busy planning ideas for what we wanted long before), and after a recommendation through my wife’s work we hired an architect to ready our plans. Luckily the planning came through quickly, although we did have a condition that required an archaeologist to come out and conduct a survey as previously a Bronze Age urn had been found in the garden.

“For the design, we knew we wanted a house for entertaining our friends – social space was important to us – and so we wanted to reconfigure the accommodation to meet these needs.

“However, while we did not want many bedrooms as it’s just the two of us, we knew it was smart to have one eye on the end value, and knew that additional bedrooms upstairs would make the property particularly attractive if the time ever came where we had to sell,” says Simon.

With this in mind, the couple have chosen to completely overhaul the existing layout, keeping only the large 7m² living room – which they are living in throughout the works. “We are turning the old master bedroom downstairs into a dining room, opening out to a new conservatory, moving the staircase, converting the old garage into a study, building a new garage and then adding two new bedrooms upstairs to make this property a four bedroom home – we’re keeping the other two guest rooms which sit above the former integral garage,” says Simon. “The other bedroom on the ground floor will become a boot room, and by taking down one of the internal walls this will make room for a large kitchen.”

Simon and Karen were also keen to create a feeling of space and volume with

high ceilings. They knew it wasn’t going to be possible with the existing roof space, so the architect suggested removing the roof and raising the ridge height.

“We were quite particular with the design, and by introducing a large dormer on the front elevation we knew we had to make this attractive as it’s the first thing both we and guests will see when they approach the driveway,” says Simon. As a result, the house is being clad in HardiePlank fibre cement cladding above 2m, with matching render below, taking the property from a brick-clad 1960s bungalow to a beautiful New England-style home.

So what stage are the couple at currently? “We’ve changed every window and the new front door has arrived but we’re going to wait to put that on. The footings for the new garage and the conservatory have been done, the wall has been knocked down to move the position of the staircase and we’re currently putting the new beams in the ceiling to support the new floor above for the new bedrooms. The next step is pulling the roof off, which will be done in stages as we go along, and building the dormer.

“It wasn’t until three or four days into the project that we realised that we could have been more prepared. We had been so focused on making sure we got the right contractors and the right schedule that we forgot to arrange what we personally need to get through it – particularly as we’re ‘camping’ out in our living room!

“The only question now really is when it will be finished, and as we are doing this on a budget that will all depend on what we have left to spend towards the end and whether I need to step in and finish some of the work myself in my spare time.

“There are absolutely no regrets though as the house we’ll end up with will cost way more than we ever could have afforded to buy outright – and it’s an exciting challenge.”

STEVE TARLING





Are You Undertaking a Project?

If you're currently on site working on an extension, renovation or self-build project and would like to see your home appear here, we'd love to hear from you. If your project is featured you'll even receive a free 12-month subscription to the magazine. To take part, email homebuilding@centaurmedia.com

Brick is back.



Wienerberger's pioneering clay facing brick helps Belfast development claim major industry award.

Nominated for RIBA House of the Year and winner of Best Housing Development (1-5 Units) at the BDA Awards 2015, this family home on Church Road in South Belfast is testament to the virtue, versatility and vitality of clay facing brick. Architects Hall McKnight selected Mellowed Red Sovereign Stock from Terca for its excellent life-cycle performance and durability.

Download our **Brick Selector App** and find the right brick in just a few clicks.



iOS QR Code for
Apple Store



What to Consider When Choosing Bricks

BUILDING INSIGHT FROM INDUSTRY INSIDER **ANNETTE FORSTER**

Making sure that the right bricks and mortar are selected for your project is likely to be very important. Within the UK, brick is the most popular façade option, with durability, security, solidity, longevity, versatility and cost-effectiveness all being key contributors to the product's sustained prominence within the housing market.

There are many variables, but most people are surprised that typically the cost of bricks on a new detached property is around £5,000. That is less than three per cent of the overall build cost – and much less than most people spend on the average kitchen – yet this product has such an important impact on 'curb appeal'.

From the way the building looks to how it fits in with its surroundings, bricks can have a major impact on the end result. Add to this the fact that it's also difficult to change at a later date – unlike a kitchen or bathroom, for instance – and the importance of selecting the right brick for your project becomes clear, especially when there are over 1,000 different types available within the UK alone.

With this in mind, it's important to consider the many factors involved with selecting the right product – from the style of brick (contemporary or traditional) to considering the local area and what the planners will accept. So, what are the differences between bricks that impact on the look of a property?

- **Brick type:** Handmade, stock, wirecut and water struck are all popular options.

- **Size:** The standard size for bricks in the UK is 215x102.5x65mm; however, there are several different sizes available.

- **Colours:** There are a huge number of colours available, from plains to multi coloured, reds, yellows, white, blacks and even glazed.

- **Textures:** Creased, handmade textures and 'tumbled' effects provide a look of reclaimed bricks, which are popular with traditional styles. Monotone, smooth products are more popular for contemporary styles.

- **Blending:** By mixing different products, you can achieve a bespoke look for your project.



Above: Traditional-Style Brickwork

Wienerberger's Kempley Antique is a red soft mud stock brick – perfect for traditional schemes

- **Mortar colour:** Mortar accounts for over 15 per cent of the external wall coverage, so considering the colour is key.

- **Bond patterns:** People opting for a traditional look tend to go for patterns like a Flemish bond, while those after a contemporary style may look to options such as stack bonding.

- **Mortar joint profiles:** There are a number of options that impact on the look of the build, from recessed, flush and bucket handle to weather struck, and weather struck and cut.

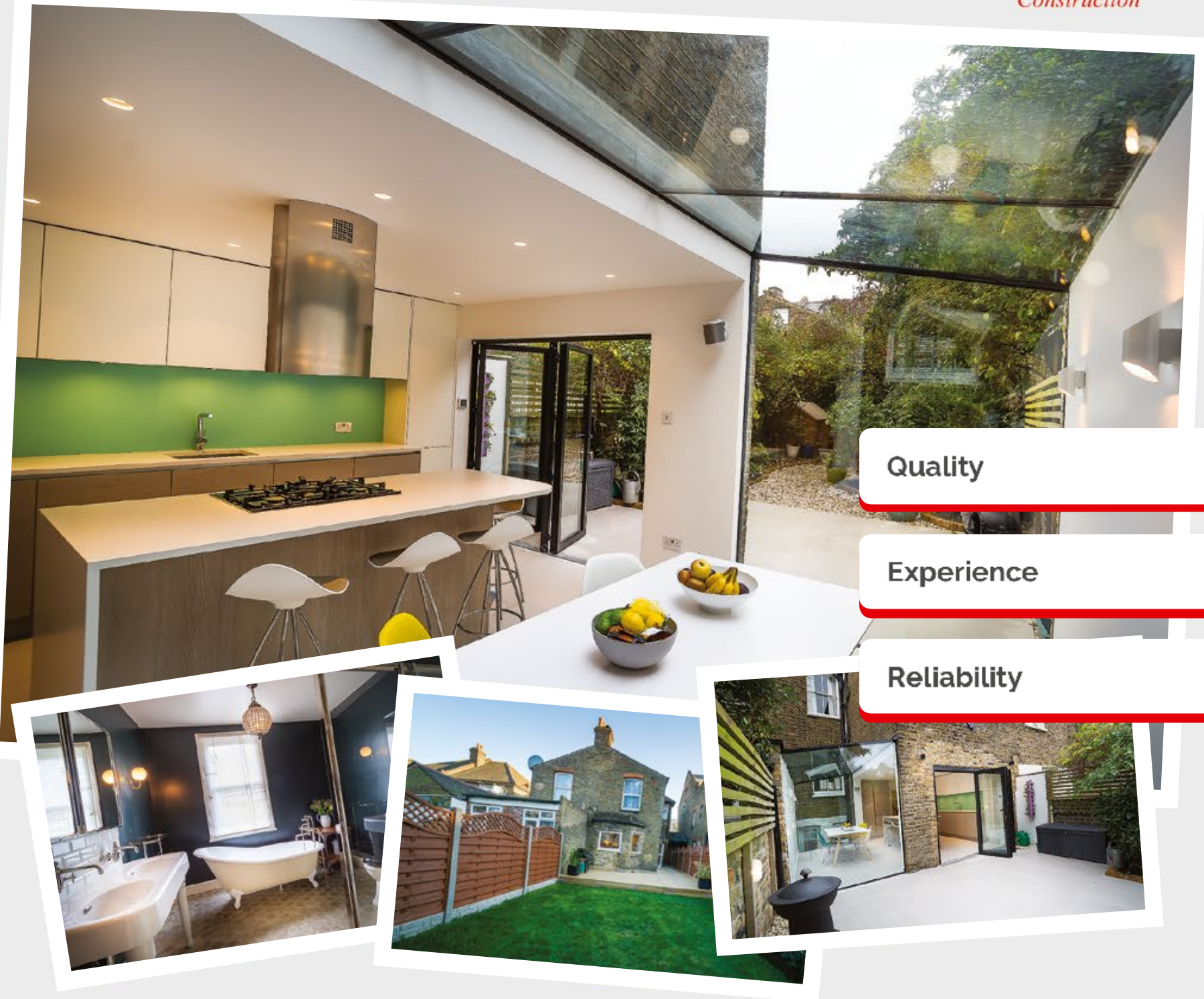
- **Shaped bricks:** These offer different benefits, from enhancing the look of a project to increased durability. They can even reduce build time and waste on site by reducing the need for hand cutting.

- **Brickwork detailing:** Bricklaying techniques like corbelling can add interesting features.

With so much choice available, make sure to visit a showroom and play with colours and textures to get the right look for your project. 

● Annette is the director of marketing at Wienerberger and a lead on the Brick Development Association and Construction Products Association. Wienerberger, the world's largest producer of bricks and Europe's biggest producer of clay roof tiles, has four showrooms and 14 factories in the UK. Its range includes Terca, Porotherm, Sandtoft, Keymer and Penter brands.

Visit wienerberger.co.uk or phone 0845 303 2524



Quality

Experience

Reliability

LONDON

BUILDING COMPANY

www.phsconstruction.co.uk

Phone 02074766648

E-Mail info@phsconstruction.co.uk

We understand that every home is different and therefore, we have an individual approach to each project. Our experts work closely with our customers, providing each and every single one with tailored approach in order to meet all the expectations. We strive at all times to provide seamless, top quality building and renovating services at competitive price.

BUILDER WISDOM IN ASSOCIATION WITH



“Good Communication Can Save Thousands”

Builders share their words of wisdom for a successful building project

One of the most common problems

when dealing with existing homes is the effect of changing weather patterns — heavy, penetrating and driving rain has had a huge effect on homes today, together with water ingress from the lack of maintenance such as defective gutters, flashings and poor workmanship. In turn, both can cause migrating dampness problems, creating cold walls, condensation and the very high risk of timber decay to embedded timbers.

The industry has changed dramatically

in the last decade. There are fewer homeowners wanting to entertain the idea of DIY and there is a huge demand where clients can't find suitably qualified, experienced and up-to-date contractors to trust, take advice from and employ.

Energy efficiency is also gaining enormous momentum and importance in all our lives. At Tiffin Group we are qualified and experienced in thermal imaging and have diplomas relating to the best modern methods and techniques regarding insulating old and listed buildings.

Projects are all about client/builder relationships — knowing what is expected of each other is essential to the success of a building project. A clear specification, conditions, programme and communication will result in a good working relationship. Also bear in mind that changing your mind and varying work during a project is always expensive and you won't get best value for money. Good communication at an early stage can save thousands.

One essential tip when embarking on a home improvement project is not to be price driven. Have you heard of the astronaut who was perfectly confident of a successful mission when he discovered that his spaceship and suit had been sourced by the cheapest supplier?! **H**

● Robert Tiffin is a building expert and owner of London and home counties-based contractor Eco Tiffin (01442 259067; tiffingroup.co.uk)

● The Federation of Master Builders (FMB) operates the Find a Builder service to help you source quality contractors near you at fmb.org.uk

JAMES TURNER



ADVICE

The Rise of the Prefab Home?

Would you rather your car was built in a field or a factory? Why not ask the same question about your home? It's a fair point — so why aren't more houses in the UK prefabricated off-site? Mark Brinkley explains all



MARK BRINKLEY
Mark is the author of the best-selling *Housebuilder's Bible* and an experienced builder; he's just bought another plot

THE QUICK READ

➤ Prefabricated homes are big news in Germany and becoming increasingly popular for UK self-builders. Building a home under controlled conditions off-site can result in a build delivered on time and on budget

➤ 'Modern methods of construction' (MMC) is a term often used to describe this approach to building

➤ In the UK, a hybrid model has evolved, whereby the superstructure is typically prefabricated off-site and erected (usually with the aid of a crane) on site, with the self-builder taking over to manage the finishing trades



Design-Led Prefabricated Homes

This architect-designed self-build was prefabricated almost entirely in Germany by Baufritz — the shell was erected and made water-tight in just five days!

A few weeks before Christmas 2015, I was cycling through a leafy suburb in my home town of Cambridge, when I spied a huge 40-tonne truck trying to make a right turn across my path. As I got closer, I noticed the lorry had German plates. Why would a vehicle this size, coming from another country, be turning into a quiet suburban side street?

I knew the answer the moment I clocked the German plates. It could only be a prefabricated house from a nation where self-build is far more common than speculative building. Germany is home to over 100 fertighaus (or prefabricated house) builders and several of them are active in the UK market. This one was being supplied by Hanse Haus, who have been trailblazers in our home market and have been supplying UK-customised homes for many years.

Over the course of some 20 years writing and researching self-build, I have been to many sites where factory-built homes were being craned into place, and erected at an almost unimaginable speed, but I always arrived on site by invitation and at a scheduled hour. This was the first time I had ever stumbled across such a delivery by chance and that in itself is significant, because previously such construction methods were so unusual that they were



newsworthy. Now they are routine, if not exactly commonplace. I followed the truck down the side street and found another already parked up on the roadside, waiting to start unloading the house. The assembly gang had also come over from Germany and were being put up in local B&Bs. They knew their job and aimed to have the structure of the house up in three days. The customers were replacing an older house and had been told that they would have the keys to their new home in just eight weeks.

Four months later, the finished house sits easily in the street, the construction phase long finished — only the garden and the landscaping await to be completed. This, in essence, is what people are talking about when they use the phrase ‘modern methods of construction’ (or MMC).

What are Modern Methods of Construction?

Modern methods of construction are all about taking as much of the grunt work away from cold, wet building sites as possible. Instead of struggling to construct brick and block layers and working from a set of plans in all kinds of weather, much of the process is moved under cover, into an environment where the structure of a house can be built with greater speed and to engineering standards. Which begs the question: why aren’t all houses built this way? Why are the majority of new homes in

this country still built on site? The answer is not straightforward, but usually boils down to one or two factors. Factory housebuilding sells itself on being quick, but not everyone is in a hurry to complete. In fact, our big housebuilders have a vested interest in not being too speedy because they want to release their output at a measured pace to match a predicted market demand, thereby keeping their prices high. The second factor is cost: there is often little to choose between on-site and off-site builds, and shipping houses across continents is never cheap.

The main drivers for the uptake of modern methods of construction are quality combined with predictability. I very much doubt my Cambridge self-builders (who incidentally I never met) were drawn to this route because it was a cheaper option. I suspect that they valued the certainty of the outcome (more than simply the speed), combined with the reputation that German manufacturing enjoys across all sectors. Buy a German fertighaus and you know precisely when you can move in. You could book a holiday for the following week, safe in the knowledge that you wouldn’t have to cancel at the last minute because of unforeseen snags; there won’t be any. That’s a very appealing prospect for many people, compared with a typical on-site self-build where the finished date is always “a few months away” and the hope of being “in for Christmas” so often turns into a cruel joke. ➤➤➤



Photocredit: NVB Architects

Built with the NUDURA ICF system, 'Spring Road' is a sustainable, detached self-build home which has very high levels of insulation and high thermal mass. The energy use is equivalent to Code 6 carbon zero homes. Energy data harvested in Year 1 revealed there were zero energy costs to the homeowners.



www.nuduraicfs.co.uk

minimising energy costs

build your home with NUDURA® ICF



Distributor Name

The Fell Partnership
ICF Wales
ICF Supplies

Telephone

01822 890251
01286 671006
01268 542748

Website

www.thefellpartnership.co.uk
www.snowdoniawindows.co.uk
www.icfsuppliesltd.co.uk

Postcodes

TR/PL/TQ/EX/TA/BS/DT
LL/SY
TN/CT/ME/SS/AL/LU/OX/HP/MK/SG/CM/CO/CB/IP/NR/PE/NN/CV/BR/DA/
RM/SE/IG/E/EC/N/EN/WD/HA
LE/LN/NG/DN/HU/YO/WF/LS/HG
DL/TS/SR/DH/NE/TD/DG/KA/ML/EH/G/KY/FK/PA/DD/AB/PH/IV/KW/ZE/HS
DT/BH/BA/SP/SN/BS/GL/HR
SA/CF/NP/LD
FY/PR/BB/BD/LA/CA/IM/BT
DY/WR/B/WS/WV/TF/ST/DE/CH/CW/SK/WAL/WN/BL/OL/HD/HX
SO/PO/BN/GU/RH/RG/SL/KT/CR/SM/SW/UB/W/WC/TW

Landmarks UK
ICF Scotland
ICF Direct
ICF Cardiff
Island Timber & Building Merchants
Newbuild-Solutions
ICF Southern

01652 640001
01506 240279
01373 463508
07921 453519
01624 827338
01909 568377
01903 744440

www.landmarksukltd.co.uk
www.icf.scot
www.icfdirect.co.uk
www.icfcardiff.co.uk
www.islandtimber.co.uk
www.newbuild-solutions.com
www.icfsouthern.co.uk

ADVICE MODERN METHODS OF CONSTRUCTION



Closed-Panel Systems

Clockwise from left: **Haus** is an architect-led package company providing prefabricated homes using composite timber frame systems, which are craned into place on site; The wall panels of this **Baufritz** home are factory-finished, complete with windows and cladding in place — saving time on site; The **Hanse Haus** system utilises numerous independent components (layers, seals, flashings, foils, adhesives, materials, compounds, etc) that form an integrated whole — once on site, the windtight and watertight shell can be finished in three days!



An Emerging Hybrid Model in the UK

The total number of entirely prefabricated houses being built each year in the UK is still very small. Even within the self-build community, it accounts for less than a hundred homes each year. It's an expensive business to ship a home across the Channel, and the overall size of the business doesn't yet warrant the investment in local plants, although this may change as one company in Scotland plans to do just this (watch this space).

What has instead evolved in the UK is a hybrid version of fertighaus, where only the superstructure of the house is factory built and erected on site and the self-builder then takes over and manages the finishing trades. Technically, if we take timber framing as an example, the difference between the German approach and the British approach is referred to as closed panel vs open panel. Closed-panel framing sees entire walls finished in the factory. The external cladding is fixed, as are the doors and windows and the ducting for cables and plumbing. A closed panel itself tends to be larger and heavier and a crane is therefore essential to the assembly.

In contrast, open-panel construction leaves the external cladding and the joinery to be fitted on site. The process can often be carried out without a crane. This makes it suitable for sites where access is restricted, a factor common in the UK.

Open-panel timber frame developed in Scotland, riding the back of the oil boom around Aberdeen in the 1960s. Americans were arriving in droves and needed lots of housing quickly. They were more than happy with timber buildings, as that is how they were built back home, but the Scottish weather meant that American-style stick building was always going to be a challenge on site. So the process was brought into a factory and the UK-style timber frame was born. It has proven very effective and Scottish homebuilding has been dominated by timber frame ever since, with suppliers such as Scotframe and Stewart Milne now familiar names. In England, Potton picked up the baton and led the way in introducing factory construction in the 1970s. While the major housebuilders have been happy to stick with traditional methods, the self-build market has been a different story and has embraced different build systems and techniques.



ADVICE MODERN METHODS OF CONSTRUCTION

Oak Framing — a Modern Method of Construction

It can be difficult to shake the perception of oak frame as a centuries' old way of building, but prefabrication is key to modern oak framing; after all, the majority of oak framers construct their frames off-site, ready to be erected on site — the quick erection of the frame being one key benefit. What's more, no longer are infill panels of brick or wattle and daub acceptable; today's oak frame builds are typically encased in a highly insulated, airtight envelope in order to meet Building Regulations. Structural insulated panels (SIPs) are often used, but Oakwrights has developed its own series of encapsulation systems (the WrightWall Natural system, shown here, being just one) — wall and roof panels are built off-site to exacting standards (below), reducing build time on site



ADVICE MODERN METHODS OF CONSTRUCTION

The Many Faces of Modern Methods of Construction

But there is more to modern methods of construction than just a choice between closed and open-panel timber frame systems, and timber is not the only construction system that lends itself to this approach. Danilith, a Belgian company that also operates in the UK, provides prefabricated panels of highly robust insulated concrete with a brick outer leaf (render, timber cladding and even flint can be specified too), complete with external windows and doors. These are transported to site and craned into position as described before.

In the past 20 years, alternative construction systems have also emerged that are rather different from either closed or open-panel timber frame, and they all vie to be included as 'modern methods of construction'. Timber frame has spawned variants, most notably SIPs (structural insulated panels) which are characterised as being like timber frame without the timber. Here you are essentially building walls and roofs out of solid slabs of insulation, producing excellent thermal performance, in tune with today's concerns over energy efficiency and sustainability. SIPs are an American idea and were first used in the 1950s. They appeared in the UK in 2000 and have established a successful niche in both the self-build and developer markets. There are other framed systems using steel, too, though these have yet to make a significant impact on the self-build scene.

Even on-site blockwork construction is going through something of a rethink, using methods which simplify and speed up masonry construction — and in the case of insulated concrete formwork (ICF), completely rethink it. ICF construction is based around the use of expanded polystyrene moulds which are used to build walls with readymix concrete, then poured into the cavity to form the structure. No way can this be characterised as 'off-site construction' but, used well, it can be very speedy and the result is often a better insulated house that ticks many of the sustainability boxes that modern methods of construction tend to benefit from.

To completely understand all aspects of modern methods of construction, it is necessary to delve into the world of commercial building (where many aspects of car manufacture have been incorporated into building design). Here we see developments such as prefabricated craned-in bathrooms and living spaces fitted with wiring looms. This sort of building needs economies of scale — typically 50 or more very similar units — so it is usually only seen in blocks of flats, hotels or student accommodation. Its interest to self-builders is little more than academic at this stage. ➡



Insulated Concrete Formwork

Left: BecoWallform is based on large lightweight block components that lock together without intermediate bedding materials — creating a formwork system into which concrete is poured. The formwork remains in place as thermal insulation and the system provides low U values

Top and above: NUDURA estimates that its insulated concrete formwork (ICF) system saves up to 60 per cent on labour and 25 per cent on time on site for a shell finish, compared with more traditional build masonry methods such as blockwork. The product has also recently been used to complete a curved self-build

HAVE AN EXTRA ROOM ON US



IMAGINE | LIVE | INDULGE

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

- › Room in the roof as standard
- › High thermal efficiency without impacting on room space
- › Flexible design

To find out how the Kingspan TEK® Building System can save you money during and after your project visit:
www.kingspantek.co.uk/selfbuild
or email us at:
literature@kingspantek.co.uk
for your self build guide.



 **Kingspan TEK®**
Building System

ADVICE MODERN METHODS OF CONSTRUCTION



Above: Structural Insulated Panels

Potton was pioneering in its introduction of timber-based builds to the UK in the 1970s. Today, the company offers a number of build systems – including timber frame and SIPs (the Kingspan TEK® Building System shown) systems in order to deliver highly efficient homes – plus, a range of self-build routes (from erecting the shell only, to a full build service)

Below: Prefabricated Components

The Danilith system uses brick-faced insulated concrete panels which are transported to site and erected



The Benefits to the Self-builder

Which brings us to ponder what this all has to offer the prospective self-builder. There is no straightforward answer to this, partly because there is no clear-cut definition of what modern methods of construction represents.

Many non-conventional build methods like to call themselves modern methods of construction because this distinguishes them from the mainstream or traditional methods. However, this doesn't mean that the so-called modern methods always share common features. SIPs and ICF are poles apart in their approach to house-building. SIPs are all about factory-produced panels used for their energy efficiency and airtightness characteristics; ICF is very much an on-site method, appealing to the hands-on self-builder who wants to be in control of the whole process of the house assembly. Paradoxically, what they have in common is their heavy use of plastic-based insulation and also their designed outcomes, providing very energy-efficient homes.

Interestingly, neither SIPs nor ICF are widely used in Germany which many see as the spiritual home of modern methods of construction. The choice in Germany is somewhat simpler: on-site (or traditional) construction versus the off-site fertighaus methods, which we are slowly seeing becoming established over here. In the UK, we seem to be more open to other construction systems, many of them emanating from North America, but the wider choice doesn't necessarily make it better or a better place to build; the plethora of choices sometimes just adds to the confusion.

The choices for the self-builder are not simply restricted to wall systems either — component parts such as prefabricated floors and roof cassettes, for instance, can make for a more efficient build and speed up the construction of the shell of a new home.

If you are hoping to build a home in the coming years, it probably pays to keep an open mind about potential build methods, whether modern or traditional. Off-site construction has many attractive benefits for the self-builder. It delivers a certainty of outcome at a predictable cost that most on-site methods cannot match. But off-site modern methods of construction do not suit every design or every site, and only rarely does it work out as being significantly cheaper.

One thing modern methods of construction don't do is remove the human element in building. Whichever method you choose to build your home, make sure that you are dealing with people who know what they are doing and are able to show you how their system will meet your needs and your budget. **H**

FURTHER CONTACTS

Danilith UK: danilith.co.uk; ecoHaus: ecohaus.org.uk; Haus: haus-uk.com; Hanse Haus: hanse-haus.co.uk; Heb-Homes: hebrideanhomes.com; Oakwrights: oakwrights.co.uk; Potton: potton.co.uk; Scotframe: scotframe.co.uk; WeberHaus: weberhaus.co.uk; **SIPs**: Kingspan TEK® Building System: kingspantek.co.uk; **ICF**: Nudura: nudura.com; Beco Wallform: becowallform.co.uk



Tradition meets Innovation

Unique Innovative Approach

Danilith brings a unique and innovative approach to any self build or development project. Bespoke design, traditional appearance, quality materials and hand finishing combine with solid insulated walls and floors, excellent air tightness, and high thermal mass to ensure an efficient, comfortable environment throughout the year.

Danilith Delmulle has built over 15,000 bespoke homes in Belgium and neighbouring European Countries. Now through Danilith UK this unique factory built traditional construction system is available here in the UK.



enquire@danilith.co.uk
01832 730 264
www.danilith.co.uk

ceiling2floor

PANELLING MERCHANTS

BEAUTIFUL PANELLING YOU'LL ADORE

Give your home a treat with our stunning NEW waterproof Shower, Ceiling & Wall PVC and ACRYLIC panels, also check out our Luxury Vinyl-Click Flooring.



- Great designs
- 100% waterproof
- No grout • No mess
- Hygienic • Easy to install

"Grout is Out!"

Homebuilding
& Renovating Show
SECC, GLASGOW STAND
21-22 APRIL 2016 417

VISIT OUR SHOWROOMS:

• CAMBUSLANG, 0141 641 7744 • GOVAN, 0141 375 9030
• EDINBURGH, 0131 297 0999 • FALKIRK, 01324 636323
• ELGIN, 01343 612632 • KIRKINTILLOCH, 0141 776 0061
• STIRLING, 01786 448867 • ABERDEEN, 01224 608790
• ANNIESLAND, 0141 954 1461

Freephone: 0800 124 4422

info@ceiling2floor.co.uk • www.ceiling2floor.co.uk



Scan QR code
for more info



Inspired to self-build your own dream home? Contact us for a free quotation and expert advice.

Our Award-winning Wallform systems are quick to build, energy efficient, exceed current building regulations and offer flexible design.



www.becowallform.co.uk

01652 653844 info@becowallform.co.uk

@BecoWallform



ICFA Founder Member



BBA Approved

"It's just so comfortable –
and our heating bills are
next to nothing!"

"We found BecoWallform
to be a fast and easy
way to build"

BecoWallform

BUILDING FOR THE FUTURE



**Homebuilding
&Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 635

**Homebuilding
&Renovating Show**
SECC, GLASGOW | STAND
21-22 APRIL 2016 | 445



THE INTELLIGENT OAK FRAME

A DESIGN FOR LIFE

For most, designing and building your own oak frame home is a once in a lifetime experience. A chance to create something completely unique that will not only serve your needs in the present, but will mellow gracefully and repay you with a lifetime of enjoyment. The importance of getting it right is paramount and as such we use only exceptional, seasoned, architectural designers to create our homes. Designers such as **John Williams**, whose lifetime of experience in designing with oak will create maximum impact for your oak frame.

The build quality, accuracy and finish of an Oakwrights oak frame is legendary, but a home meticulously designed alongside our architectural designers is the stuff of dreams.

*It's all about making the most of everything
your plot has to offer! - John.*



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

[f](#) [t](#) [p](#) [YouTube](#) [BLOG](#)





Solar Ready

Is it possible to run a house entirely on solar power?
Energy expert Tim Pullen visits three new homes which are trailblazing their way to low energy bills

The sun delivers more energy to the earth in an hour than the world uses in a year, according to the US Government's Department of Energy. An extraordinary statistic, but perhaps misleading in that the amount of energy actually available will vary with where you are in the world, the season, the time of day and the technology available to harvest it. Nonetheless, surely it should be possible to run a new home entirely on solar power?

Solar energy arrives here in the form of light and heat. We use technology to capture, magnify and convert it into useful purposes. As far as a house is concerned, there are three ways to do that:

- Photovoltaic (PV) uses silicon to convert light to electricity.
- Solar thermal uses the greenhouse principle to produce useful amounts of hot water.

● Passive solar energy is light energy gathered by the house without the use of technology. That is, sunlight passing through a window and warming the air within.

There is a fourth to consider too — PVT. In basic terms, PVT is a hybrid solar panel consisting of PV and thermal functionalities which contribute towards electricity while heating hot water.

It used to be considered by many that the UK did not receive enough sunshine to justify investing in solar power. The recent proliferation of PV arrays on roofs and in solar farms has dispelled that myth and it is the efficient use of all forms of solar energy that makes the idea of the solar-powered house a viable possibility. The one issue that could put the breaks on this notion – storing this power (solar power is generated in the day, which is not always when we need it) – is beginning to be resolved, too (more on page 63).



TIM PULLEN

Tim is *Homebuilding & Renovating's* expert in sustainable building and energy efficiency. He runs the green home consultancy *Weather Works*, advising clients on renewables and energy efficiency in the home

The Solar House

Ty Solar in west Wales has insulation levels very close to Passivhaus standard. The three bedroom house is aimed at first-time buyers

How Much Energy is Enough to Power a Home?

This is a very good question, and an essential piece of information to feed in to the design process. We need to know how much energy the house requires before deciding how much we can or want to generate. There are plenty of 'UK average' figures – the average three bedroom house uses 4,800kWh of electricity per year; a four-person household uses 3,000kWh on hot water each year; a flat screen TV uses 0.1kWh/hr (hour), a fridge 1.6kWh/day – and while these may be more or less accurate, they are at best only a starting point.

What is wanted is a detailed and accurate calculation of the energy demand based on the building and the people in it. This ideally needs to be completed by a specialist, as working out how much electricity is needed for lighting, appliances, etc, and so on is

a tricky process. These will be largely fixed amounts: we can choose to have LED lighting rather than tungsten filament and A+, A++ and A+++ rated appliances, but that is about as far as we can go.

It is the fabric of the building where we can have the greatest influence. The insulation and airtightness are important, but glazing, shading and orientation are also key issues that need to be looked at.

And then there is the question of balance: how much of the budget can be spent on renewable energy technology, how much on extra insulation and airtightness, and what are the rewards? There are a number of ways of solving this problem and the three examples on the following pages give some idea of what is possible. Regardless of the route taken, the following projects all demonstrate that the solar-powered home is a practical option for self-builders, regardless of budget or project size.





1: TY SOLAR, WALES

Ty Solar, based in Pembrokeshire, is the brain-child of Glen Peters. His idea was to develop a house that was both sustainable and affordable, ideally running entirely on solar energy.

Glen Peters brought together a small team comprising himself, architect Gareth Dauncey, and Jens Schroeder, a builder with sustainable construction experience and passion. Together they designed and built a three bedroom, solar-powered house, essentially as proof of the concept, and are now building an estate of six solar houses, due for completion in June 2016, with plans in place to build 1,000 solar houses over the next 10 years.

“The design process was a combination of cost engineering, materials research, environmental design and end user analysis,” begins Glen Peters. “What we wanted was a house that would

provide comfortable family accommodation, using predominantly sustainable materials, that generates most of its own energy and can be built at a price which is affordable to first-time buyers.” This led the team to focus on energy demand reduction, rather than technology. The idea was to use PV alone, and focus on thermal efficiency in the fabric of the building and passive solar heating to generate a high proportion of the space heating. The average space heating demand here is below 25kWh/m²/yr, compared to 31kWh for the Northamptonshire house featured on page 66 and 39kWh for the solar house in Kent, on page 65.

What Glen Peters and his team have done is to develop a method of building energy-efficient, attractive, spacious, robust, three bedroom houses, at £1,000 to £1,100/m², including the PV panels. The anticipated running cost for these remarkable houses will be below £300 per year. The way he has done this is both simple and complex — simple, in that it was a matter of focusing intently on

ADVICE THE SOLAR-POWERED HOME



Low Running Costs

Passive solar heating and thermally efficient construction materials were chosen for Ty Solar. Annual running costs are expected to be below £300 per year. Sustainable materials, including locally sourced timber, were also used in the construction

the design and eliminating everything unnecessary, and complex for exactly the same reasons. To make the project just that bit harder, Glen Peters also wanted materials and labour to be locally sourced. He set up an apprenticeship programme to provide skilled labour and the timber frames are made from trees from a local forest, kiln-dried, processed and manufactured in the company's own factory.

Insulation levels are also very close to Passivhaus standard, with an airtightness of 0.9m³/hr. Passivhaus was not a requirement, or even a consideration, but reducing energy demand was considered an essential prerequisite for a solar-powered house. Large, south-facing glazed areas, with appropriate shading, produce a lot of passive solar heating, meaning that space heating is provided by a couple of simple electric radiators. This, in turn, eliminates the cost of wet radiators or underfloor heating. It is that sort of innovative thinking that has led to this truly remarkable house — a house that produces enough energy to even power an all-electric car. ➡

Right: Ty Solar during construction

The timber-frame house was built to demonstrate that a home aimed at first-time buyers could run on solar energy

STORING SOLAR ENERGY

The problem with solar energy is that we have access to most of it when we want it least — in the daytime and in summer. Caplin Home's Earth Energy Bank (see overleaf) is the only practical option currently available for storing heat for weeks or months, but there are more options available for storing electricity.

The Tesla Powerwall has a 7kWh capacity, which is sufficient to power most homes through the evening, given that the PV panels fully charge it during the day. Multiple batteries can be installed together for homes with greater energy needs.

The Sonnenbatterie takes a slightly different route with a modular design that can be customised to store up to 16kWh. This is already seeing some success in Germany, which is some way ahead of us in terms of solar technology. This product is now available in the UK.

Furthermore, Maslow is a 3kWh unit that looks like a small gas boiler and is aimed at the urban three bedroom home. It can be connected directly to PV panels and to electronic devices via smart USB sockets and is intended to run a home office.



**FROM
£5**

**Subscribe to plotfinder.net
from just £5**

**To take advantage of this fantastic offer visit:
plotfinder.net/june16**



OUR SPONSORS



ADVICE THE SOLAR-POWERED HOME

Solar Technology

This large solar-powered property in Kent uses several solar technologies, including PVT panels and the Earth Energy Bank (a borehole-based heat storage system)



2: KENT SOLAR HOUSE

This architecturally stunning five bedroom property in Bekesbourne, Kent, was designed and built by Caplin Homes with the specific intention of being solar powered. It incorporates extensive glazing to provide passive solar heating and shading to prevent summer overheating, as well as a south-facing roof to accommodate the PVT panels (see right) and a ground-source heat pump.

With a floor area of 431m², this is a large property, and even with thermal resistance close to Passivhaus standards and a low airtightness level of 4.5m³/hr, it still needs a lot of energy. EPC (energy performance certificate) figures suggest a heating load of 17,180kWh per year and domestic hot water at 2,753kWh, although it is accepted that these are often at odds with real life. The 9kWp PVT array can produce around 23,000kWh of heat each year but most of this is, obviously, produced in the spring and summer months, when not much of it is needed.

To address this problem, the property uses a technology called the **Earth Energy Bank**: a system of 90 boreholes, each 1.2m deep, below the house itself and connected to a pipework grid. In summer the Vaillant heat pump diverts the excess heat to the Earth Energy Bank, where it (mostly) remains until winter when the heat pump extracts it again to warm the house.

As a result of this technological approach, the house is close to zero carbon and the investment ensures running costs are – taking the FiT (Feed-in Tariff) scheme and the domestic RHI (Renewable Heat Incentive) into account – almost zero! The director of Caplin Homes, Michael Goddard, comments: “We want to prove that Government targets are achievable and that genuine zero-carbon homes are a viable investment for UK housebuilders. This house shows how existing technologies can be used for a large family home, but we also offer solutions for all house sizes.” ➡

WHAT IS PVT?

While PV and solar thermal panels produce either electricity or heat, PVT (photovoltaic thermal) panels generate both. They look like PV panels but have a heat exchanger on the back. We assume the bright sun of summer will be best but PV panels are actually more efficient in cold sunny weather; as they get warmer they become less efficient. The panel loses around 0.5% efficiency for each 1°C over 25°C. PV panels can hit 70-80°C in bright sunlight, meaning a 25% loss in efficiency at those peak times when they should be generating most. A good PVT panel, like those supplied by Solar Angel, will maintain the panel at its optimum temperature, not only increasing electricity production but also generating significant amounts of heat. The Solar Angel panel is rated at 250W peak electricity production and also produces 648W of heat energy.

CHEAP DAYTIME ELECTRICITY

The recent proliferation of solar farms has put pressure on the national electricity grid with a surge in electricity generation in daytime. An innovative solution to be trialled in Wadebridge, Cornwall, is to encourage householders to change their habits by offering low-cost electricity in the daytime. The Sunshine Tariff, provided by Wadebridge Renewable Energy Network, will be offered to residents with a rate of 5p/kWh between 10am and 4pm from April to September and a higher rate of 18p at all other times. The trial will use smart metering technology to see how much customers could save by changing their electricity usage patterns to take advantage of the low daytime rate.

3: CLOPTON NEW BUILD

This family home in Clopton, Northamptonshire, demonstrates that providing genuinely low CO₂ emissions and low running costs can be done for the 'average' UK home. In this case, the 162m² three bedroom house has 12 PVT panels with 3kWp electrical capacity and produces 7,800kWh of heat each year. Insulation levels are again close to Passivhaus standard and airtightness is 2.8m³/hr.

The space heating energy demand is 5,006kWh per year and domestic hot water 2,340kWh — which is good, but not great. The space heating energy demand equates to 31kWh/m²/yr, compared to Building Regulations requirement for 55kWh/m²/yr and Passivhaus at 15kWh/m²/yr. While the insulation levels are very close to Passivhaus, the standard demands airtightness of less than 0.6m³/hr — rather than the 2.8m³/hr achieved here.

It seems there may have been a trade-off. The cost of the renewable energy system — 12 PVT panels, a heat pump and a 28m borehole Energy Bank — is around £24,000. Achieving airtightness close to Passivhaus standard would have a reasonably significant on-cost, but not save much in terms of the scale of the systems installed. The PVT system will produce virtually all the heat needed in the house, but probably only half the electricity. So there is more reliance on grid electricity. This situation is not uncommon or unreasonable, as it is difficult to justify the extra investment in renewable energy to produce all the energy needed for a house of this size and build cost. **H**

WHAT THESE HOUSES HAVE IN COMMON

These three very different houses have two key issues in common: they all incorporated the idea of solar energy from the design stage right through to construction, and they all recognised that improving thermal efficiency was essential to success.

In addition, they all achieved very low running costs. The projects in Kent and Northamptonshire (below) used a variety of technologies applied to the house design and accepted the capital cost implications. In the case of Ty Solar, reducing capital cost was a key issue and this led to a focus on energy efficiency rather than technology. The Earth Energy Bank, developed by Caplin Homes, is also a leap in the right direction in storing heat.

What these three houses also show is that the solar-powered home is not only possible but a practical option for any self-build, from starter homes to the more grandiose. The knowledge, the skills, the technology, everything necessary to build a solar house, exists and for the self-builder it is simply a matter of deciding to go for it.



PVT Panels

The PVT system on this three bedroom house produces almost all of the heat required by the household and around half of its electricity needs



The Experts in Speciality Timber Products

When choosing a material for your project, appearance and performance are of paramount importance. Silva Timber supply the finest selection of speciality timber cladding, decking, fencing and roof shingle products in the UK.

Specialising in Western Red Cedar, Siberian Larch, ThermoWood® and a range of hardwoods, the range is supported by a knowledgeable customer support team, factory pre-finishing and fire treatment services, industry leading website, technical specifications and downloadable BIM objects.

For the natural choice, speak to the timber cladding experts.



0151 495 3111 (Cheshire)

01895 271 300 (West London)

For more information visit:

www.silvatimber.co.uk

enquiries@silvatimber.co.uk

SILVA
TIMBER PRODUCTS





the underfloor heating store

UK's largest underfloor heating company



“The best choice, the best price, the best service, that's why I use The Underfloor Heating Store”


Sarah Beeny

prowarm™
ELECTRIC CABLE SYSTEMS

CABLESAFE GUARANTEE



from **£84.99** INC VAT

prowarm™
LOW PROFILE WATER SYSTEMS

50 YEAR PIPE WARRANTY



from **£539.99** INC VAT

Polypipe
WATER UNDERFLOOR HEATING



from **£407.99** INC VAT

 **LifeTime Warranty** 'on all our ProWarm™ electric underfloor heating systems, including thermostats!'

 **GET GREAT DISCOUNTS**
Enter this code at checkout
HBRDISCOUNT

www.theunderfloorheatingstore.com

The smarter way to heat your home!

0844 800 3396



FREE NEXT DAY DELIVERY

LIFETIME WARRANTY



Electric mat kits from
£113.99 INC VAT

The smarter way to heat your home!

FREE DELIVERY



Wetroom kits from
£59.99 INC VAT

TRADERS DISCOUNTS



Water kits from
£409.99 INC VAT

EASY TO INSTALL



Underwood kits from
£127.99 INC VAT

Affordable luxury for any room!

- ✓ ELECTRIC UNDERFLOOR HEATING
- ✓ WATER UNDERFLOOR HEATING
- ✓ THERMOSTATS
- ✓ WET ROOM KITS
- ✓ INSULATION BOARDS
- ✓ ADHESIVES & LEVELLERS
- ✓ AIR SOURCE HEAT PUMPS
- ✓ FREE DELIVERY

BAL ULTRA
ADHESIVES, LEVELLERS & GROUTS



from
£9.99 INC VAT

prowarm™
ROOM TEMPERATURE CONTROLS



from
£49.99 INC VAT

LIFETIME WARRANTY

SAMSUNG
AIR SOURCE HEAT PUMPS



from
£2299.99 INC VAT

£ Price Match Promise 'if you find the same product cheaper elsewhere online, we'll match the price!'



Having successfully completed the assessment process we are very pleased to be a Which? Trusted trader, our membership is 402349444. Although our standards are already high this recognised qualification endorses the fact that our level of service and professionalism is exceptional.



Wireless Security

TOTAL CONTROL is TOTAL PROTECTION

These compact and elegant wireless detectors are based on ground breaking UHF technology and combine several field-proven advanced technologies.

- 1 CAMERA/DETECTOR
- 2 REMOTE CONTROL
- 3 APP
- 4 CURTAIN DETECTOR
- 5 SLIM-LINE DOOR CONTACT
- 6 GLASS BREAK
- 7 SMOKE DETECTOR

ONE WIRELESS SOLUTION WITH MULTIPLE BENEFITS



Contact us now for your wireless security survey for your home or business.

Visit us at **Homebuilding & Renovating Shows**
Glasgow 21-22 May and Surrey 25-26 June 2016



0808 100 01 01

e: info@actexcel.com w: www.actexcel.com

Better than wired, better than wireless!



How to Manage Your Home's Key Risks



Crime may be our worst home security fear, but losses from burglary are tiny compared with damage from risks such as water leaks and fire, says security expert Will Brocklebank — who reviews the latest (and smartest) alarm systems



WILL BROCKLEBANK
The founder of building data company Shepherd, Will is also a former director of CEDIA, the Custom Electronic Design and Installation Association

THE QUICK READ

- ⇒ Traditional alarm systems operate to long-established national standards and are favoured by insurance companies
- ⇒ More modern 'smart' options offer a more integrated system that allows homeowners to manage their security alongside other systems such as lighting and heating
- ⇒ Another new option is the internal camera-based system that monitors activity in the property

The Cornish sea looked beautiful in the evening sun. There was only one thing troubling me: why was my home alarm not set? My phone had buzzed when the cat sitter unlocked the house at 10.15am but the alarm was never set again. I was on the point of calling her when my phone vibrated again to tell me the alarm had been put on. "OK," I thought, "she must have forgotten and returned to the house when she remembered." But, oddly, this happened every day of our holiday... six hours or so each day our alarm was left unset. So on the third day we called her and she admitted she was learning to become an interiors photographer and had been spending all day at our home taking photos as training!

This story is a useful place to start when discussing the ways the home security market is changing — it illustrates the increasing popularity of a self-monitoring solution and the usefulness of getting a wide range of information such as set/unset times as well as the traditional 'alarm is ringing' alert. It also demonstrates how internal CCTV cameras can play a helpful role in modern home security. ➡



"Extremely satisfied with the neat installation of latest HD camera's to the shop. Excellent quality products at a great price. We definitely recommend Xtreme to install a security system for you"
- Mr. Craig Percy - Kenilworth



- CCTV SYSTEMS
- INTRUDER ALARMS
- LED MOOD LIGHTING
- AV CINEMA ROOMS
- NETWORKING



Xtreme Security offer one of the largest range of HD security and lighting products.

Find us on



CALL NOW ON : 024 7736 0005
info@xtremesecurity.co.uk www.xtremesecurity.co.uk

Complete self-build insurance solutions...

over **20** years
in the self build
insurance
industry



...from buying a plot of land to moving in!

Are you an independent self-builder considering embarking on building your dream home? If so, **SelfBuild Insurance** offer a range of quality self-build insurance policies which are comprehensive, highly flexible and backed by a major insurer.

With our self-build insurance, from the start of your project, through to a 10 year structural warranty being available, you've got one less thing to worry about.

SELFBUILD
INSURANCE

Speak with our team today about your insurance needs

Tel: 0800 230 0225

(Lines open **Mon-Thurs** 8am - 8.30pm; **Fri** 8am - 6pm)

Web: www.selfbuild.uk.com **Email:** enquiries@selfbuild.uk.com

Site only insurance

Self Build insurance

Structural Warranty

SelfBuild Insurance is a trading name of Trade Direct Insurance. Authorised and regulated by the Financial Conduct Authority (FCA).

TD0084-1512

ADVICE HOME SECURITY

Traditional Alarm Systems

So, let's start with a quick review of the home security options currently available to UK consumers. First, we have the traditional alarm system that is installed by a professional security company with hard-wired door and window sensors, presence detectors (PIRs), keypads and alarm sounders. These are available from national firms like ADT and thousands of independents accredited by the likes of the National Security Inspectorate (NSI) or Security Systems and Alarms Inspection Board (SSAIB). Costs for an installation like this run from £800 including VAT and labour to £3,000+, depending on the size of the house. The alarm hardware is provided by well-known brands like Honeywell, Texecom and others.

Second, we have the same sort of equipment deployed using wireless sensors, as with Texecom's Ricochet products. Although wired systems are usually preferable to wireless ones (for security and reliability), there are many retrofit circumstances where a wireless system is significantly more economical due to reduced labour costs. (It is also possible for your installer to design a hybrid system that uses a mixture of both.) Prices are similar to option one.

Together these first two approaches are the 'classic' choices. They operate to long-established national standards mentioned previously and can form the basis of a 'graded' alarm system. This means that they can be connected to an ARC (alarm receiving centre) that can call the police in the event of an emergency. Ungraded systems do not have this function.

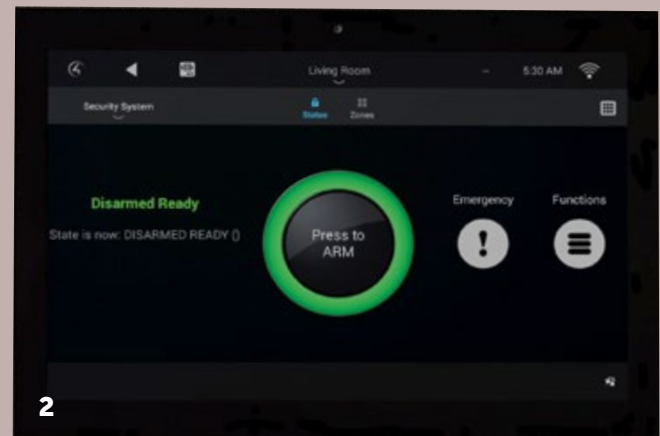
However, it is important to note that the police are struggling to respond to a large number of domestic alarm call-outs as their resources are stretched. As such, there is a growing realisation that proactive self-monitoring might actually produce a more timely and effective response to alarm issues.

Smart Home Systems

The third option comprises more intelligent components that form part of a wider smart home 'eco system'. Perhaps the most well-known in the UK are Samsung's SmartThings devices that have been on sale on the high street for the last year or so, but other platforms can be used (such as Loxone, Control4 and Crestron). A highly capable home security system can be built up incorporating PIRs, door/window sensors and a wide range of other smart home components giving control of lights, heat and the integration of camera imagery. These systems can also play a direct role in promoting security by turning lights on and off to mimic occupancy. This sort of function is remotely controllable and can be automatically initiated when the alarm is fully set. (If a camera had been installed in my home I could have seen that the cat sitter was still in the house during that period, which would have put my mind at ease instantly.) However, it is important to note that, unlike the first two options, these products are not currently regulated by a body like the NSI and the initial reaction from your insurer may be less ➡

Right: Intelligent and CCTV systems

1: Samsung's SmartThings allows homeowners to monitor, control and secure their home from anywhere; 2: Control4 provides a similar platform; 3 & 4: Internal CCTV systems such as Piper (3) and Canary (4) alert homeowners to unexpected activity in the home; 5: ACT Excel products include wire-free alarms, CCTV alarm systems and door viewing systems



“The insurance industry is increasingly aware that a smart home security system, if properly monitored, can be preferable to an unmonitored bells-only system”

favourable as a result. Even though these home automation products do a better job for most people of keeping tabs on the key causes of loss, the insurers are not conceding this and so it will not currently reduce the premium that households have to pay. But here’s the strange part: if you can actually discuss the capabilities of this sort of system with your insurance underwriter they will often be very happy with the level of comprehensive coverage the products offer and will endorse them once satisfied. Indeed, the insurance industry is increasingly aware that a smart home security system like this, if properly monitored by the owners and other responders, can be preferable to an unmonitored bells-only system that might conform to NSI standards but never stop an intrusion or alert homeowners and their neighbours to a problem.

These smart home systems can be installed by a committed and technical DIYer or you can seek help from a wide number of custom integration specialists (visit cedia.co.uk for the latter). Because these systems cover much more than just burglar alarms, they can range from £150 including VAT to £5,000+ and can integrate TV, music, heating and other controls.

Internal CCTV Solutions

The final option is relatively new and comes from the growing number of standalone, often camera-based security products that are meant to help you literally ‘keep an eye’ on your house. Products like Canary, the Nest Cam, Piper and others offer an attractively packaged internal CCTV solution that make various claims to alert you if activity is detected when you are away (i.e. to act as an alarm that can be ‘set’) and you can view imagery, sound sirens and take your own actions. In the main, these work for smaller homes, such as city apartments, where a judiciously placed camera is likely to capture intruders crossing a central part of the building. They are also readily movable to a new property and they can be used in properties where a wired infrastructure is not an option or too expensive to install. These systems are DIY and the units cost £100-£200 excluding VAT.

In deciding which of these routes to follow there are two key questions: do you feel it is vital for your insurance to have the possibility of police response? If so, choose a standards-compliant graded alarm system and a traditional security installer with accreditation to sign off on the whole system. If not, you have more choice and the opportunity to use a more comprehensive and modern solution.

Flood, Fire, Burglary?

The second question is a little more radical but no less vital: how do you view the nature of ‘security’? In the UK we have a highly developed model of intruder security using the alarm systems mentioned, but rates of domestic burglary have been falling since the 1980s. Losses from burglary are tiny compared to fire and water damage (particularly from internal water leaks). Statistics clearly show that it is wiser to consider the security of your house in a broader context: you should consider deploying a system, or different sensors, that monitor for any of the big threats. These clearly include burglary but crucially they also monitor for fire, flood and even mechanical failure of key items like boilers or freezers. If this sounds sensible, then a smart home package would be a better choice.

Which brings us to the question of monitoring: we live in a world of notifications, alarms and alerts. Whether it is the disembodied voice telling us we are coming to the end of the airport traveller or the honking of a car alarm, as a nation we have ‘alarm fatigue’: the old ‘bells-only’ approach to burglar alarms (in which it is hoped someone in the street will come looking when they hear the sounder go off) is somewhat ineffective. It is prudent to have a monitoring solution that alerts specific people in the event of serious alarm. These people might be neighbours with whom you have a specific agreement or they might be a professional response service like the Keyholding Company.

Whatever happens, it is important that your solution reaches out to you and then to other responders if you are not in a position to assist. This can be achieved for burglar alarms via the traditional ARC, but is somewhat outdated as you are essentially asking a person in a call centre to make phone calls when an alarm comes in. Also, ARCs only traditionally monitor burglar and fire alarms; they don’t offer a multi-threat, information-rich alert system. But soon to launch are 21st-century solutions that seek to automate this process more cheaply, simply and effectively. These will give a much more flexible and powerful self-monitoring solution with all the benefits of back-up from third party responders and day-to-day peace of mind.

Personally, I want a solution that tracks and logs the normal pattern of life and my home systems, and alerts me when things go wrong: in the example of my cat sitter, the fact that I knew the alarm was not being reset in the expected timeframe alerted us to an issue. I felt in touch with my home, even though I was miles away. 

Useful Contacts

ACT Excel	actexcel.com	Control4.....	control4.com	NSI.....	nsi.org.uk
ADT.....	adt.co.uk	Honeywell.....	honeywelluk.com	Piper.....	getpiper.com
Canary.....	canary.is	Loxone.....	loxone.com	Samsung.....	samsungsmarththings.com
CEDIA.....	cedia.co.uk	Keyholding Company.....	keyholding.co.uk	SSAIB.....	ssaib.org
Crestron.....	crestron.com	Nest.....	nest.com	Texecom.....	texe.com/uk



WE DESIGN - WE MANUFACTURE
WE INSTALL - WE CARE

BESPOKE TIMBER FRAME

turnertimberframes.co.uk



Tel: 01482 218945 Email: info@turnertimberframes.co.uk

Decisions, decisions...

under floor heating

air to water heat pumps

air source heat pumps

heat recovery ventilation

solar panels

central vacuum systems

compact service units

we'll help you to take the right road from an informed choice.

we can do your heat loss calculations & SAP reports!



successfully combining sustainable technology

0345 260 0123 www.totalhome.co.uk

COMFORT AND EFFICIENCY For Your Self-Build Home.

At Unico, our mission is to provide industry leading heating and ventilation equipment. So, if you're building the home of the future today, the Unico System® is the only choice for energy efficient heating and ventilation comfort.

- Ultra Quiet
- Even Room Temperatures
- Energy Efficient and Future Proof
- Professional Sales and Technical Support

To learn more about Unico System Small Duct Heating and Ventilation, visit unicosystem.co.uk

or contact
The Quantum Group
Unit 8, Easter Industrial Park
Ferry Lane
Rainham
Essex
RM13 9BP
t: 01708 528 240
sales@thequantumgroup.uk.com

The Unico System®

Comfort & Efficiency Fit For Your Home



50mm diameter round outlets and 16mm x 304mm slotted outlets are available in a variety of colors and materials, as well as an even more minimalist bespoke design approach in 50mm round and custom linear lengths.

**Homebuilding
& Renovating Show**

**SANDOWN PARK
25-26 JUNE 2016**

**STAND
319**



aSba architects

Building dreams

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



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

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

freephone 0800 387310 www.asba-architects.org



The Royal Incorporation of Architects in Scotland

Dunsley Heat

THE NEW
SG RANGE



All Dunsley stoves
are manufactured
in Great Britain

For your nearest stoves stockist
T: 01484 682635
www.dunsleyheat.co.uk

Dedicated to Self Build

Specialising in the self build market, we manufacture, supply, and fit windows and doors.

We guide you through the process from drawings to installation and work with you to make your dream home a reality.

HWL
bespoke glazing

R9
RESIDENCE 9

Telephone: 0113 244 9006

|

Email: build@hwllwindows.co.uk



ADVICE

Building New Floors: The Choices

The methods used to construct new floors have come on in leaps and bounds in the last decade. Chartered surveyor Ian Rock explains the options for ground and first floor structures for new homes and extensions



IAN ROCK

Chartered surveyor Ian Rock MRICS is the author of eight popular Haynes House Manuals, including the *Build Your Own House Manual*, and is a director of Rightsurvey.co.uk

THE QUICK READ

- ⇒ Beam and block floors are the most popular solution when building a ground floor on self-build sites. Concrete slabs are a good alternative for small extensions (where beam and block floors are uneconomic)
- ⇒ Beam and block systems which utilise insulated blocks can provide an even quicker installation
- ⇒ Solutions for first floors include traditional softwood joists, timber I-joists or open metal web joists; the latter options are more expensive but provide considerable benefits. Unlike softwood joists, timber I-joists do not warp over time, providing a 'quiet floor', while open metal web joists can provide an easy means of installing services

The world of floor construction has undergone something of a revolution recently — the established order rocked to its core by dramatic advances in methods and materials. At the dawn of the new millennium, many new homes were still being built to a formula little changed since the Victorian era, with solid concrete slabs downstairs and boarded 8x2inch timber joists 'up top'.

But both types suffered from significant drawbacks. Timber floors were constrained by stunted spans and prone to developing draughty gaps and annoying squeaks; their intolerance to damp also rendered them vulnerable to attack from fungal decay and beetles. Concrete slabs fared little better, with a tendency to sink and crack over time, and a propensity to conduct cold into the home. Fortunately, in the intervening years, technology has leapt ahead, transforming the options available to domestic buildings. Over the forthcoming pages we explore the options available for both ground and first floors.





From balustrades, columns and porticos to pier caps, window surrounds and custom designs – our high specification cast stone designs provide affordable elegance to any project.

Browse our unrivalled collection **online** or **call** to request a catalogue.



haddonstone.com
01604 770711

Imagine a roof.....



....with loads of character and charm, in the true clay colour of your choice, that improves and mellows with age, where the colours will not fade, that is made in the UK, at a price you can afford.

3 ranges & 7 natural clay colours
Ask about our new rustic range



SINCE 1805
Dreadnought
TILES

**Homebuilding
&Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 657

www.dreadnought-tiles.co.uk

info@dreadnought-tiles.co.uk/Tel 01384 77405



**Homebuilding
&Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 721

www.arborwinsys.co.uk

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

1385 Park Avenue, Aztec West,
Bristol BS32 4RX

Tel: 01454 270039

Fax: 01454 270049

email: sales@arborwinsys.co.uk





ADVICE CHOOSING FLOOR STRUCTURES

Installing a Beam and Block Floor

Beam and block ground floors are now employed on the majority of self-build sites. Another alternative is hollow core slabs, which are craned into position and offer a rapid build time

Beam and Block Ground Floors — The Most Popular Option

Suspended concrete flooring systems were originally developed as a means of overcoming ground problems such as unstable sloping sites, where it made sense to bridge deep gaps rather than fill them. Today, nearly all new houses employ beam and block construction for their ground floors. Although the cost of materials is relatively high, ground preparation is minimal and a beam and block floor is quick to install, with significant savings in labour.

Standard concrete beams typically span up to 6m, although some can extend as much as 8m without support from expensive subfloor walls. Specialist suppliers can custom design beams if supplied with a set of approved drawings, or they can be ordered via builders' merchants.

The pre-cast reinforced concrete beams are laid in rows in a similar fashion to traditional timber joists, with their ends resting on the inner leaf of the main walls over the damp-proof course (DPC). Their inverted T profile is designed to accommodate standard 100mm deep concrete blocks (which are typically 440mm wide), making infilling between the rows remarkably quick and inexpensive. Standard beams are 150mm deep, although for longer spans deeper 225mm sizes are available. For greater strength the rows can be laid closer together with the blocks instead laid sideways. The floor surface is then stabilised by grouting with a weak sand/cement mix brushed into the joints.

It's essential that the void under the floor (which should be at least 150mm deep) is vented via airbricks in the lower walls to protect the building from any build up of noxious gases such as radon or methane. (On this note, you may be required to install a radon barrier and sump too by Building Control.) The void can also provide a handy place to run service pipes.

One slightly odd quirk with these floors is their slight upward camber (more than 10mm over a 4m span). This isn't a problem with a conventional screed finish, but with dry floors (such as 'floating' insulated chipboard panels) a self-levelling compound may first need to be applied.

The main drawback with beam and block floors is that they are uneconomic below about 50m² — so they are not a solution for small extensions. It's also important to note that the heavy weight

of longer span beams requires use of a small crane to lift them into place.

On the positive side, unlike timber floors, suspended concrete doesn't shrink, creak or bounce. This makes the system well-suited for upper floors which need to be exceptionally strong.

The Importance of Insulating Beam and Blocks Floors

It's essential that suspended concrete floors are properly insulated from blasts of cold air blowing through the subfloor void underneath your feet. The Building Regulations' 'backstop' target U value for ground floors is 0.25W/m²K, which should be easily achievable with 75mm or 100mm-thick rigid insulation boards laid over the surface. Polyurethane (PUR) is a more effective insulator than expanded polystyrene (EPS), meaning a thinner board can be laid to achieve the same results. The insulation can then be covered with a conventional wet sand/cement screed of approximately 65mm thick, or with a dry floating chipboard deck. Alternatively, a highly insulated composite 'floating floor' finish can be applied using special panels made from insulant material bonded to a base of either plywood or chipboard laid over a polythene vapour barrier.

However, the most efficient solution combines two layers in one — minimising the depth of the floor by making use of the wasted space in the void below. Rather than adding an extra layer of insulation above standard blockwork, the insulation is incorporated into the structure. Systems such as Jetfloor, Litecast XT and TETRiS use special insulated polystyrene infill panels between and beneath the floor beams, helping to eliminate cold bridging.

Hollow Core Ground Floors — An Even Quicker Solution

The quickest way to construct an entire floor is by craning in enormous ready-made hollow core concrete flooring planks. These feature a hollowed-out interior to reduce their weight. Inevitably the price you pay for super-swift buildability is the relatively high upfront cost, but the system also offers potential savings in terms of flexibility in the location of internal walls, which can be built on top without the need for additional support. Hollow core decks are used mainly for upper floors in flats, but are ideal for cantilevered balconies, although cold bridging can be a potential design issue. ➡



The intelligent building system

Durisol is a simple, sustainable alternative to traditional brick, block and timber-frame construction. Made from recycled timber and cement, this ecofriendly building system can save you both time and money.








Tel: 01495 249400
 Email: enquiries@durisoluk.com
www.durisoluk.com

architectyourhome

interioryourhome

with our **collaborative** approach and **pay-as-you-go** service, we set the standard in **design** services for **home** improvement **projects**

to find out more call 0800 849 8505



Homebuilding & Renovating Show
SANDOWN PARK | **STAND 722**
25-26 JUNE 2016

Homebuilding & Renovating Show
SECC, GLASGOW | **STAND 207**
21-22 APRIL 2016



bublshop

distributors in expertise

Your One Stop Shop For Renewable Energy Supplies



Tel: 01747 826900
 Email: sales@bublshop.co.uk
 Or visit: www.bublshop.co.uk

NEED HELP WITH YOUR NEXT RENEWABLE PROJECT?

- Latest Heat Pump Technology
- Design & Specification
- Trade Supply
- Technical Support
- Commissioning Service
- Government Incentives
- FREE Training







ADVICE CHOOSING FLOOR STRUCTURES



Quick Guide to Installing a Concrete Slab

Concrete slabs are usually employed on smaller sites (extensions being a prime example). Once the foundations have been dug out (top), the area within needs to be stripped of vegetation and top soil. A loose granular sub-base (MOT Type 1 is ideal) is then added and compacted with a wacker plate (centre).

The damp-proof membrane (DPM) and insulation can then be installed (a steel mesh may be required too), with the concrete slab poured. The edges of the DPM are lapped around the slab (bottom) in order to prevent cold bridging. (Here the blocks and bricks have been delivered in readiness for building up the walls)

Concrete Ground Floors — A Good Option for Extensions

Ground floors built of solid concrete remain popular with small builders and can often be an economic solution for home extensions. Although this method is very labour intensive, the cost of materials is relatively low, hence the appeal for DIYers with access to free labour.

But there's a risk with solid slabs. Whereas foundations are normally dug down at least a metre to anchor the building into solid ground, floor slabs sit on the cleared oversite, less than half a metre deep. So this isn't ideal on soils prone to seasonal movement, like shrinkable clay with trees in the vicinity.

Slabs rely on careful ground preparation and a well-compacted hardcore base. Unfortunately, this often gets skimmed on site with the result that slabs can start to sink years later, leaving a cracked, hollow surface. So, as a precaution, the concrete can be strengthened by incorporating sheets of steel mesh, similar to raft foundations designed to span across patches of weak ground.

It's also important that hardcore is specified as 'clean' — old demolition rubble containing lumps of plaster and wood can hold moisture or start to rot. Worse still, chemical reactions in poor-quality hardcore can cause solid floors to expand, bulge and crack. However, despite such risks, when laid correctly this method can be a cost-effective solution.

Solid concrete floors are typically built in six layers (plus two more if you include underfloor heating and the floor coverings). The key stages are:

- The oversite area is stripped of vegetation and topsoil. Then a base of clean hardcore at least 100mm thick is laid. The ideal material for this purpose is a loose granular sub-base such as MOT Type 1, which can be delivered to site. Being largely self-compacting, this only requires a quick going over with a hired wacker plate before levelling with a layer of sand blinding.

- To prevent any dampness percolating through, a 1,200 gauge plastic sheet damp-proof membrane (DPM) is placed over the sand blinding, or alternatively laid higher up on top of the concrete slab. Either way, the edges must be joined up with the DPC (damp-proof course) in the walls. It's common for flooring-grade rigid insulation boards (e.g. PUR) to be placed on top of the DPM at this stage, in thicknesses ranging from 50mm to 100mm.

The DPM must be lapped up around the edges of the slab and screed to protect against cold bridging and also around incoming water pipes and soil stacks, etc. Alternatively, the insulation can later be placed on top of the concrete slab prior to screeding.

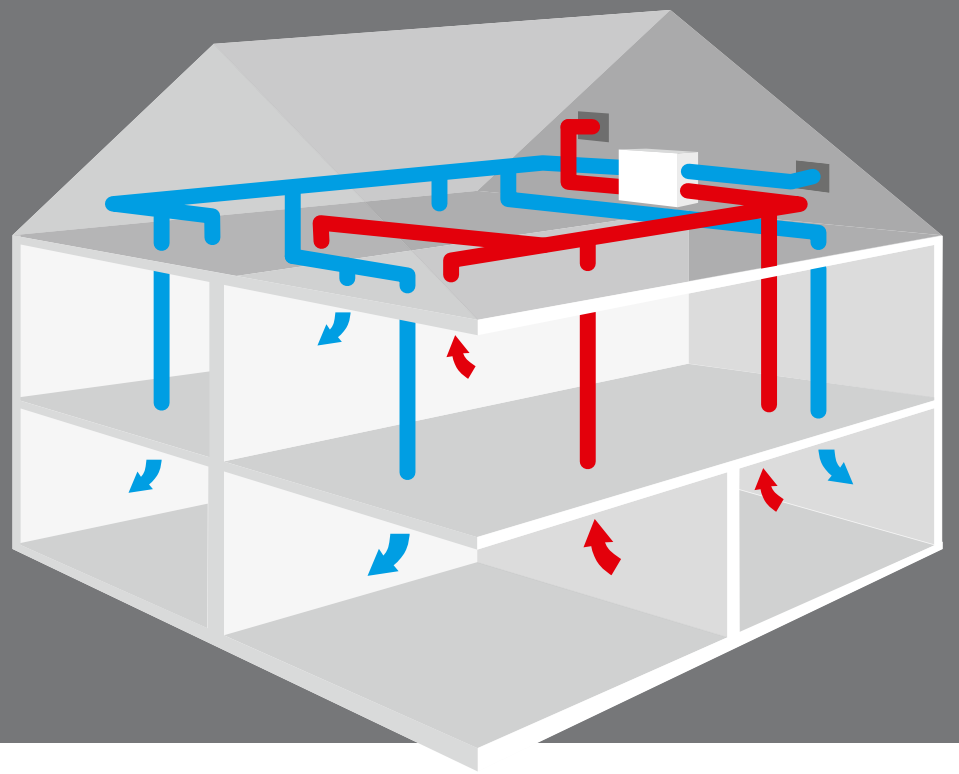
- The slab is normally at least 100mm thick, cast from ready-mixed concrete (a relatively strong mix). The fresh concrete needs to be 'tamped' as it's poured to remove air bubbles and excess water. Depending on ground conditions, the slab may need strengthening with steel mesh or special fabric reinforcement.

It takes two or three days for concrete to cure and in cold weather it needs to be protected with suitable sacking or old carpet. In hot weather, concrete can also be vulnerable to drying out and cracking, requiring a periodic light sprinkling of water. Concrete should not be poured when temperatures are below about 5°C.

- Instead of finishing the slab with a conventional screed, it's perfectly feasible to level the surface of the slab with a power floater, which results in a hard-wearing floor finish. Insulation will need to be added below the slab in this instance.

The Problem

Delivering the right amount of ventilation to the right rooms in the right location.



The Solution

Posi-Joist™

The **Outstanding** Joist System

The Posi-Joist open web floor system will allow you to deliver the right amount of ventilation to the right rooms in the right location in the simplest of ways.

The advantages are clear:

- Open web design provides easy access for the design and installation of services
- Improved quality of service fitting, eliminating costly remedial work
- Greater clear spans for design flexibility
- Clear profit from savings in labour, time, materials and call-backs
- The largest network of licensed manufacturers throughout the UK and Ireland



CPD Now available for Posi-Joist



Contact MiTek today or visit
www.posi-joist.co.uk for full
details and an on-line presentation.



MiTek House
Grazebrook Industrial Park
Peartree Lane
Dudley
DY2 0XW, UK
Telephone: 01384 451400
www.mitek.co.uk





I-joists: A Good Alternative to Softwood Joists

Timber I-joists are a popular alternative to softwood joists due to their stability (they're not prone to warping, so provide a 'quiet floor') and ability to span greater widths. The webs can be drilled to accommodate services, but can also be specified with pre-formed knock-out holes for this purpose

Above: The Metsä Wood Finnjoist (metsawood.com)

Below: Howarth Timber Engineered Solutions' I-Joist (engineeredolutions.howarth-timber.co.uk)



OPTIONS FOR FIRST FLOORS

Timber floors may largely be a thing of the past downstairs but they still enjoy a virtual monopoly upstairs. Kiln-dried softwood joists typically span up to about 4.5m between structural walls or steel beams. Joist ends must be supported from galvanised steel joist hangers rather than simply being embedded within the walls. Softwood joists are available in standard sizes such as 38x225mm and their spacing determined by published span tables, usually at 400mm, 450mm or 600mm centres. To support partition walls and accommodate openings for staircases, for instance, the rule of thumb is for joists to be 'doubled up', although building control will want to see the structural engineer's calculations to confirm adequacy.

To prevent joists deflecting and wobbling about, bracing in the form of herringbone strutting needs to be inserted between the joists, usually comprising purpose-made steel X struts and wooden noggin offcuts. Steel straps also help prevent movement by tying floors to the main walls. The enduring popularity of timber floors is probably down to the fact that they're a relatively inexpensive option as well as being straightforward to build and easy to adapt on site.

Traditional pine boards cost about twice the price of chipboard (which must be of a moisture-resistant type), but are hard to beat for natural appeal. Timber is also the most sustainable option but has a tendency to suffer from shrinkage resulting in floors becoming squeaky over time, and is always potentially vulnerable to subsequent weakening from careless notching and drilling for pipe and cable runs.

Timber I-Joists — Creating a Quiet Floor

Today the upper floors in most new homes are built using factory-made timber I-joists (also known as I-beams). These are basically timber RSJs (rolled steel joists) with an I-shaped cross-section comprising top and bottom flanges made of softwood or LVT (laminated veneer timber) bonded to a tall vertical web of OSB (oriented strand board), or a similar engineered board. Their main appeal is that, being strong and lightweight, they can span 6m or more, without support from internal walls or beams.

While they cost roughly twice as much as standard softwood joists, they be installed in half the time. Their superior rigidity and strength-to-weight ratio makes for easier handling, and they typically feature pre-formed knock-out panels designed for pipes and cables to be threaded through. They can be cut to length and the webs can be drilled, but the top and bottom flanges must not be cut. To provide lateral support, 'blocking panels' made from strips of engineered wood or spare I-joist offcuts are wedged between the joist ends.

There's another reason why I-joists have captured the hearts of developers, self-builders and renovators alike — unlike standard softwood joists, I-joists aren't prone to shrinking and warping, making them perfect for 'quiet floors'. It's even claimed that some products do not require sound insulation when installed at 400mm centres or closer.



BUILDING A PASSIVHAUS WITH H+H CELCON BLOCKS

With retirement looming and big energy bills from their Victorian-era home, Mr and Mrs Young decided to pursue an ambitious self-build project. To meet their demands for an ultra-efficient Passivhaus, H+H's Aircrete Blocks were the building material of choice on this project.

Compared to a timber frame solution, H+H products allow for a faster

build process, enhanced stability and provide better thermal mass allowing for Passivhaus-level efficiency. Additionally, using aircrete for the external walls further improves thermal mass to help keep temperatures stable inside the building.

With the close dimensional tolerance of aircrete, blockwork fits together snugly, which in turn creates the airtightness necessary for Passivhaus. In this case, the bungalow's construction took 28 weeks — with the inner shell erected in just three weeks.

The Young family were thrilled by aesthetics as well as efficiency of their new home. "We were primarily driven by the desire to reduce our own energy consumption," say Mr and Mrs Young. "We have downsized, but with the slopes and curves in every room we are comfortable and content."

For further information about how H+H can assist in creating your dream home visit hhcelcon.co.uk, follow H+H on Twitter @celconblocks, or check out the H+H Facebook page and YouTube channel. 

ICYNENE - SAVING YOU MONEY

The Icynene Insulation System is a soft, flexible, breathable, foam insulation and air barrier. Sprayed as a liquid Icynene expands up to 100 times its initial volume in seconds, filling every nook and cranny in walls, floors and ceilings. Icynene's unique formulation sets it apart from other insulation products offering many advantages over traditional insulation materials and more modern alternatives. While all materials of equal thermal resistance perform identically under laboratory conditions the same is not true in real life; the effectiveness of some insulations materials diminishes over time. Installing Icynene ensures no loss of performance.

Icynene is 100% water blown, containing no toxic chemicals like HFC's, CFC's or HCFC's. Remaining soft and flexible Icynene accommodates any normal expansion, contraction or movement within a building. So whether you plan to build, renovate or extend the Icynene Insulation System will deliver the performance you can count on for a lifetime of savings and comfort.



T: 01229 716039 E: sales@icynene.co.uk
www.icynene.co.uk

ADVICE CHOOSING FLOOR STRUCTURES



Open Metal Web Joists — Good for Running Services

Engineered joists with a wavy metal web centre are another recently adopted flooring solution, with a plethora of different brand names such as Ecojoists, Posi-Joists, easi-joists (Fforest Timber Engineering's easi-joists are shown above) and SpaceJoists. Typically costing about 10 per cent more than timber I-joists, they are extremely strong, capable of achieving unrestricted spans of up to 7.5m, and light enough to easily carry up a ladder with one hand!

Like I-joists, they have a top and bottom flange (chord), but are held together by a galvanised steel framework. They come in a range of depths, from 195mm to 304mm, and can be hung from the top or the bottom chord. The installation time is claimed to be around half that for the traditional softwood variety, plus there's no need for bracing, which helps to reduce labour costs. Like I-joists they have the benefit of not being prone to shrinkage-related problems.

Because the whole system is open, they can accommodate bulky service runs such as mechanical ventilation ducting and full bore 100mm waste pipes, although where different lengths run alongside each other you need to check the webs all line up. The main drawback – apart from the cost – is that they need to be custom made to suit the dimensions of your build and can't be cut on site to fit, although some suppliers incorporate adjustable ends for minor trimming.

Soundproofing First Floors

Thermal insulation is only necessary in rare cases where upstairs rooms happen to be located above cold spaces like garages or passageways. But Part E of the Building Regulations does require floors to be insulated for sound. The simplest method to deaden impact sound (e.g. noise from people walking upstairs) is by laying thick carpets and underlay. The spaces between the joists can also be packed with sound-absorbing mineral wool (up to 80 per cent depth). Alternatively, special acoustic flooring, such as pre-insulated chipboard panels, can be used to build a sound-deadening floating floor. Other methods include fixing 'resilient bars' to the undersides of joists prior to plasterboarding; British Gypsum's Gypframe RB1 Resilient Bars is one such product.

Where resistance to the passage of sound is a particular design factor, suspended concrete flooring is normally the best solution. There are systems such as the beam and pot system from Litecast that can achieve exceptionally high performance with specially formulated 'robust tray tiles' between the concrete beams. Whatever your choice of flooring, it's obviously best to avoid cutting holes in ceilings for recessed lighting; a better idea is to construct a false suspended ceiling underneath to run ducting and lighting. ⑤

The Benefits of Open Metal Web Joists

Self-build package company Potton specified MiTek Posi-Joists when constructing the first floor of its latest Passivhaus-standard showhome (below). "They really do simplify the installation of the services, particularly the large ducts required by MVHR (mechanical ventilation heat recovery) systems. They can also be manufactured to a variety of depths and widths so that a range of span and load conditions can be accommodated," says project manager Brent Ackerman.

Here, the Posi-Joists are hung off the external Kingspan TEK® Building System walls using metal hangers to help reduce thermal bridging.

Norbord Cabershield floor decking was specified on top. "The Cabershield chipboard is a new product for us – a departure from traditional plywood," continues Brent. "It has a permanent protective coating that protects the product from moisture during construction; we now know that it works very well. The Cabershield floor deck is then glued and screwed, using a special gap-filling adhesive, to the top of the Posi-Joists. The adhesive helps prevent squeaks and creaks in service and contributes to the moisture protection performance of the system during construction." For more on the Potton build, visit: homebuilding.co.uk/self-build-live-building-a-passivhaus





WE'D LOVE TO BE YOUR EXTRA SET OF EYES

OUR WARRANTY SURVEYORS WILL WORK
WITH YOU TO ENSURE QUALITY THROUGHOUT
YOUR PROJECT.



CALL: 0845 054 0505 WWW.LABCWARRANTY.CO.UK

LABC Warranty, a brand of MD Insurance Services Ltd. MD Insurance Services is authorised and regulated by the Financial Conduct Authority.

Why Your Project Needs a Warranty

Even if you don't need a mortgage to finance your project or do not intend to sell up after building your new home, a warranty is a very smart idea, says self-builder David Snell



DAVID SNELL

A 13-time self-builder, David has been building homes for 50 years and is the author of *Building Your Own Home*

THE QUICK READ

- Not only does a dedicated self-build warranty provide peace of mind against faulty workmanship, design, materials and components, but a warranty inspector can also lend a second pair of eyes to a project
- Some warranty providers can provide a building control service, too — combining both can be a cost-effective option
- The cost of the 'average' self-build warranty is around £2,000, and the majority of warranties last 10 years

Unlike self-build site insurance policies, which cover unforeseen eventualities, warranties give specific insurance against faulty workmanship and/or design. "They also protect against faulty component parts and materials," says Simon Middleton, divisional director of self-build warranty provider Protek Selfbuild. Most lenders will require that any property under 10 years' old has a warranty and, while there may be some who feel that, as they don't need a mortgage to build a new home, there's no need to bother with a warranty, they'd be wrong. Quite apart from the peace of mind that comes with having a structural warranty, if they ever wanted to sell, chances are that the buyer will need a mortgage and their lender will want to know that a valid warranty is in place.

Those buying a new home from a builder will almost always be offered a warranty as part of the purchase price. Those who,

while still self-builders, are not intending to do any of the work themselves or employ any of the tradespeople directly, in all probability will employ builders who are able to offer a warranty through and from one of the recognised providers.

In most cases that means that the structure of the property will be covered for 10 years with the builders responsible for many other faults (including non-structural faults) for the first 12 months to two years of the policy. A distinct advantage of these policies is that the schemes cover a developer's insolvency, and loss of deposit of up to 10 per cent of the contract value or £100,000, whichever is the lesser.

Happily, those who do want to employ smaller unregistered builders, subcontractors or even put in their own labour, can still purchase a warranty, putting them in almost as good a position as any new homebuyer. There are a small number of companies that specialise in providing self-build warranties; some can provide warranties for conversion and renovation projects, too.

Most of the self-build warranty schemes have a lock-in period, during which the cover cannot be transferred, effectively preventing any sale within that period — this lock-in period tends to be 12 months (although this is worth checking before choosing a provider). This is not because of any perceived fact that self-builders represent a higher risk. Instead, this is designed to stop builders and developers endeavouring to escape the requirements and responsibilities for latent defects within the first 12 months and taking advantage of lower fees or the lack of a need to register.

The cost of a self-build warranty will vary from provider to provider, and will be dictated by the size and complexity of your project. The cost for an 'average' self-build is around £2,000.

What Does a Self-build Warranty Protect Against?

"Unlike an architect's certificate, a warranty is an insurance policy providing you with cover in the event of damage caused by a defect in your property," says Andrew Reardon, senior self-build account handler at ProActive Selfbuild.

Warranties do not protect against minor snagging issues such as sticking doors, but against defects in the design, workmanship, materials and components which could cause damage; they also offer protection against major issues relating to weatherproofing. "They protect you against defects which could be very expensive ➤

STRUCTURAL WARRANTY

SITE INSURANCE

SITE SURVEYS



Before you lay the first brick, make sure you & your project are protected ...

Self-Build Zone provides Site Insurance and liability cover for anyone starting new building works, as well as covering any existing structures on site. Our Approved Inspectors can facilitate all survey services you may need during the build or for the warranty provision. On completion, Build-Zone can provide you with a 10 Year Structural Warranty.

For more information or to obtain a quotation go online at

WWW.SELFBUILDZONE.COM

or Call the Self-Build Zone Team on

0345 230 9874



ADVICE SELF-BUILD WARRANTIES

Above: An Extra Pair of Eyes

Self-builds are often pioneering in their use of products, technologies and construction systems, which makes a dedicated self-build warranty more of a necessity. “The main thing for the surveyor on a scheme of this sort is to be as proactive and as helpful as possible,” says Keith Shackleton, the LABC Warranty surveyor who oversaw this cutting-edge self-build. “As the self-builders were using non-standard systems and materials, I checked every product and solution for the relevant accreditation and also examined the technical specifications. There were many telephone discussions to ensure everything went smoothly”

to fix. For instance, you may move in and discover the damp-proof course or membranes were not installed properly or are faulty — the cost of taking the house apart to rectify the problem, to move the family out, etc, can be significant,” says Simon Middleton. “Most warranty claims tend to be against the waterproof envelope.”

Taking the Build-Zone Self-build Structural Warranty as an example, this warranty protects against: major damage attributable to defects in design, workmanship or materials; newly constructed drainage systems (excluding septic tanks and treatment plants); defective weatherproofing in the external envelope attributable to faulty design, workmanship or materials; defects in chimneys and flues causing an imminent danger to occupants. Like most self-build warranties, cover is also provided for additional local authority or professional fees resulting from the work, alternative accommodation costs and the removal of debris.

When to Buy a Warranty

It is a very good idea to purchase a warranty at an early stage. “You need to buy a warranty at least a couple of weeks before you start on site: the warranty provider’s inspectors will need to audit the design drawings prior to the build going on site, and if you are using a warranty provider who will also provide the building control [more on which later], they’ll need to serve an Initial Notice on the local authority before any works commence on site,” says Simon Middleton. “Although a warranty can be provided retrospectively (even once the build is complete) you can end up spending four to five times more on a completed housing warranty,” adds Andrew Reardon. “The further into the build you are, the more expensive a warranty becomes.”

What’s Involved

Your warranty provider will need copies of your plans and Building Regulations drawings to first complete a technical audit. They’ll also need to inspect the site at arranged stages during the construction and once complete, in a similar way to building control. LABC (local authority building control) provides its own dedicated warranty through LABC Warranty; the inspectors will liaise with the local authority building control inspectors, but will also want to see the build at set stages.

Some providers also offer a building control service. Build-Zone, for instance, can for an additional fee, take on the responsibility of building control through its network of approved inspectors, or are quite happy to fit in with local authority building control. Protek Selfbuild can also provide this facility. Combining both is often more cost-effective, and as such, it can pay to research your options for a warranty while deciding who will deliver building control for your project.

The number of site inspections required will often depend both on the provider and the nature of the project — its size and complexity (the use of non-standard systems and products, for instance). “There are inspections at key stages throughout the build which will depend on the complexity and size of the project,” says Andrew Reardon. “Once the site is live, the risk management surveyor will discuss with the client directly how many visits will be required and what they are looking for.”

Another advantage of buying a structural warranty is the expertise that a warranty’s inspector will bring to the project. “One of the best things about a self-build warranty, especially for those project managing their own builds, is that you’re getting another pair of eyes on your project, which can be invaluable,” concludes Simon Middleton. ^H

WARRANTIES

Build-Zone Structural Warranty: selfbuildzone.com 0345 230 9874; **BuildCare Structural Warranty:** build-store.co.uk 0345 223 4888; **LABC Self Build Warranty:** labcwarranty.co.uk 0845 054 0505; **Protek Selfbuild Structural Warranty:** protekselfbuild.co.uk 0845 217 7059; **ProActive Selfbuild Warranty:** selfbuildonline.co.uk 01302 346 831

Site Insurance & Structural Warranty



Arranging suitable site insurance and structural warranty cover on your project is absolutely essential. Our self build insurance underwriting team are experienced and really do understand the risks you face, so you can be sure your getting the cover that's right for you.

Protek provide insurance for new build, conversion, extension and renovation projects anywhere in the UK. Our structural warranty can be packaged with building control, making it a very efficient proposition.

Try us - we don't think you will be disappointed.



New Build | Conversion | Renovation | Extension
Your project, covered your way.

Quotes & cover available online at: www.protekselfbuild.co.uk
Call us: 0845 217 7059

Protek is a trading style of Lucas Fettes & Partners Limited who are authorised and regulated by the Financial Conduct Authority.
Registered Office: Plough Court, 37 Lombard Street, London EC3V 9BQ



See more of the great outdoors...



Our top quality windows and stunning bi-fold or sliding doors will enhance your extension, renovation or self-build beautifully, giving a clear view of your outside space. Our experienced team offers free advice and a quotation so you can confidently choose the best. Nationwide delivery. Visit www.livingwoodwindows.co.uk or call Toby Golding/Antony Jackson on 01284 764045.



The Ultimate Guide to Extending a Home



An extension is one of the most popular projects carried out by homeowners, but where do you start? This 20-page guide explains everything you need to know, — from design and project management advice, to a portfolio of inspiring projects ➤

DESIGN EXTENSIONS

The Art of Extending: A Design Masterclass

You are creating the next chapter in the history of your home, so think big and have some fun with the whole process, says design expert Pete Tonks

Extending your home has gone way beyond the basic requirement of providing more space to meet increased demand for living. When extending your home, you, as the guardian of that property, have the privileged opportunity of writing the next chapter in its history. Do not underestimate how important this could be and more importantly, how much fun. We all like to think we can leave a legacy, so think big about your plans to extend and consider far more than just creating more of what you already have.

This article looks at some of the key elements and considerations when extending, how to create your extension methodically and practically with a focus on engineering basics, and the successful integration with the host dwelling through the consideration of layout, flow and connection of the new spaces with the existing rooms.



PETE TONKS
Pete Tonks is
HB&R's design
expert and has
been designing
homes for over
20 years



SIMON MAXWELL; OPPOSITE: LUKE FOREMAN

Design Basics

Look sensibly at the space around your existing dwelling and zone in on the best place to put your extension. Side and rear extensions are the norm as gardens here often have the best outlook and orientation. However, do consider the balance of built form versus outside amenity space. It's all well and good having an amazing large new kitchen/family/dining room opening out to the garden, but if the extension takes up too much garden and dominates unsuccessfully, this will have a negative outcome on the property as a whole. It is all about a sensible balance and you don't always have to add a large extension to make a huge difference to the existing spaces.

Set the budget at an early stage and allow for at least a 10-15 per cent contingency, too. This is particularly important when extending, as the overall development cost per square metre is often greater than with a new build. Ensure you commission a measured building survey and topographical site survey before any design work is done. The output from

these surveys will deliver 100 per cent

accurate data about the host dwelling and the site, and will therefore ensure the design process is efficient from the outset.

This approach allows for design issues to be considered during the first round of concepts, thereby minimising inconvenient and often costly decisions being made during the construction process.

Consider a single storey versus two storey extension, as this decision will set the blueprint for the project in terms of construction methods, the impact(s) on neighbours, planning permission and the overall architectural integration with the host dwelling. Where do you need more space? Is it day-to-day living areas or do you need more bedrooms?

Just because you need more bedroom space, don't assume this has to be upstairs. We're living longer, so ground floor bedrooms can be a good long-term consideration. I also know from my own experience with clients that many would like a ground floor bedroom because it results in a connection with the garden.



Planning Considerations

You may be able to extend your property without planning permission (known as Permitted Development, or PD). While not guaranteed to be applicable to every property, the basics of PD are currently:

- You can extend a detached dwelling by 8m to the rear (subject to the neighbour consultation scheme; this is 6m for an attached house) if it's single storey, or 3m if it's two storeys;
- The height of a single storey extension to the side or rear of the host dwelling is restricted to 4m in height (measured from the nearest ground level) to the top of the

ridge and the eaves, and ridge heights of any extension not being higher than the existing property;

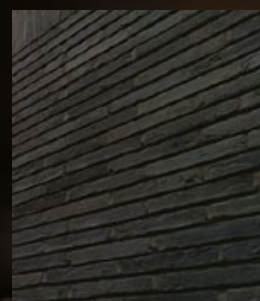
- A minimum distance from the end of the extension to the boundary must be 7m;
- The extension must be built in the same or a similar material to the existing dwelling;
- No forward-facing extensions are permitted under PD, based on the main entrance being the front elevation;
- Side extensions must be no wider than 4m (measured from the nearest ground level) and no wider than half the width of

the host dwelling;

- In designated areas where certain restrictions apply, such as Conservation Areas, Areas of Outstanding Natural Beauty and National Parks, side extensions will require full planning permission and all rear extensions must be single storey;
- As a result of extending, the built form should not cover more than 50 per cent of the plot area.

Full planning permission is needed for extensions that go beyond PD criteria, although the process and documentation is not as detailed as for a new build. ➡

**Homebuilding
& Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 706



WE HAND MAKE OUR BRICKS TO INSPIRE YOU.

With a superior array of colour, texture and size, York Handmade offer a unique choice of genuine handmade bricks, perfectly suited for both traditional and contemporary building designs.

T: 01347 838881

Search: York Handmade Brick

E: sales@yorkhandmade.co.uk

@yorkhmadebrick



www.yorkhandmade.co.uk



Vent-Axia®

Lo-Carbon Svara with App control

Commission and control from your phone

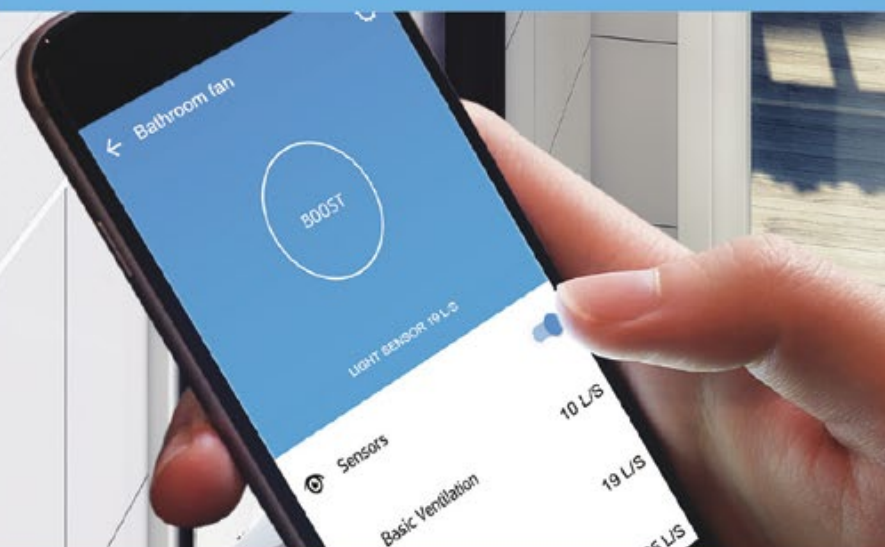
Multifunctional and easy to use

- Bathroom and kitchen fan
- Quick smart phone set up
- No fiddly dip switches
- Speed control
- Sensor control
- Silent mode

Performance

- Only 17-20 dBA
- Up to 30 l/s
- Continuous or Intermittent
- Three speeds

Total control for the installer and the householder!
Visit your local wholesaler and ask for a demonstration!



www.vent-axia.com/svara



DESIGN MASTERCLASS EXTENSIONS

**Above: The Side Return Extension**

A side return extension can be an ideal means of adding space to a terrace home — as this project by architect Cathie Curran goes to show (rooflights can be a great means of pulling in additional light too)

**Centre: A Change in Levels**

IBLA Architects replaced a lean-to with a contemporary kitchen-diner extension — a change of level allows the dining area to be on a level threshold with the garden

Below: Using Existing Openings

An existing opening provides a connection between a cosy living space and bright kitchen/dining area in this contemporary extension project by Granit Architects



FROM TOP: LYNDON DOUGLAS, NINA MAKLIN; DARREN CHUNG; GRANIT ARCHITECTS

The Practicalities

When extending, look to minimise the amount of work you need to do on the host dwelling (unless, of course, you need to renovate), so that the budget is focused on the new build element. Try to nominate the 'break-through' using existing openings. For instance, existing window openings will have lintels above them taking loads from above. This often means no structural calculations will be necessary if you want to remove the wall section below a window opening to make into a door opening or walk-through into the extension space.

If, however, you want to merge a number of existing small openings into one large opening, you'll require a new lintel to be designed by a professional and backed up with the appropriate engineering to support a full plans Building Regulations application, or as part of the documentation trail if you are undertaking the project under a building notice.

It's a very good idea to use a laser level to get the datum of the floor levels on the host dwelling, as you'll probably want to match these with the new build element to ensure good flow between the new spaces and old. When calculating how to match floor levels, bear in mind that the build-up required to meet today's Building Regulations will be far more than historical build-ups and you may also want to include underfloor heating and thicker floor finishes.

It is likely that, in addition to the proposed extension, you may end up wanting to reconfigure the spaces within the host dwelling (to 'remodel') to achieve a cohesive overall flow through the spaces. This doesn't need to be an expensive process, but it does take the talents of a designer who can look at the proposal with fresh eyes and suggest subtle changes such as wall removal and zone re-designation to make sure the whole house works well when completed.

Tel: 01392 984012

Phone now for **FREE** expert advice



**VERSATILE
INSURANCE**

We don't cluck around when it comes to getting you the cheapest
INSURANCE QUOTE!

✓ *Experienced and helpful staff*

✓ *Quick and easy to get a quote*

✓ *New builds, conversions, renovations and extensions*



FREE*
gift with every quote!

Simply call us and quote: **HRM**

www.vipins.co.uk/HRM

info@versatileinsurance.co.uk 01392 984012

Bridge House Okehampton EX20 1DL



* One free gift per household or business and cannot be combined with any other promotions.

Versatile Insurance Professionals Ltd is authorised and regulated by the Financial Conduct Authority.

INSPIRATIONAL DOORS.
Undeniable value.



Doors that add a touch of style to your interior...

Innovative, contemporary & classic door designs



Order or download your copy of JB Kind's Door Collection brochure today. Visit www.jbkind.com

T: 01283 554197

www.jbkind.com

KATZBECK
WINDOWS & DOORS



WELCOME TO THE WORLD OF
KATZBECK WINDOWS & DOORS



**Homebuilding
& Renovating Show**
SECC, GLASGOW STAND 320
21-22 APRIL 2016

You can live anywhere
but Katzbeck makes you feel at home.

+44 (0) 20 3005 3253

www.katzbeck-windows.co.uk

DESIGN MASTERCLASS EXTENSIONS

Linking Old and New

This contemporary extension (designed by Simon Shaw Architecture & Design) to a listed cottage features a glazed link, which visually defines old from new



ALISTAIR NICHOLLS

The Aesthetics

If, like me, you are a property 'nerd', you will get excited about the evolution of buildings and how they can be read in chapters. Many of my favourite buildings have different personalities and there is a good chance you also have a few too! Look to have a bit of fun with your extension project if appropriate and create something that is clearly different to the host dwelling. Think of it more as an exercise in art as well as architecture and take the opportunity to make a statement.

There is no right or wrong in terms of matching new and old and, as always, your design should relate to the context of the host dwelling and its immediate surroundings. Many local authorities publish their own district design guidelines for extending and you will see phrases such as 'materials should be the same or similar'. In this instance, for example, if the host dwelling is brick and horizontal timber boarding, the extension could also be clad in brick and timber boarding, but the latter could be

applied vertically to clearly demonstrate the different visual chapters of the building. This approach could be considered to match and may also be considered a contrast — albeit a subtle one.

If you really wanted to make a completely obvious difference between new and old then this can be an exciting approach and the sky really is the limit — subject to the usual planning constraints.

Historically, when designing extensions, architects and designers would have taken the existing layout and added the new element immediately on to the host dwelling as a direct continuation of the built form. However, this presents various technical challenges about how to 'knit' the new element into the existing element while still producing good architecture. Sure, you can set the wall lines in so there is a step in the building line and make the extension lower than the host dwelling so that it appears subservient, but this can still result in that

'more of the same' look that is not always successful.

In recent years, there has been a growing trend (which I support and practice daily) to consider the extension space to be a separate entity and place this a distance away from the host dwelling in terms of the construction, to make it in effect a stand-alone building. The new build element can then be linked back to the host dwelling in a more refined and controlled manner using simple glass or metal frames. This method of extending has proved to be successful as it clearly defines the difference between new and old. It also looks really cool and can lift the design level of your project.

When considering your planned extension as a separate entity, albeit linked back to the host dwelling, you can start to expand your thinking and strive to create a built form which has its own identity. If done well, it will also complement and enhance the host dwelling. **G**

JG Speedfit®
UNDERFLOOR

aura
heating controls

A warm welcome home

JG Aura gives homeowners ultimate control of their heating from the palm of their hand, no matter where they are.

- Energy saving solution
- Control radiators, UFH systems, or both
- Unique 4-in-1 thermostat
- Wireless TRVs
- Multi-zone or individual room control
- Smart App control at your fingertips
- 5 year guarantee

Whether you are looking to control radiators, underfloor heating or both, JG Aura has it covered.



**Homebuilding
&Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 527

**Homebuilding
&Renovating Show**
SECC, GLASGOW | STAND
21-22 APRIL 2016 | 316

To find out more, watch our video at
speedfitUFH.co.uk

**Homebuilding
&Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 561



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 info@revolutionhomes.co.uk
www.revolutionhomes.co.uk



A Beginner's Guide to Project Managing Your Extension

Should you leave project management to the professionals or take the plunge and manage the extension yourself — potentially saving thousands in the process? Project specialist Bob Branscombe says that first-timers can take this on successfully, and explains how



BOB BRANSCOMBE

Bob is a chartered surveyor with almost 30 years' experience running a mix of residential and commercial projects.

He has particular expertise in cost estimation and project scheduling

THE QUICK READ

⇒ If you are new to project management, consider using a contractor to finish the shell, and then tackle the finishing trades

⇒ Technical construction knowledge is not necessary, but project management does require a clear head, time and an understanding of risk

By far the most common type of project undertaken by us on our properties is an extension or reconfiguration of an existing house. While this is generally perceived to be a simpler form of improvement than demolition and reconstruction of a new build, in reality, the challenges of dealing with an existing building can often impose greater management requirements on the project than for a new build. The initial reaction, therefore,

would be to engage a professional project manager or architect to oversee the whole process, absolving you of any problems or tricky technical issues.

However, I would always maintain that the best person to oversee an extension that you are proposing to utilise and enjoy is yourself — no one knows the space or the building better than you, and nobody has a greater level of interest in getting it right. In fact, if you are a typical homeowner, you will always inspect ➤

we are klöeber

*10 years of
bespoke glazing
solutions*

in timber, aluminium & composite



Thank you to our customers, staff, suppliers
and associates, here's to the next 10 years!

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

telephone: 01487 740044
info@kloeber.co.uk
www.kloeber.co.uk

LAKELAND TIMBER FRAME



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



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



Oak
Timber
Structures

contact@oaktimberstructures.co.uk

01889 597 283



**Oak Trusses, Oak Framed Buildings,
Oak Gazebos, Oak Pergolas, Oak Porches**

Try our Interactive 3D product designers
online for instant prices.



OakTimberStructures.co.uk



Cost Saving

The triple-glazed sliding door system for this extension was sourced from Polish company Lumex for a very good price. The rear extension (designed by Granit Chartered Architects) was part of a complete remodel of a 19th-century property in south-west London. The building had been unoccupied for two years, which meant that the project was eligible for VAT at just five per cent. Careful cost planning – software such as Easy Price Pro (easypricepro.com) can aid here – is also key to success

the works at night once everyone has gone home, send outraged emails to your architect, and then change everything prior to work starting the next day — you are in effect ‘pseudo managing’ vicariously, and probably wasting a significant chunk of fees on consultants who are simply carrying out your instructions. I say this slightly tongue-in-cheek, but there is a grain of truth in there.

For a reader of this magazine, it is a reasonable assumption that you have a higher level of interest and desire to be involved in your project than others. You will almost certainly fall into the ‘remote manager’ camp, which begs the question: why not project manage the extension yourself? **So, what exactly do we mean by the term ‘project management’? By definition, it is the overall planning, coordination and control of the project from inception to completion.**

None of this implies a high level of technical training, construction knowledge or experience. It does, however, imply a level of dedication, commitment and ability to motivate, engage with and understand the input of the consultants, contractors, suppliers and authorities that do possess

the technical background. Project management is about facilitating, confirming, enabling and satisfying the brief. We are all project managers every time we go to a supermarket for a ‘big shop’. We write down a brief list, ensure the travel arrangements are in place, arrange the procurement of the goods, select alternatives if necessary to ensure the timeline and programme is achieved, arrange delivery home, settle the finances, and provide safe, secure storage for the materials. A home extension is not that different, except the materials, costs and third party influences are greater.

At the outset, you can influence the design of your extension to best suit the key drivers of the project, be they cost efficiency, programme speed, maintaining usage of the existing house, minimising disturbance, maximising space, etc. If you stay in the house while the works are ongoing then the need to maintain services, heating, etc, are paramount. If you move out (or are building a new house) then the pressures of family life and the peculiarities of an existing building are less of an issue.

So when looking at the design, think about the impact of maintaining usage of the building — cutting off drains may be

necessary for the works, but challenging for the household. As part of the planning element of project management, consider hiring a site toilet, or constructing a temporary bathroom and kitchen if necessary in an unused reception room adjacent to the extension. Remember, rooms are all simply spaces for living — the names we give them do not have to define their use!

Early Planning and Logistics

Plan the logistics of the work early on — if you have a house near a low railway bridge, don’t allow a design to progress which requires large items of plant or prefabricated elements to be used that cannot be delivered to site. The key to early planning regarding design is to consider how you would enable the works to be able to commence and be carried out — will you need a road closure to get materials on to the site? It seems unlikely for an extension, but many double-parked urban streets present huge challenges in getting materials delivered without stopping traffic.

Another potential issue to consider is whether the existing utilities are able to cope with a bigger property. Don’t let the design evolve without considering water ➡

WITH **LoPro™** ...
**UNDERFLOOR HEATING
FOR RENOVATIONS**
YOU WON'T HAVE TO DIG UP YOUR FLOOR!

**Homebuilding
& Renovating Show**
SANDOWN PARK | **STAND
748**
25-26 JUNE 2016



There's no need for extensive building works with Nu-Heat's award-winning LoPro™ range of underfloor heating systems. Simply laid directly on top of your existing floor, with an incredibly small height build-up and heating up as quickly as radiators, you can enjoy the luxury of underfloor heating whatever your project.



Call us to find out how LoPro can work for your project
01404 540650 or visit **www.nu-heat.co.uk/lopro**

Nu-Heat
UNDERFLOOR & RENEWABLES



An Alternative Route

The homeowners of this newly extended and remodelled property in Kent chose to appoint an architectural firm to manage both the design and build, right through to the decorating. The project was completed on time and within budget

JEREMY PHILLIPS

pressures, gas requirements, etc. You do not need to be able to calculate this, you simply need to be able to have a conversation with your designers who can do the technical work. Your job as project manager (PM) is to plan, enable and deliver, not design. The examples mentioned here illustrate the additional elements the PM needs to consider outside of the 'fun' parts. You don't need reminding to pay attention to the window design, the colours, the room layouts, etc — it's the logistics and practicalities that scupper the PM's remit, such as programme, cost compliance and legislative approvals.

When procuring the work, there are several different options that are commonly used by the PM for an extension project. The main factors affecting your choice are your appetite for risk and your need to be involved. Many projects are often used as ego trips. If this is your main driver then there is nothing wrong with this, but always look at effective and value-led use of resources. If you are better served earning in your day job, then you are making a wise choice by engaging someone else to manage the work for you. Don't ever dismiss the opportunity cost of your wages in this process.

However, as with most people (myself included!), it is surprisingly hard not to get involved and be intimately caught up in the works to your home. Therefore, the next consideration must be an assessment of your appetite for risk, which is always present in a construction project. This may include cost risk, programme issues, technical compliance, health and safety on site — you get the picture. The management of this risk all comes down to who is responsible for it. By using a design and build contractor you pass 'ownership' of this risk to the contractor, but of course they will be building in a cost provision for this risk. If the risk doesn't materialise, they will make more money, so it is in their interest to manage the risk properly.

The opposite of this is you acting as PM, retaining all responsibility for risk, appointing individual trades and buying materials directly — you retain the risk, but the advantage is that if you manage it well and mitigate it properly, the cost of that risk arising has not materialised, and you have saved money over a full contractor route. This ownership of risk is a key consideration with procurement.

In practice, most extensions and alteration projects are managed with a hybridised

system of procurement — using a contractor to construct the shell of the structure, make it watertight and do the knocking through of the old into the new, leaving you with a building that can then be fitted out via individual trades and operatives appointed directly by the project manager/yourself. The advantage of the shell being constructed by one entity is that the contractor is responsible for the riskiest technical processes — holding up the existing property, cutting openings, not damaging water mains, drains, and other services, and maintaining the existing usage of the building. If this is your first attempt at project management, I would suggest that this hybrid route is sensible and leaves you free to hone your management technique on the follow-on trades.

Managing out Loopholes

Coordination of tasks is one of the most challenging aspects of project management — ensuring the acrow props are on site, that lintel bearings are maintained, building control is informed and inspects the works, and so on. The point here is that it is the loopholes between the tasks that cause issues and hold risk, not the tasks themselves. This is the main point to keep





Trunk & Gresford Passivhaus

Gresford Architects and Trunk Low Energy Building join forces to integrate architecture and construction project management for the delivery of Passivhaus and low energy homes. Our buildings are designed to delight and built to last. Together, we bring exceptional design & construction expertise to the delivery of your project.

www.tgpassivhaus.com
hello@tgpassivhaus.com



RainCell

RAINWATER HARVESTING SYSTEM FOR THE HOME AND GARDEN





Happily for everyone the new Marsh Raincell is the simplest, most reliable and cost effective rainwater harvesting system on the market.

With storage capacities up to 6000 litres the Raincell system accommodates most household roof sizes and effectively distributes clean recycled rainwater to the home and garden, allowing you to save up to 50% of your metered water costs.



RAINCELL TANK BENEFITS

- Heavy duty shell as standard ensures tank integrity
- Integral lifting eyes for improved on-site handling
- Unique 'keying-in' lip to assist anchoring into granular or concrete surround
- Self cleaning, easily accessed filter to improve water quality
- Pressure sensitive, dry-run protected pump guarantees supply pressure. Automatically turns off when no demand or no rainwater detected
- 'ELITE' option provides additional level indicator for visible display of tank volume

Legislation
Complies with BS8515 Rainwater Harvesting Code of Practice and Building Regs (Parts G and H), and often vital to planning approval by assisting compliance to environmental guidelines such as The Code for Sustainable Homes and BREEAM.

For further information and tech specs visit www.bit.ly/MarshRainCell






+44 (0)1933 654582 | sales@marshindustries.co.uk | www.marshindustries.co.uk

“If this is your first attempt at project management, a hybrid route is sensible – with a contractor building the shell – leaving you free to hone your management technique on the follow-on trades”

in mind when project managing — how do you ensure that each task or trade is not impeded by the predecessor, and does not impede its successor? Speak to the different tradespeople, understand what they will require from you to make the process work smoothly, and make sure you know exactly what you are getting for your money. Anything not included needs to be procured or put into the follow-on package of works — either way, eliminate the ‘gaps’ between the trades and works.

Take the example of making sure that the wall plate is strapped down to the walls of your extension when the roof is built. The bricklayers will build the walls, and the carpenters will build the roof out of timber. Simple. But the wall plate should be bedded on mortar, level and true, and then strapped down to the masonry with stainless steel straps. Who beds on the plate — carpenter or bricklayer? In practice, this is easily resolved, but unless the project manager either remembers and plans for this, or gets one firm to build the walls and pitch the roof, this remains a risk to be managed and considered. The technical risk of the plate not being bedded on is minimal — most carpenters will point out that it is not correct before pitching the roof, but the cost risk is high as you are assuming that someone will have allowed for it in the pricing. If neither has, the only person who takes the hit is you.

Managing your own project has the potential to deliver a scheme at a lower cost than using a main contractor. This is the obvious, well-known, and logical choice for the would-be project manager. Or is it? The main issue to consider once again is risk. If you retain ownership of this risk, you retain financial responsibility for it. Pass this on to a contractor and their price will contain provision for it. Either way, the risk itself has not gone away. So while the common view that it's cheaper to manage the works yourself is sound, it can only be finally considered once the

level and severity of risk has been catered for. Every scheme has risk.

Consider a typical extension to provide a large open plan box to the rear of the property with bi-fold doors and a patio to create the ‘inside/outside’ living currently in vogue. The risks there are generally well understood and minimal: structural integrity of the existing property, maintaining the soil and drainage runs which typically run down the original rear walls, procurement of the doors in a timely fashion. It's all fairly manageable stuff. But when you appraise the job as a project manager, look at the topography — if the ground falls away steeply to the rear, the foundation construction changes significantly and the support of the patio becomes an issue. The level of ground water similarly affects these issues. Procure the job via a main contractor and you can pass this risk to them via your contract documents. They will look at the site, and build in some risk money to cover potential ground problems.

If you haven't understood the site, it is tempting to think that this is an expensive price and you will manage it yourself more cheaply. However, the risk still remains, it is just that you have retained ownership of this risk. If, for example, the soil is not a problem, you have indeed found a cheaper way of getting your extension, but if it hasn't...

Consider External Influences

Be wise to the third party influences that impact on your project — as project manager you need to be sure that not only is your project architecturally designed, structurally proven, correctly specified and well procured, but that you have also considered all the external influences, such as:

- Are Party Wall agreements required?
- Building Regulations approval
- Planning approval and discharge of conditions
- Site logistics and preliminaries
- Any product guarantees or collateral

warranties available

- Test and completion certificates
- Neighbourly issues and consideration
- Traffic management and impact of construction traffic
- Overhead issues if cranes are needed
- Tree protection issues
- Hours of working (often stipulated in planning approval)
- Local access and road issues
- Address of nearest A&E department (in case of accidents)

The list goes on, but you can see already the level of influence that can be brought by third parties is potentially significant, and will be yet another risk factor to manage and deal with.

So let's assume that you are now acting as project manager for your extension — you have understood and put in place your procurement strategy and have got comfortable with the ownership and costing of risk as identified in your design, site planning, programme considerations and the requirements of the existing site, occupants and neighbours.

Preparing for the Project

Your next consideration is: what can you do before works start to be prepared? The obvious aspect is programming. A fully thought-out programme of works enables you to understand the relationship between trades and tasks, plan procurement and establish ‘critical path nodes’ — points in time when certain things have to be resolved prior to the next task being enabled. This can include ordering windows and glazing which have generally long lead-in times for manufacture, and require ordering well in advance of the site works. You will need to ensure that the window openings are well detailed to enable them to be constructed without the windows necessarily being available. This can be done by building in ‘formed’ or dummy frames which ensure that the



ADVICE PROJECT MANAGING AN EXTENSION

DAVID STILL C/O KHOURY ARCHITECTS



Glazing Challenge

Finding builders to work with so much glass on this extension project in Birmingham took some time — either the contractors felt that they did not have the expertise for the job or quoted sky-high sums. A second challenge arose when the glass box was constructed in snowy conditions, which meant that the silicon joints would not set. The company returned later to fix the leaks

PROJECT MANAGER SKILLS

To be a good project manager you'll generally need to:

- ✓ Be able to focus on the point of the discussion and cut to the chase
- ✓ Not be blinded by the aesthetics and excitement of the project
- ✓ Understand a programme of works and the principle of critical path analysis
- ✓ Have motivation and be able to motivate
- ✓ Have energy, enthusiasm and be positive
- ✓ Have an aversion to assuming anything — facts, facts, facts always
- ✓ Recognise and appreciate risk and the ownership of it
- ✓ Have a reliable 'phone a friend' service to provide technical back-up (which can be invaluable when challenging views, techniques and issues). Often surveyors and project managers can offer this service for reasonable rates which are charged as they are required.

windows will fit correctly when delivered later. This programme analysis lets you move on to lining up trades, materials and specialists to be 'booked' to come to site at the right time, remembering to look for the loopholes between each package.

While you should avoid it for risk management reasons, many suppliers are insisting on advance payments before manufacturing component and bespoke elements — windows, doors and kitchens being prevalent at present. If left with no choice, manage this risk to an extent by ensuring a correct paper trail and full vesting rights to the items as a minimum, to give you some recourse if the supplier goes out of business with your materials in their workshop. This is not ideal but is often a pragmatic approach given the current market unease with credit and payments.

Split the Work into Packages

If you decide to act as your own PM, there are a few skills that you need to possess (see left). It is a time-consuming role — for a simple extension, this can be part-time, but will probably involve several very early mornings and late evenings during the week as well as some dedicated daytime work. The more time you spend, the better your understanding and involvement.

For first-timers, the hybrid procurement route would also enable you to be

less involved time-wise while the structure/shell is built, and then increase your involvement as the fit out commences. Splitting work into smaller packages will require less dedicated hours on site, and be more of a coordinating role, which may be advantageous if you have a demanding job, for instance.

Finally, bear in mind the flexibility that project managing can offer. By getting the shell built with one contractor, then letting a few significant packages (mechanical, electrical, plastering, etc) to smaller outfits, you still have the flexibility to put a cap on expenditure and carry out some finishing items on a DIY basis if you need to. While not ideal, this ability to reduce your contractual liability as the work proceeds lets you make savings and use 'sweat equity' as needs must.

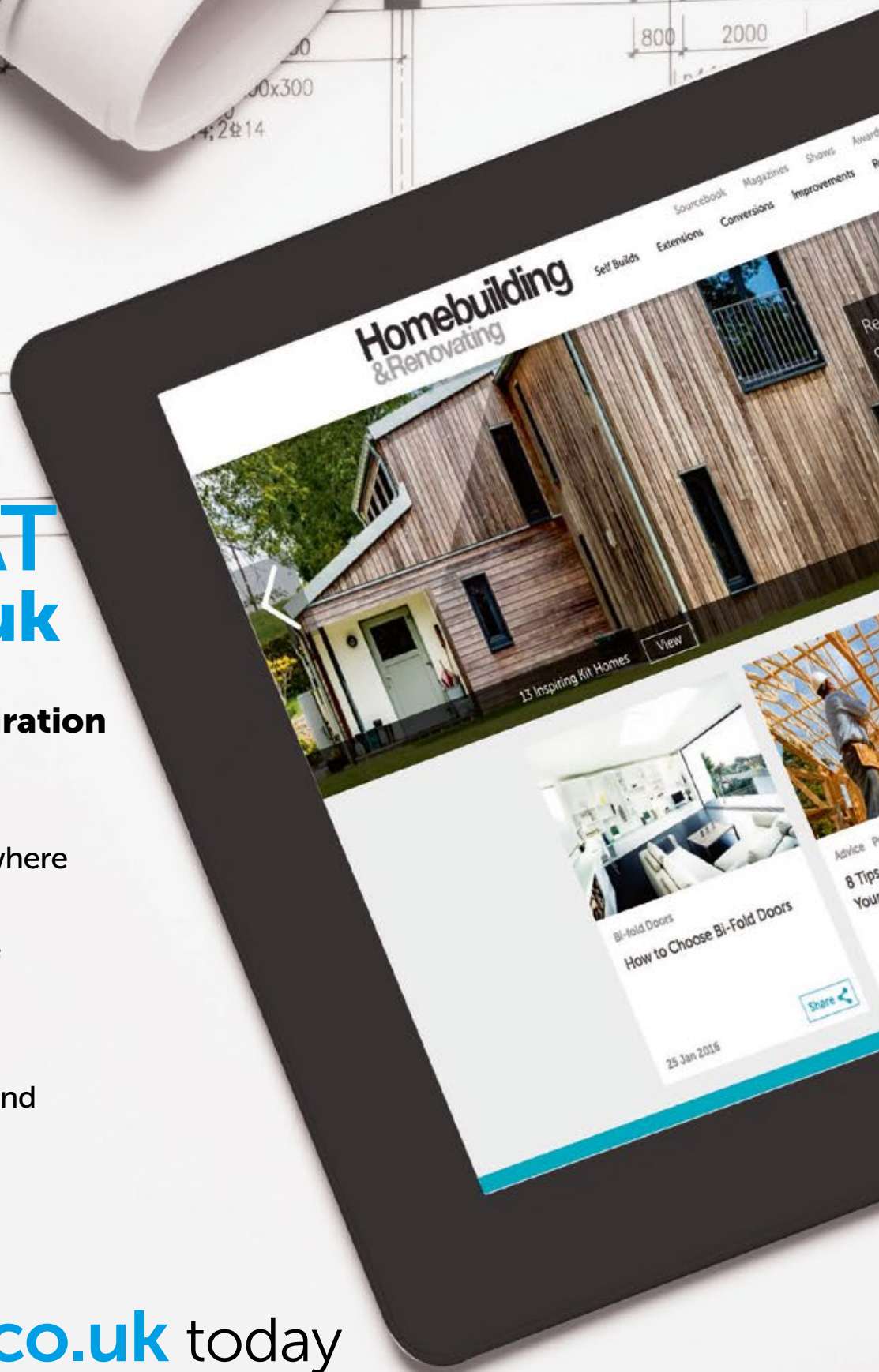
The only caveat is that supplementing trades packages with DIY work as part of the package (loading skips, insulating works, etc) is often thought to be a saving, but in my experience generally slows things down and sometimes makes no savings at all, just increases the stress levels of all parties. Don't rely too much on your own labour — as the project manager you would be better served pre-booking, procuring, value engineering and planning as no one else will do it for you while you are out loading skips to save a few pounds. **H**



WHAT'S NEW AT homebuilding.co.uk

- **The Ultimate in House Design Inspiration**
1,000s More Ideas for Your New Home
- **Brand New Source Book**
Browse Key Suppliers You Won't Find Elsewhere
- **Easy-to-find Advice**
from Independent Experts on All Aspects of
Self-building and Extending
- **Share Your Projects**
and See What 100s of Other Self-builders and
Renovators Are Doing

Visit homebuilding.co.uk today



Extension Project Step-by-Step Planner

What does a typical extension project look like? What are the critical paths and construction schedule? Here's our week-by-week guide and checklist

BEFORE WORK STARTS

- Find trades, obtain quotes and inform them of your schedule
- **Check lead-in times for materials to avoid delays**
- Advise Building Control of commencement
- **Arrange/amend insurance**
- If living on site, put measures in place to keep the building work separate from your living spaces
- **Arrange toilet facilities for trades if necessary**

WEEK
1

PREPARATION WORKS

- Ensure clear access to site
- **Have bricks,**

blocks and associated materials delivered to site and stacked in place

- Hire mixer and digger — this is only necessary if you are project managing, otherwise your builders or contractors will organise this on your behalf
- **Ensure the site is safe, particularly if you have small children**

WEEK
2

GROUNDWORKS

- **Builders arrive on site**
- Groundworkers dig foundations

- **Building Control visit to approve the foundations**
- Reinforcement laid within foundations, if required
- **Pipework, drainage or services laid within foundations**
- Concrete footing poured and levelled
- **Building Control visits to approve**

WEEKS
3-4

SUPERSTRUCTURE

- Bricklayers to build up to damp-proof course
- **Drains installed**

and trenches dug for associated pipework

- Insert concrete lintels into brickwork if a drain run requires it
- **Sand is then laid before damp-proof membrane is put down**
- Insulation fitted
- **Concrete slab poured**
- Arrange for Building Control inspection

WEEK
5

EXTERNAL WALLS BUILT

- **Check that the required materials**

are on site for the superstructure to commence, including lintels, door and window frames and wall ties

- Whether the brickwork or blockwork is built first will depend on your builder, but work now starts on the superstructure
- **Cavity wall insulation fitted**
- Wall ties inserted to fix the new walls to the existing
- **Lintels for windows and doors fitted**
- Door and window frames should be inserted as the walls go up

WEEK
6

INTERNAL WALLS BUILT

- **Internal walls are constructed**
- Order materials

such as windows, roof tiles, etc., which can sometimes have long lead times of up to five weeks

- **Check that the carpenter is all set for the following week and all materials are ready — including lead**

WEEK
7

ROOF STRUCTURE

- The carpenter will start building the roof structure

— or in some cases prefabricated roof trusses may be used

- **If you are having rooflights, the carpenter is usually in charge of fitting these at this stage**
- Dormers will be constructed if they are being introduced

WEEK
8

ROOF COVERINGS

- **Roofing membrane is laid over**

the newly built rafters

- Roof battens cut and fitted over membrane
- **Tiles/slates laid**
- Ridge/hip tiles laid and bedded
- **Valley tiles laid, along with finishing details, flashings, etc.**
- Fascias, soffits and verges primed/stained/painted
- **Floor screed laid**

WEEKS
9-10

WINDOWS AND DOORS

- External rendering if required

- **Windows and doors fitted into linings and frames that were (hopefully) put in place when walls were being built**
- Guttering and downpipes fitted
- **First fix carpentry, plumbing and electrics**
- Studwork walls built, door linings fitted and pipes boxed in

Right: Superstructure

The trick with building extensions is to delay breaking through to the existing house to as late as possible in the build schedule

**WEEK
10****BREAKING THROUGH**

➤ Now is a good time to ensure you get sealed off from

the building work as things will get messy

➤ Steels are put into place, along with padstones — sizes should have already been approved by Building Control

➤ Joins made good

**WEEK
11****PLASTERING**

➤ Walls are boarded, with insulation placed between battens on

existing uninsulated external walls

➤ Plastering — followed by a period of drying out (around a week before decorating can begin)

**WEEK
12****SECOND FIX**

➤ Second fix electrics carried out (sockets made live,

switches put in place, lights fitted, etc.)

➤ Second fix plumbing (taps, connections, etc.)

➤ Flooring laid (sometimes people choose to lay flooring after the kitchen is fitted)

➤ Kitchen units installed (if this is a kitchen extension)

**WEEK
13****SNAGGING**

➤ Leaks, electrical problems, heating system issues, sticking

doors and windows — report them all to the relevant trades as soon as possible after finishing **H**



JEREMY PHILLIPS

Extension Checklist

Make sure your project runs smoothly with our handy 'don't forget' checklist

- Obtain planning permission, if required, prior to works commencing
- **Submit application to your local Building Control**
- Arrange access for delivery lorries and consider where skips can be placed
- **Get quotes from trades**
- If living on site, arrange schedules to minimise impact on day-to-day living
- **Agree timescales and schedules with trades to avoid delays on site**
- Arrange or amend insurances as necessary (you may need a new policy)
- **Inform neighbours of work commencing**
- Organise the hire of plant, toilets, etc.
- **Set up accounts with your local builders' merchants**

- Check lead-in times for materials and order where necessary
- **Notify Building Control that you are commencing works**
- Make space available to store materials safely on site
- **Make sure water will be available for cement mixer (and later plastering) where it will cause minimal mess inside**
- Arrange scaffolding if required
- **Make second fix decisions (such as the position of lights and sockets) as early as possible**
- Build in time for plaster to dry out before decorating commences
- **Make sure plasterers and other trades know if you are carrying out aspects of their jobs on a DIY basis**

ADVICE

20 Great Tips for Extension Success

No two extensions are the same, yet it's surprising how many share similar design and construction challenges. Our panel of architects explain how to ensure your project goes smoothly from day one

SPEND TIME ON THE BRIEF

"It is so important for the client to ensure their brief is refined at the start of the design process. At this early stage, we ask for the client to send us a copy of the brief, no matter how small the project is, which states the types of spaces they want to achieve and an idea of what they envisage will happen within the spaces — in essence, how they want to live.

"As well as information regarding likes and dislikes, we are also keen for the client to be as accurate as they can about their budget. Often we ask a client to accompany the brief with a link to their Pinterest account, so we can get an idea of the client's tastes. We often find that one client's idea of 'modern' or 'minimalist' is very different to another client's, and such websites help us to pinpoint what a client is trying to achieve or likes visually.

"We quite often find that a written brief is far more detailed or contains more desires than when we discussed the project in our initial consultation, as the client has had the chance to really think about what is important to them. Once we receive this information it becomes the basis for the design, and something we refer to during the design process.

"For this reason, we expect the brief to not change too significantly once we start the design process, so we can hone the design to the client's requirements and make sure we have addressed all the initial points raised by the client. The more information we receive in a brief, the better opportunity we have to tailor the design to the client. A brief can take many forms: from handwritten lists to PowerPoint presentations, we seen them all, but all are useful."

Lesley Hally, LA Hally Architect

GO FROM GENERAL TO PARTICULARS

"Do not get hung up on the detail at the very early stages. If you and your architect get the concept right, the detail should simply fall into place. Immediately concentrating on existing details is an easy trap to fall into, particularly if you have been thinking about work to your home for some time.

"Designing the whole extension around an existing boiler location is a classic example of this. There are some big decisions regarding existing features which do need more consideration, particularly the decision to move a staircase. Of course, this could have a significant cost implication. However, it could be the magic ingredient which ensures you get the concept right and the home and layout you have always dreamed of."

Brendan Tracey, Phillips Tracey Architects

BE FLEXIBLE WITH THE BRIEF

"Don't start with too rigid a brief; although you know your house better than anyone, it can take an outsider, your architect, to spot issues and opportunities that you might have otherwise missed.

"Although for most an extension may be the right route, it's not always extra space that's ultimately required. A reorganisation of space — maybe a small strategic extension — can often unlock

a home that currently doesn't function to its best potential. A better arrangement of rooms and spaces, better daylight and strategic fitted furniture can all make a house much more enjoyable and give a perception of spaciousness without the cost of an extension."

Paul Testa, Paul Testa Architecture

IS AN EXTENSION THE RIGHT CHOICE FOR YOUR RENOVATION PROJECT?

"Extensions are not the only option when looking to renovate your home. We have worked on various projects where we have had to consider all the options before extending.

"We had one scenario where a client was extremely keen to build another floor on top of their 1950s bungalow. We looked into the possibility of doing this and found that if we were to go down this route we would end up using a huge amount of money having to underpin the extremely shallow foundations. Instead, we opted for a two storey side extension that housed the sleeping accommodation in a modern style, contrasting against the simplicity of the bungalow. In this scenario, it made financial sense to extend to the side rather than to build above. This project came in under budget and we were able to modernise the entire bungalow so that internally the design was coherent.

"In another scenario, we were asked to look at building a rear extension to create a larger kitchen/dining/family area, which would look on to the client's large rear garden, set within a Conservation Area. The small extension would have been built over a public sewer, and the cost for the build-over application would have

eaten severely into our client's budget. They would have also faced Party Wall issues with their neighbours — again a possible costly exercise.

"We looked at the design and altered the existing layout and instead used the volume they had to create an open home with all the requirements. By rearranging the internal spaces and altering the walls, we could answer the client's brief, yet avoid some of the costs that would have been levied had additional volume been added to the house."

Lesley Hally, LA Hally Architect

OVERCOME THE PLANNING HURDLE

"Gaining planning permission is usually the first major hurdle and can be a nerve-racking process without the help of the correct individuals."

"Choosing an architect who understands the planning process and has a very good history in gaining approval is key. It's worth noting that most architects are by no means 'experts' in planning policy; if a planning application is likely to be complicated or contentious then we always advise using a planning consultant. An architect, however, does have the experience and insight into how a local authority will review a proposed scheme and know when to push the boundaries."

Andy Ramus, AR Design Studio

GET ADVICE ON RESTRICTIONS

"Many houses have Permitted Development rights that allow you to build an extension, subject to certain conditions, without planning permission. However, these rights may be restricted if you have a listed building or are in certain areas (e.g. within national parks or Conservation Areas). If in doubt, check with the planners or an architect. Because we produce contemporary architecture, we always apply for approvals for our projects.

"First and foremost, your project must address the points raised by planning policies in your area. Your case officer wishes to be certain that your proposals comply with these policies. Sometimes the planning policies require interpretation, which is why a clear set of drawings together with some 3D images help."

David Nossiter, David Nossiter Architects

SKETCH YOUR IDEAS

"Good communication is key throughout the entire process, particularly when you are engaged with a building contractor. Showing your design and contracting teams images helps, but don't be afraid to sketch either. Clients are often embarrassed to draw, but even the crudest drawing often helps articulate an idea and helps information flow down the chain from architect to contractor. Having everything written down in drawings and documents, and utilising a standard form of building contract, will ensure you have a cost that is as accurate as possible, before you put a spade in the ground. Ask your architect, or contact your regional RIBA office for advice on what contract suits your building work best."

James Ferguson, Staran Architects

SINGLE OR TWO STOREY?

"Whether you extend one or two storeys will of course depend on your brief and your budget, but also your site and the proximity of your building to the neighbouring ones. Two storey extensions can impact on neighbouring properties.

"When designing any extension, think about the consequences on the existing room layout. Are you left with a room in the centre of the plan without views and without daylight? Do you need to add a rooflight to encourage daylight entering deep into the plan?"

David Nossiter, David Nossiter Architects

GO AHEAD — EXPERIMENT!

"Do not be afraid to experiment with different design materials and contrasting palettes. Allow your horizons to be broadened and don't rush your architect to complete the design stages — allow plenty of time for reflection and thought."

"There have been several times when some exceptional design ideas have been created while pondering 'completed' designs. Allowing time to really understand and assess the designs at the drawing stage will save money in the long run as changes to designs once they get to site are costly and time consuming."

Katie and Simon Lewis-Pierpoint, SDA Architecture



Simon and Katie Lewis-Pierpoint,
SDA Architecture (sdaarchitecture.co.uk)



Lesley Hally,
LA Hally Architect
(lahally.com)

Andy Ramus,
AR Design Studio
(ardesignstudio.co.uk)



Allan Corfield,
Allan Corfield Architects
(acarchitects.biz)

Brendan Tracey,
Phillips Tracey Architects
(phillipstracey.com)



Paul Testa,
Paul Testa Architecture
(paultestaarchitecture.co.uk)

Kieran Gaffney and
Makiko Konishi,
Konishi Gaffney
(konishigaffney.com)



Annie Martin,
Annie Martin Architect
(anniemartin.co.uk)

James Fergusson,
Staran Architects
(staranarchitects.com)



David Nossiter,
David Nossiter Architects
(davidnossiter.com)

James Chapman,
OB Architecture
(obarchitecture.co.uk)

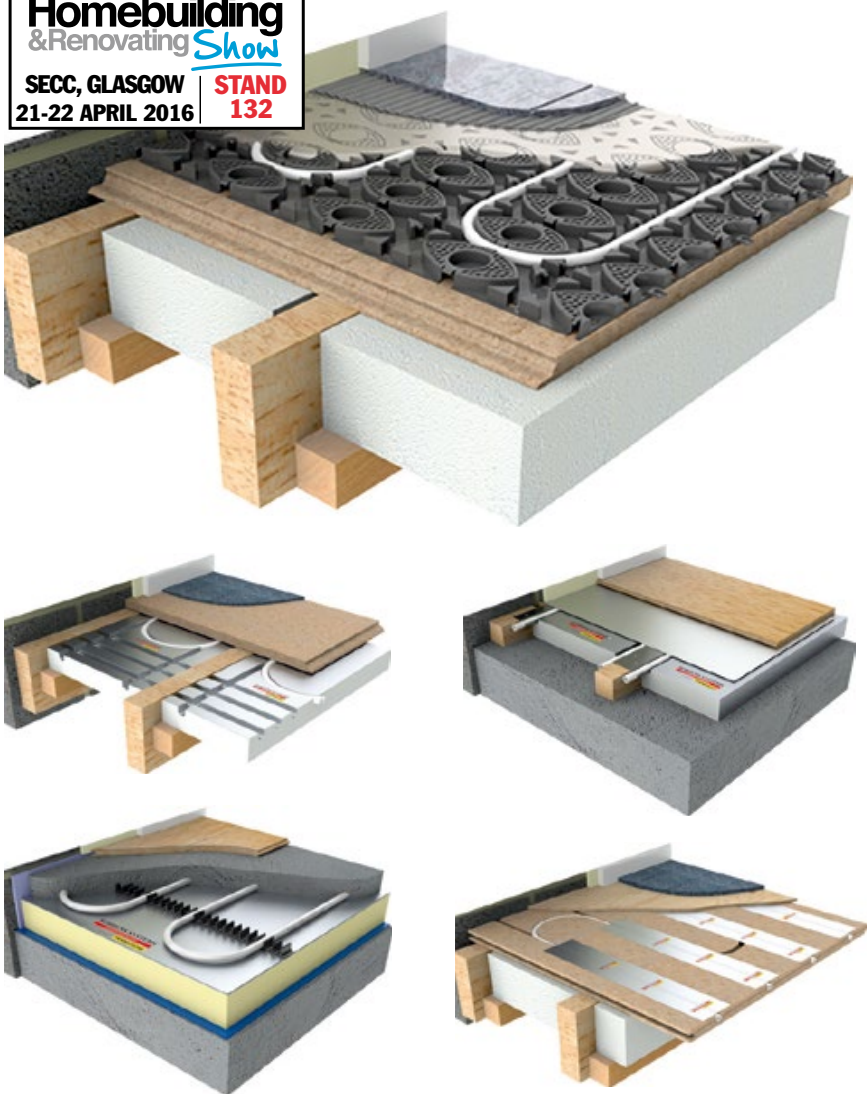
ROBBENS SYSTEMS®

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

**Homebuilding
&Renovating Show**
SECC, GLASGOW **STAND**
21-22 APRIL 2016 **132**



FREE QUOTE

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

underfloorheating.co.uk

PINELAND FURNITURE LTD



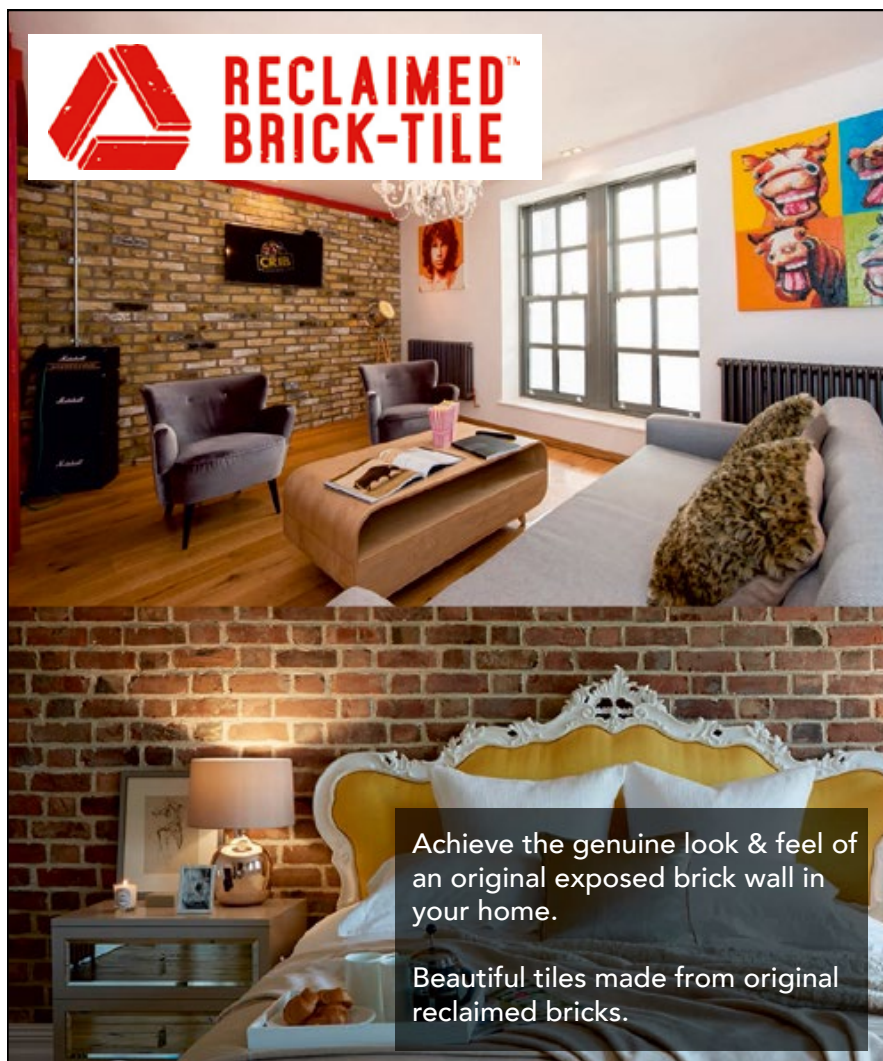
- 100% solid wood kitchens – no MDF, chipboard or ply
- Dovetail jointed drawers – mortise and tenon joints for carcasses
- Free design service, individual, hand drawn plans
- Non-standard sizes, at no extra cost, to suit your kitchens dimensions
- Fully assembled units; no annoying flat-pack assembly
- Straightforward, easy to understand costing – prices include VAT & delivery
- Primed, or primed and painted units can now be provided

PINELAND is a privately owned, family company that has been established for over 20 years. We believe in listening to our clients, and our hand drawn plans, reflect our customers desires and opinions. The final design combines well planned functionality, with elegance and beauty, and our clients are often surprised how all this can be achieved at such a reasonable cost.

Visit our website; www.pineland.co.uk Email: enquiries@pineland.co.uk or call our offices:

CLEOBURY MORTIMER, SHROPSHIRE
NORTHWICH, CHESHIRE

01299 271143
01606 41292



Achieve the genuine look & feel of an original exposed brick wall in your home.

Beautiful tiles made from original reclaimed bricks.

Tel: 0843 218 5465 Email: info@reclaimedbrick-tile.com
www.reclaimedbrick-tile.com

ADVICE TOP TIPS FOR HOME EXTENSION SUCCESS

INTRODUCE THE WOW FACTOR

"We believe that the main entrance is very important to the appreciation and perceived value of a house, so make the design here a priority. Look at the feasibility of incorporating double-height or oversized spaces, particularly over the dining areas to create a wow factor. Rooflights can also be used to dramatic effect to bring light deep into an interior space."

James Chapman, OB Architecture

LOWER YOUR FUEL BILLS

"When complete, an extension can make up a large proportion of the external envelope of your home. So it makes a lot of sense to make this as energy efficient in its construction as possible. This can improve the comfort of your whole home and ensure your bills are as low as possible. You're unlikely to ever revisit the construction of an extension, so get it right first time. I would also suggest that anyone should aspire to retrofit their home to a high standard. Most people won't be

able to afford the cost or disruption of this at the same time as an extension, but planning this in is useful so that you won't need to undo anything if this retrofitting work becomes possible in the future."

Paul Testa, Paul Testa Architecture

UNDERSTAND THE BENEFITS OF SIPs

"Clients are tending to lean towards very energy-efficient construction materials. In particular, we've dealt with a number of clients opting to use SIPs (structural insulated panels) as their chosen construction method.

"These panels – usually a core of expanded polystyrene (EPS) sandwiched between outer layers of oriented standard board (OSB) – are stronger than the sum of their parts, and are very well insulated. The other advantages of extending your home using SIPs include the fact that they are factory-made to the precise measurements of the building's design, so on-site labour time is kept to a minimum. They are lightweight and extremely quick to erect due

to their precise design. SIPs also offer a lot aesthetically, as they can be used to create open or vaulted roof spaces. Typically, roof construction relies on a conventional trussed roof to develop the roof space, but as SIPs are glued together following their precise design, they can span from ridge to eaves (maximum 4.8m) with, at most, one intervening horizontal beam.

"Building roofs with SIPs is much quicker compared with other conventional roof systems and is very cost-effective as the insulation is built in."

Allan Corfield, Allan Corfield Architects

CHOOSE DURABLE MATERIALS

"You have to consider durability and maintenance when choosing external cladding. Better to pay more for a more durable timber that may be left unfinished, such as Siberian larch. We have used fibre cement cladding successfully, which is very durable but does require care to set out and install and is often supplied through specialist com-



DON'T OVERLOOK THE INTERIOR

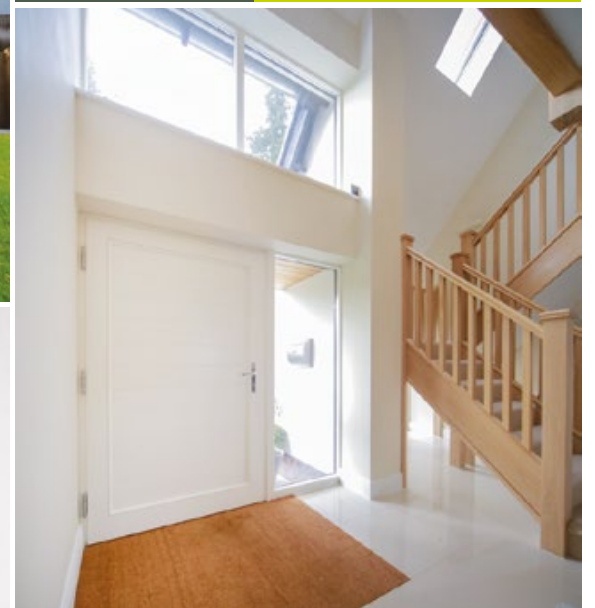
"One of the most important items that we constantly find has been overlooked is the interior architecture. We often spend more time designing the interior architecture than the exterior, as this is where the clients will spend a large percentage of time. This does not mean overlooking the exterior, as it is equally important, but it is not the only area of design that needs to look great."

Katie and Simon Lewis-Pierpoint, SDA Architecture




Made-to-order
timber
windows
and doors

**LOMAX
+WOOD**




Style with performance

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

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



Please visit our Essex showroom

01277 353 857
www.lomaxwood.co.uk

Everything you need to create your own home

We provide our customers with a unique one-stop shop service, not only for coordinating the manufacture and delivery of the timber frame structure, but also the supply of windows, external doors, internal door sets, stairs, architrave, skirtings, finishings insulation, plasterboard and a whole lot more.

And with **Val-U-Therm®** - Scotframe's unique family of advanced, closed panel, factory insulated, high performance wall, roof and floor systems - your space heating costs will be significantly reduced!



Val-U-Therm®
Future Proof Solutions

AIRTIGHTNESS

THERMAL PERFORMANCE

ENERGY EFFICIENCY

SPEED OF CONSTRUCTION



See us on stand 331
 at the Glasgow Show

Cumbernauld	01236 861200	Inverness	01463 717328
Inverurie	01467 624440	Paignton	01803 267680
Dundee	01382 561772		

www.scotframe.co.uk



scotframe
 timber frame | homes

panies. Be aware that as soon as you consider alternative materials, costs inevitably go up. General builders can be nervous about using materials that they do not have experience installing and it can be an advantage to use a manufacturer's approved contractor. Often a manufacturer will not guarantee the installation of their product unless an approved subcontractor installs it."

David Nossiter, David Nossiter Architects

ADDRESS EXISTING ISSUES

"Extensions can be an opportunity to put right irritating problems with the original house. Remember that an extension is not just about space. The project needs to address the shortcomings of the house and address issues such as poor circulation. You may even be able to re-evaluate the house so as to enjoy the best of the views."

Annie Martin, Annie Martin Architect

CONSIDER PREVIOUS EXTENSIONS (OR CONSIDER DEMOLITION)

"If it is possible to reuse existing extensions and incorporate them in the design this is generally preferable, as the embodied cost and energy in these buildings is high. They can usually be insulated, opened up with windows and extended to increase the floor area. Be wary though — we have worked on many projects where an existing extension is of poor quality or simply in the wrong place. This is typical of Victorian extensions built at a time when sunlight wasn't deemed important and of 1960s construction, when quality wasn't so high on the agenda. We find that it is better and sometimes cheaper to consider demolishing extensions which are obviously in the way or that are poorly built.

"This can be frustrating, as there is a cost for demolition and then rebuilding a similar amount of floor space. For us, natural light is the most important part of any project, so managing sunlight and orientation is essential. Clients should be prepared to demolish to let the light in. On several projects we have demolished extensions and not rebuilt them — more space is not always the right answer."

*Kieran Gaffney,
Konishi Gaffney Architects*

IMAGE: DAVID BARBOUR; PROJECT DESIGNED BY PAPER GLOO ARCHITECTURE AND DESIGN



BEWARE TREES

"Trees present an issue for structural engineers when designing the foundations and some species have deeper root spread and water requirements than others. It is therefore important that the structural engineer is aware of the proximity of any trees to the building."

Allan Corfield, Allan Corfield Architects

AIM TO HAVE A CONTINGENCY FUND

"Try to identify cost plans along the way. Until the project is tendered they are always approximations, but it may help you avoid nasty surprises later. When you tender your project, ensure that you receive a full breakdown of the costs as far as possible and do not forget VAT."

"Costs can increase as clients become enthusiastic about their project. With existing properties, extra costs may arise when dealing with elements concealed within the existing fabric of the building and under the ground. Identify these as far as possible, but also ensure that you have a contingency fund."

David Nossiter, David Nossiter Architects

VALUE FIXED COSTS

"RIBA suggests that an average architecture fee for an extension project should equate to between 9-12 per cent of the overall construction cost. However, we would suggest you try and find an architect who offers a fixed cost and an advised timescale, with the required services split up into logical stages. We believe our clients should know all of the main facts and costs before committing to

an extension — that way, budgeting and monitoring cashflow can be done with more concrete figures."

Allan Corfield, Allan Corfield Architects

TAKE CARE WITH LISTED HOUSES

"Listed properties and those in Conservation Areas require particular care. Our approach would always be to provide something contemporary to contrast with the period property. A contemporary approach can be sensitive if handled with diligence by a good architect. Consider carefully the materials that you use for repairs. If you own a listed building, be aware of the reasons why the building is considered notable and ensure you have the necessary consents in place before undertaking work — remember, it is a criminal offence to demolish a listed structure without consent.

"Lime mortars and lime renders are breathable and compatible with traditional building methods. They are better suited to older buildings than cement-based mortars and renders, which can trap moisture, although lime-based materials require care during execution."

David Nossiter, David Nossiter Architects 

I: An Evolution in Time

MARTIN GARDNER



Extensions Portfolio

From a listed farmhouse to a dramatic urban project, Alison Wall visits five projects that illustrate different solutions to common extension challenges – including a wide range of approaches to successfully tackling the build

1 For anyone faced with the prospect of renovating or remodelling an existing extension – particularly one poorly built or designed – the simplest and most effective option may simply be to demolish the original extension and start again.

This was the route taken by the homeowners of this extension project in Surrey, who chose to start afresh rather than renovating a single storey rear extension designed and constructed with little consideration for the original Victorian villa.

They asked Olly Bray, director of OB Architecture, to remodel the interior and design a two storey extension to

the side and a large open plan kitchen/living/dining space with better connections to the garden. The decision to demolish or renovate an existing extension needs careful thought, he says, especially when it involves some heritage or architectural value.

"So often we go through this process and ask ourselves: can we rebuild? In our experience, it is easier and cheaper to take the extension down, and builders prefer working with a clean slate," he says. "Here we went through a process of stripping back and allowed the original building to breathe again."

The other choice facing owners of traditional or period homes is whether

to mirror the original home's form and fabric, or to create something distinctively modern and different.

In this case, there is a clear division between the old and new but the use of glazing and white render links the two spaces and retains the memory of the original property.

Thinking through the size of the rear extension was also key. "We needed the extension to be subservient to the main house," explains Olly. "If we'd constructed something too large at the back of the house, such as a two storey extension, the handsome proportions of the original house would have been lost."

(obarchitecture.co.uk)

ADVICE EXTENSIONS PORTFOLIO

2 The starting point for this project, a rear extension and loft conversion in a terraced house in London, was a client prepared to take risks and go outside their comfort zone, according to architect Luke McLaren of McLaren Excell.

"The homeowners wanted something different — from the outset, their overriding concern was that they did not want yet another typical rear terrace extension and they also knew they wanted to use concrete as part of the project in some way," begins Luke. "They were very happy for us to push them with challenging ideas and concepts, and they warmed to the idea of making unexpected decisions. That level of trust is really quite important and taking the right kind of risk will lead to the right kind of reward."

Another important factor was the unusually generous height of the extension. 'Right to Light' planning restrictions restrict building height to 2.4m on one side. But,

interestingly, after discussion with the next-door neighbours, a joint application was submitted to the local authority that allowed both households to build extensions up to 3m high.

"The approach was quite unusual — and getting permission does depend on individual local authorities — but having the extra space has made a difference to the feel of the space internally and avoided the standard lean-to aesthetic," says Luke.

Throughout the ground floor interior, the dominant material is concrete, which is used for the walls, floors and a central island/table in the ground floor extension. Externally, the cladding for the walls is pre-weathered — or 'rusted' — Cor-ten steel, the same material used for the large central door. "The orange rusted tone worked really well against the concrete," says Luke. "We didn't want a building that looks fabulous now and in five years looks haggard and tired — Cor-ten works well and will age very well as it is designed to weather and rust." (mclarenexcell.com)

CONCRETE NOTES

"Concrete furniture is starting to become more and more popular, as people see how it can be used to create very dramatic and unusual items in projects such as this one," says Luke McLaren. However, the material is challenging to work with. "When you pour concrete it's a one-chance thing — you need to go hell for leather before it dries. Once it's done, it's done." For anyone thinking of using concrete in their project, Luke has these words of advice: "Concrete is like Marmite — it polarises opinion and you need to be very sure that you want to use and live with it. Because it is a live material, it has different colourations and textures, so you need to be open minded and accepting of surprises, in a good way. Concrete is cheap but when it is used for complex items the overall costs rise, but it's certainly an investment."



2: A Rear Extension to a City Terrace

NICK GUTTERIDGE/MCLAREN EXCELL

Renewable Energy Systems

Design from conception of the project combining the systems to produce an integrated solution.

All aspects of the materials and the installation supplied or organised to give a SWITCH-ON install.

Complete documentation service and support for Microgeneration Certification Scheme, RHI & FIT claims.

- Air Source Heat Pumps
- Ground Source Heat Pumps
- Photovoltaic Electric
- Solar Thermal Water Heating
- Bio-mass Boilers



"Paul took us through the whole process of sourcing, installing and commissioning our Open-Loop Viessmann Ground Source Heat Pump and EnPHASE Solar PV with great care and attention. To the lay - person the technologies can appear daunting but Paul's obvious technical knowledge reassured us throughout. He is always on the end of the phone to answer any questions. We would definitely recommend Aztec Engineering Ltd for all your renewable energy system requirements."

Rupert and Linz



Paul Brooks
07748 603407
ase1@outlook.com

www.aztecsolarengineeringltd.co.uk



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



Panoramic Views

The extension allowed the architect to open up the building to surrounding rural views. Removing a large barn helped, as did re-routing the original driveway to the rear of the house. A new stone retaining ha-ha allows uninterrupted views across the fields, as does extensive glazing

3: A Modern Extension to a Listed Farmhouse

3 Obtaining planning permission to extend this Grade II-listed farmhouse in the rolling hills of Dartmoor National Park in Devon was never going to be easy. “The National Park planning department is renowned for being stringent,” says architect Annie Martin, who carried out the project for her parents.

“They required detailed drawings and much more negotiation than normal — for them, vernacular architecture is key and they were very interested in materials. I was pleased that they accepted the standing seam zinc roof finish that I’d specified — it’s a slate colour, reflecting the farmhouse slate roof, and is a reminder of the corrugated iron roofing that was on the barn previously.”

The approvals process was helped by the fact that the proposal involved taking down one enormous — and unattractive — barn and converting the dilapidated and structurally unsound storage barn adjoining the main farmhouse. Neither barns were required for their original purpose, as Annie’s parents were retiring from their organic holding and no longer needed a working farm. Taking down the structures was considered to be a large planning gain, so the conservation officer and national park planners sanctioned a more contemporary approach. However, there were some restrictions.



Listed building requirements meant that Annie could not create an entrance from the original farmhouse wall directly into the extension, so instead she designed a small timber porch at the rear that provides the link between the two spaces. An original casement window in the adjoining farmhouse wall was also required to remain intact, and has survived as a visual link with the original architecture.

Overall, the extension is a simple double-height space, executed with exacting craftsmanship. “My parents liked big

bright open spaces with large sliding doors, but living in the farmhouse there were no options because of the beams and small windows,” she says.

Visually, the new space follows the original asymmetric roofline of the original storage barn, although the original oak A-frame — kept for its aesthetic appeal and to meet listed planning requirements — is no longer structural. All of the new timbers are also oak, some of them sourced from the farm grounds and seasoned on site and others reclaimed from elsewhere. “We had a joiner on site and got through an amazing amount of timber,” says Annie. The one remaining cob wall adjoining the farmhouse was repaired using conservation techniques and elsewhere new cob blocks with lime mortar were introduced. “They have a robust quality and match the rest of the house,” she says. “It was relatively straightforward — my dad did the work himself. I am not a conservation architect but on this project I learnt not to be scared of conservation techniques. They’ve been around a long time and once you understand them, they are easy to do.”

Another stand-out feature is the mezzanine, which is used as a study. “I slightly resisted this, as I didn’t want to go back to dark low ceilings, but the mezzanine is only half way across, and pulling it back allows us to retain the full-height double space,” says Annie. (anniemartin.co.uk) ➤

You don't need to dig up your floors...

...to enjoy the luxury and comfort of floor heating...



...Simply use our thin, Rapid Response Overfloor® Heating System

Wunda Rapid Response Overfloor® System spreads heat 25 times faster than traditional underfloor heating. It fits over the top of any existing floor, adding as little as 16mm to floor height. Perfect for complete renovations, extensions, conservatories, lofts, basements and all new build projects, it's the best quality, strongest and fastest floor heating system on the market and comes complete with long peace of mind guarantees and detailed design layout plans.

Being warm water based, it helps reduce running costs and works alongside radiators and existing boilers. You can control the temperature in every room individually and because you're buying direct from Wunda, you cut out the middlemen and can save as much as 50% on the price of your system.

For a free no obligation estimate, please send plans or room dimensions to: plans@wundagroup.com

Watch the online videos • **Read** the reviews • **Live** the dream!

wundafloorheating.co.uk

0800 5420 816

WUNDA
THE BRAND YOU CAN TRUST

4

The homeowners of this large oak frame extension in north Wales saved thousands by taking on some of the work themselves and managing subcontractors after the oak frame contractor, Welsh Oak Frame, had finished on site. By tackling just one job – cleaning the oak frame after it had been installed – they managed to save between £5,000 and £6,000. “We were up on scaffolding, sanding and waxing the oak beams every single night from the middle of October to just after New Year,” remembers homeowner Lynne Harkin.

“When the oak went up it was really muddy and dirty, and black where the chains had lifted it. Welsh Oak Frame would have cleaned the oak if we wanted them to, but we were keen to sand and wax the wood ourselves.”

The other significant budget win was the kitchen. “We had a look at quite



4: Hybrid Route in Oak Frame

a few kitchens and couldn’t believe how much they cost,” she says. In the end, Lynne commissioned Unfitted, a company she found online, which allows homeowners to input their required dimensions to get a quotation.

“What we chose was double the size and half the price of some of the other kitchens we’d seen,” she says. “We went for granite worktops – the company said it was the biggest piece of granite they

had ever cut.” Taking on the latter stages of the project also allowed the homeowners to side-step some of the logistical challenges of the early stages of the project, including six weeks of local road repairs that threatened to scupper access to the house for large vehicles. Welsh Oak Frame managed the potential disruption by rescheduling the works and starting on site at 7am each day. (welshoakframe.com)



5: A Full Design and Build Package

5 Another option may be to find a company that manages all stages of your project, as in this extension to a barn conversion near Wilmslow in Cheshire. ARKHI.build, an architect-led design and build company, was approached by the homeowners to design and build an extension to provide more space for their growing family.

“Originally, the couple wanted a simple lean-to at the rear, perhaps with a gable on the side,” says architect Matthew Lewis. “I went round the house with them and

saw that they were very design orientated. I didn’t think their original plan was really them, so I designed something that I thought did represent them.” In fact, Matthew created two options: one that had a slightly pitched roof, and the other – chosen by the homeowners – a simple zinc-clad boxed form that makes the maximum use of glass. Its most striking feature is a glass-to-glass corner, which provides the kind of design statement the clients were looking for.

Energy efficiency was also important. “Although you can only do so much with

an older building in terms of energy efficiency, we super-insulated the walls and it’s pretty warm in there,” says architect Matthew, who managed both the design and build elements of the project.

“We are a construction company as well as an architectural firm. It simplifies the process for the client – they have one port of call and it avoids the triangle where the builder blames the architect, the architect blames the builder and the client is left in the middle.”

Working in this way also allows the project to benefit from the coordination that comes with it, he says: “We can mobilise quickly, get on to site and work straight through.” The other benefit is being able to take architectural details from concept to execution.

“We are architects first – and the devil is in the detail. Often, the client doesn’t keep the architect on and the detail that the architect specified just doesn’t stay. Although here we took a simple approach, the client was a details man, interested in elements like the junctions between the flooring. People may not notice these things consciously, but they do recognise quality compared to a badly designed project.” (arkhibuild.com)



ALL ALUMINIUM CONSTRUCTION WHITE OR GREY BIFOLDING DOORS & WINDOWS

Vufold provides you with a range of affordable internal and external bifold doors and windows that feature both outstanding quality and design, while also being engineered to use a wide range of materials and finishes to help cater to your individual needs, tastes and décor.

[Visit our website, showroom or call us for more information.](#)



- **EXTERNAL BIFOLD DOORS**
- **INTERNAL BIFOLD DOORS**
- **FRENCH DOORS**
- **WINDOWS**
- **DOOR BLINDS**

VUFOLD®
BIFOLD DOORS & WINDOWS

www.vufold.co.uk
01625 442 899

Vufold Ltd, Queens Court, Queens
Avenue, Macclesfield, SK10 2BN

HOMES

Hidden Depths

A healthy dose of clever design and a considerable measure of DIY has seen a youth club transformed into a unique home — for just £95,000

THE QUICK READ

- Mat and Polly Hilton have converted a redundant youth club near Exeter into a characterful two-bed home
- The building was wrapped in external insulation, with insulation added to the roof and floor to bring it up to modern standards
- Part of the roof was removed to create a south-facing courtyard — this fills the interiors with much-needed light and provides valuable outdoor space



PROJECT NOTES

Project: Youth club conversion

Location: Devon

Build time: Nov 2011 – Dec 2013

Size: 115m² + 28m² workshop

Plot cost: £82,000

Build cost: £95,000 (£644/m²)

Value: £250,000 – £300,000

Left: Front Elevation

Behind the unassuming façade of this converted youth club lies a dynamic interior (here). The front elevation features a pared-down palette of white render and cedar cladding — the latter wraps around the side and rear of the building and acts as a rainscreen for the external insulation. The wide garage door is from Wessex Doors

The Mezzanine

Mat and Polly have put space beneath the vaulted ceiling to good use in the living room, creating a mezzanine level with built-in bookcases to one side and room for a spare bed to the other — the latter is used as additional guest accommodation when needed. Mat crafted the ladder and all the joinery in the room



HOMES YOUTH CLUB CONVERSION



Words: **Claire Lloyd** Photography: **Nigel Rigden**

This magazine has seen its fair share of unusual conversions over its 25-year history. Among the flock of barn conversions and congregation of church conversions, there have been factories and stables transformed, a city centre office conversion, and even a former bowling alley overhauled as a home, but we have to admit, converting a youth club is a new one on us. But that's exactly what Mat and Polly Hilton have done — they had the foresight to spot the potential in a redundant youth club in a Devon village, and have transformed it into a dynamic home. The project is all the more impressive given that it's the couple's first venture into property ownership, they undertook the vast majority of the work themselves, and achieved the conversion for under £100,000. The property has now been shortlisted for the south-west RIBA Awards 2016 to boot.

A key part of the equation was Mat's brother, architect Rob Hilton, who developed the plans for the conversion, and joined the couple on their search for a first home. "I used to live nearby and noticed the 'for sale' sign outside this building; it looked like it could be an interesting project," says Rob. "Mat and Polly had also noticed it online — there's not a lot for sale under £100,000 in this area." First impressions were mixed and while the single storey building was in a relatively sound state of repair, it was evident that considerable work would be required to bring it into

Semi-Open Plan Living Space

The living area is semi-open plan to the dining area, kitchen and circulation space, thanks to open doorways and internal 'windows' which punctuate the interior walls. The raised floor, however, provides definition between the spaces and makes the living area feel cosier (a carpeted floor also aids here)

the 21st century. "There were single-glazed Crittall windows, an asbestos cement roof, and the building had evidently been built on a budget," says Rob. The brick-clad façade was rather of its era, too.

The youth club had been funded and built by volunteers from the local community in the early seventies, and had served the village and surrounding area for over three decades. Its construction was akin to that of an agricultural building, with a concrete portal frame providing the structural backbone, with walls built in blockwork.

Despite the challenges and the fact that it was being sold without planning permission for change of use, the couple decided to put in an offer. "A previous application had been made to convert the building into a blinds-making factory, but this was turned down. We were fairly confident about gaining planning permission and had Mat and Polly not gone on to convert the building into their home, we knew it would be worth more if we sold it with planning permission; it was a gamble worth taking," explains Rob.



The Design Process

When Mat first viewed the building, it was, he says, “one big open hall.” Creating a floorplan that would divide this space to meet the couple’s brief for a two-bed home with adequate living space, together with a workshop (Mat is a carpenter), while also ensuring that all new rooms received natural light, was no mean feat. The lack of outdoor space was another issue that needed addressing. Fortunately, Rob was on hand to suggest a solution to both. “I knew right away that an element of the roof would need to be removed to achieve this.” A considerable portion of the south-facing roof has been taken away to create an internal courtyard; a much-needed ‘room outdoors’. The primary living spaces and master bedrooms are arranged around this courtyard and designed so as to receive sunlight at different times of the day. Polly and Mat were sold on the design concept.

While first incarnations of the design featured, in Rob’s words, “straight walls and rigid, rectangular spaces,” as the plan developed, an asymmetrical floorplan began to take form, with zones dedicated to different activities and the boundaries further blurred between inside and out. “The concrete portal frame really helped here; it ➤



Circulation Space

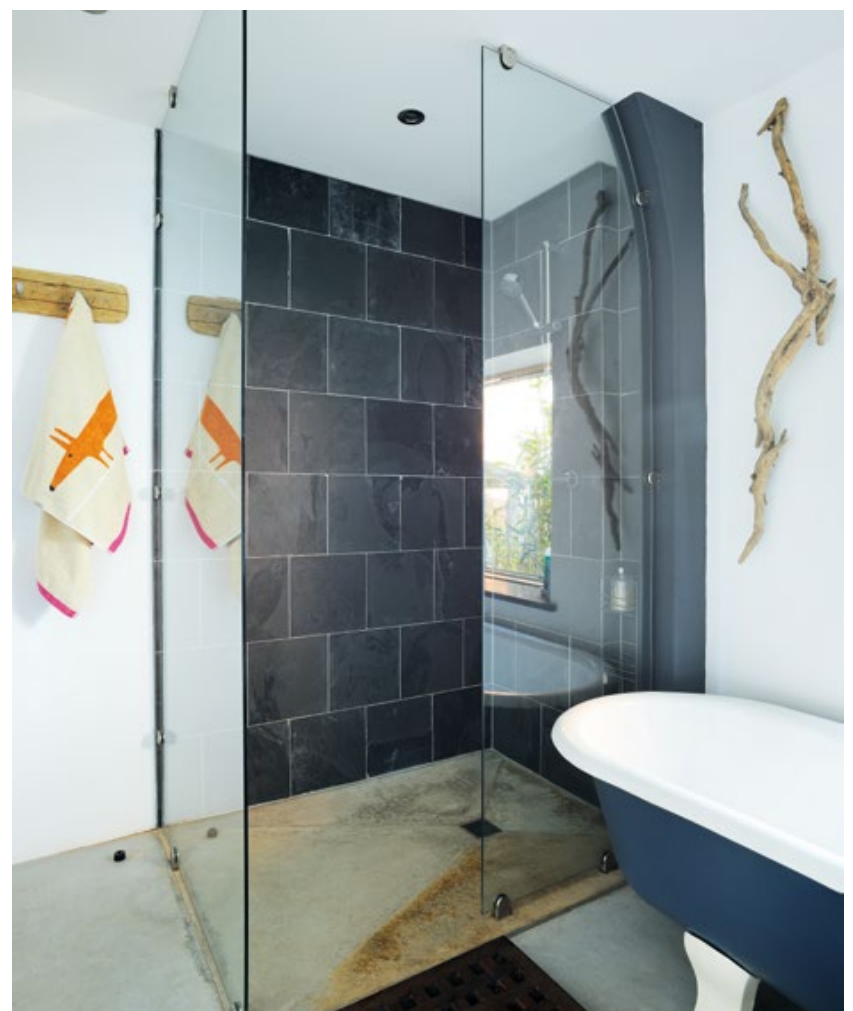
The couple and their architect Rob Hilton considered squeezing in an additional bedroom, but instead decided to utilise the generous circulation space between the two bedrooms as a home office. Oak cladding has been introduced here, too





Bathroom

The sanitaryware was reclaimed and has been paired with timber cladding (crafted from off-cuts of oak left over from cladding the living spaces) and slate worktops, lending instant character to this new room. A large picture window from Velux provides plenty of light and a discreet view



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





HOMES YOUTH CLUB CONVERSION

Kitchen

The kitchen units were handcrafted by Mat, who used salmon packing crates (which he'd collected in the hope of one day having a use for them). The units are supported on a steel framework

supported the roof, providing the freedom to experiment with the internal walls," explains Rob.

The Hiltons applied for planning permission for change of use. The plans also included a 28m² timber frame extension to the front of the building, which would provide space for Mat's workshop and help to break up this flat elevation. The planning process proved relatively pain-free. "It wasn't too bad. The only real issue was with the Highways about the entrance to the road," says Mat.

Bringing the Building up to Modern Standards

One of the biggest challenges involved bringing the structure in line with Building Regulations' standards: insulating the building was a particular priority. The Hiltons opted for external wall insulation, adding 100mm of solid PUR insulation to the exterior of the blockwork walls and fixing cedar cladding as a rainscreen. The existing floor was dug up, too, in order to accommodate further insulation as well as the pipework for the new underfloor heating system. (The couple opted for a power-floated concrete screed to provide a cost-effective and hardwearing floor finish.)

The underfloor heating is powered by mains gas, although a woodburning stove was also installed as a cosy focal point in the living area and to give off instant heat on colder days. The property features solar PV panels too (these were retrofitted on the south-facing roof and were a housewarming gift from Mat's parents — while Mat and Polly benefit from the free electricity the panels generate, Mat's parents receive the Feed-in Tariffs payments).

With the asbestos roof stripped away, an insulated roof panel system (Kingspan's Trapezoidal Roof) was introduced; the product is typically used on commercial buildings, but it provided a cost-effective and easy-to-install solution for this project. As with much of the work on site, Mat roofed the building himself. Joined by Rob and three friends, the team of five (who'd never used the system previously) roofed the entire structure in just two days.

The project took two years to complete, with Mat taking two prolonged breaks during this time. "I needed to go back to work to earn money to fund the project," explains Mat, who is self-employed. The couple finally moved in during Christmas 2013. "We wanted to finish as much as possible before we moved in — otherwise you never quite finish," says Mat, who offers the following advice: "Be patient and don't cut corners. You will be rewarded on completion."

The rewards of the couple's endeavours are certainly evident in their finished home. The interiors feel spacious, thanks to the generous ceilings and dynamic shapes created by the asymmetrical walls, and that connection to the courtyard. There are also interesting pockets of space to explore in every room, and unique design touches throughout, from the kitchen units handcrafted from packing crates sourced from a salmon farm to the timber-lined openings which punctuate the internal walls and double up as shelving. It's an enviable first property by any measure. **H**





The Courtyard

The private south-facing courtyard was key to the creation of this home — it provides much-needed outdoor space, but also allowed large windows and doors to be designed in, to introduce light to the interiors. Two sets of 3.2m-tall IDSSystems' bi-fold doors allow the dining area (opposite) and circulation space to be opened up to the courtyard too, creating a cohesive entertaining space. The original concrete portal frame (which was cleaned up during the project) also dissects this space, providing a characterful addition to the cedar-clad and brick walls





SUBSCRIPTION
OFFER



Subscribe to Britain's best-selling self-build magazine

Get advice, ideas, case studies and budget tips — all delivered straight to your door



£2 AN
ISSUE

Just £6 for 3 issues*

How to subscribe

📍 VISIT homebuilding.co.uk/june16

☎ CALL our subscriptions team on 01527 834484**

*£10 every quarter thereafter **Office hours: 9-5pm Mon-Thur, 9-4.30pm Fri





HOMES YOUTH CLUB CONVERSION

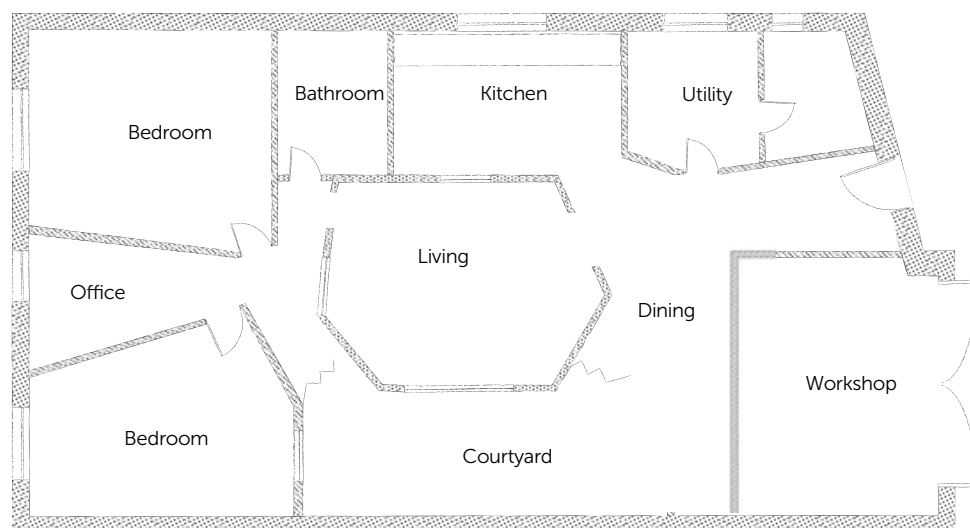
The Project



**Mat and Polly
Hilton**
Homeowners

HOMEOWNERS' VIEW

The design of the house is fantastic. It suits our lifestyle perfectly as the boundaries between outside and inside are very blurred. In good weather you can really enjoy it and in bad you feel all the elements but can still find a cosy place to relax. We wouldn't change a thing. It's certainly all we had hoped for and more. It's a great house for entertaining and is very sociable.



PROJECT TIMELINE

May 11 Building purchased
Sep 11 Planning permission granted
Nov 11 Work started on site
Dec 11 Stripping out/demolition
Feb 12 Extension completed
Mar 12 New roof added
Jun 12 External insulation and cladding installed; windows and doors fitted (followed by a break in works)
Nov - Dec 12 First fix
Jan 13 Plasterboarding
Feb 13 Plastering (followed by a break)
Sep - Dec 13 Second fix and decoration
Dec 13 Moved in

SUPPLIERS

Architect Hilton Barnfield Architects
hiltonbarnfield.co.uk; 01392 349222
Main contractor Mat Hilton
mathilton@btinternet.com
Subcontractors Stride..stride-spaces.co.uk
Structural engineer TWPtwpeng.com
Building control JHAI.....jhai.co.uk
Surveyor Croft Surveyors
croftsurveyors.co.uk
General materials RGB Building Supplies
rgbltd.co.uk
Kingspan Trapezoidal Roof KS1000/2000
RW panels SIGsigplc.com
Windows Velfacvelfac.co.uk

Bi-fold doors IDSystems
01603 408804
Oak cladding Luton Green Sawmill
01404 841504
Cedar cladding Benchmark Timber
benchmarktimber.co.uk
Stonewalling Rob White07886 636184
Garage door Wessex Doors
01942 832355
Driveway landscaping Ed Rogers
 Landscape Maintenance and Construction
ed-rogers.co.uk
Power-floated concrete floor Streat Crete
industrialflooringspecialist.co.uk

Plaster Dan Hawke07969 087121
Electrics Croft Electrical
croftelectrical.co.uk
Plumbing AB Plumbing and Heating
01647 270211
Kitchen steel work Hotstuff Blacksmith
hotstuffblacksmith.co.uk
Stainless steel MR Engineering
01392 841099
Contura woodburning stove supply and fit Ash & Grateashandgrate.co.uk
Underfloor heating Timoleon
omnie.co.uk
Carpets Drapes 2curtainsandblind.co.uk



HOMES OAK FRAME SELF-BUILD

Home in the Forest

Louise and Peter Wreford have built a characterful oak-framed property in the New Forest, overcoming strict planning rules to achieve their dream home

Words: Natasha Brinsmead Photography: Jeremy Phillips



PROJECT NOTES

Project: Oak frame self-build

Location:
New Forest

Build time: Nov 2011 – Oct 2012

Size: 192m²

Plot cost:
£322,000 (2001)

Build cost:
£550,000
(£2,864/m²)

Value: £950,000+



THE QUICK READ

➡ Louise and Peter Wreford demolished their 1950s brick bungalow in order to build a family home on their 3/4 acre plot

➡ Being located in the New Forest meant the Wrefords had to work with oak frame provider Border Oak in order to find creative solutions to fit in with the very strict planning rules that were imposed

➡ A combination of oak, brick, timber cladding and clay roof tiles means that the house blends in perfectly with its setting

➡ Despite the traditional look of the house, it uses some very eco-friendly technology, including a ground-source heat pump — making it economical to run

When Louise and Peter Wreford, along with their two children, Victoria (13) and Alexander (14), first moved to the New Forest in 2001, they had planned to renovate and remodel the 1950s brick bungalow they had purchased there. “It quickly became clear that it needed far more than we realised doing to it,” begins Louise. “It had shallow foundations and needed underpinning — so we decided to demolish it and just start again.”

The couple had been searching for something suitable for some time — which for them meant a house with enough land to accommodate the household as well as their horses, three dogs and five cats. “Originally Peter suggested that we live in a caravan on site while the build took place,” begins Louise. “I couldn’t see us coping with that, not with all the animals and two children — which meant renting would have been difficult, too. In the end we bought a small two bedroom terraced house just five minutes’ walk away from the bungalow, which we now rent out.” ➡





Left: Exterior and Garage

The oak-framed house features clay roof tiles, render panels and a single storey timber-clad section — all in keeping with the local area. The detached garage was built before work on the house began

Below: Double-Height Hallway

The hallway is flooded with light, thanks to an enormous full-height window, with views over fields owned by the Wrefords





Top: Dining Hall

The light-filled dining hall is now used for Victoria's piano practice, as the family tends to congregate in the kitchen/breakfast room at meal times

Above and Right: Living Room

The living room is full of character, thanks to the exposed oak frame and the eye-catching Bath stone fireplace complete with woodburning stove from Clearview Stoves

Strict Planning Regulations

Being located in the New Forest meant the planning stipulations about what they could do with the plot were ferociously strict. "We were told we were only allowed to build a house 30 per cent larger than the original bungalow," says Louise. "By this, the council meant 30 per cent of the total floorspace rather than the footprint, so we did have to look at ways to get the space we needed into this."

After consulting with the New Forest District Council on what kind of house would be acceptable (materials in keeping with the local area and a design that looked as though it had evolved over time), Louise and Peter chose a design from Border Oak's portfolio and adapted it to suit their needs.

"The size restrictions meant that we have gone from a five bedroom bungalow to a four bedroom house, but the layout is so much better and the rooms much bigger," explains Louise. Plan- ➞

HOMES OAK FRAME SELF-BUILD





Kitchen-Breakfast Room

An Aga and island unit were top of Louise's wish-list for the new home. The painted units (well suited to the country-style kitchen) are from deVOL. The marble floor works brilliantly with the underfloor heating — the only issue the Wrefords have with the kitchen is stopping their newly acquired rescue dog from chewing it

ning permission was granted in May 2011, but delays followed after a mistake that Louise describes as an 'awful moment'. "The groundworkers had just started digging the foundations and were in the process of excavating the first trench when I arrived on site," explains Louise. "I knew immediately that the trench was not where it was supposed to be and it turns out that the measurements they were using were derived partly from an Ordnance Survey map that was 4m out!

"Building work came to a halt and we weren't allowed to continue — we had to wait for a non-material minor amendment to be granted which took an additional seven weeks and was finally approved in November 2011. I was so upset — we had demolished our home and had nothing to show for it and technically no planning permission," says Louise.

Designing a Family Home

The new home has been constructed using an oak frame with SIPs (structural insulated panels) and finished in render. Shiplap cladding has been used for the single storey element of the house. Clay roof tiles and Flemish Antique bricks from Hoskins Bricks have been used to ensure the home blends in with its setting.

"Our brief was for the complete opposite of the original bungalow," says Louise. "No long corridors and plenty of natural light." And this is just what they have got. The open plan kitchen-breakfast





HOMES OAK FRAME SELF-BUILD

Below: The Utility

The handy utility room that leads off the kitchen is essential for a home with so many pets, while the open plan kitchen-breakfast room (bottom) makes the whole space sociable





First Floor Spaces

Upstairs, the original plans were tweaked at the request of Louise and Peter to open up the ceilings to the A-frame for maximum character. Although the stylish bathroom is currently shared by the whole family, plans are afoot to turn a storage space in the master bedroom into an en suite



HOMES OAK FRAME SELF-BUILD

room is filled with light and is the room where family members spend most of their time. An island unit, Aga and marble flooring suit the house perfectly, while a utility and cloakroom lead off.

In the living room, a Bath stone fireplace – chosen before the couple had even obtained planning permission – frames a wood-burning stove, giving the space a homely feel. But it is perhaps the stunning dining hall that steals the show, with full-height picture window and chunky oak staircase, set off by a chandelier that took Louise and Peter 12 months to choose. In fact, the decision-making process was something that Louise admits she found hard to deal with. “There were so many decisions to be made all the time,” she says. “It was quite overwhelming — and constant. It is hard to decide on flooring, door furniture and so on when you are struggling to picture what the finished house will look like.”

On the first floor, the four double bedrooms ooze character, thanks to the vaulted ceilings and exposed beams. “On the original plans the ceilings were not open like this,” says Louise. “So we asked for them to be opened up to the A-frame.” At present there is just one bathroom, although a master bedroom en suite has been planned in for the future. The finished house has some

rather impressive eco-credentials, too. Underfloor heating has been used throughout the house, powered, along with the hot water, by a ground-source heat pump. In order to meet Code 3 for Sustainable Homes (which, while now defunct, was required by the local planners at the time of building), they were also required to install a compost bin, space for bicycles and bat and owl boxes, as well as soakaways for the rainwater.

“The house is so economical compared to the old bungalow,” says Louise. “The bungalow cost us around £3,000 a year just for oil, now we only have electricity and that costs just £2,000-£2,500.

“My advice to other self-builders? Don’t be afraid to give your input. I was hesitant at first to interfere, but the builders are not mind readers! They need your input and if you don’t tell them exactly what you want, you won’t get it.”

Despite going over budget – the build ended up costing around £550,000, including interior fittings – Louise and Peter could not be happier with their new home. “I asked Peter whether he would build again, and he said ‘why would I?’” says Louise. Peter sums up how pleased they both are with their new home: “Every time I pull up at the front gate and look at the house, I smile.” **H**





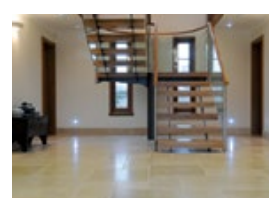
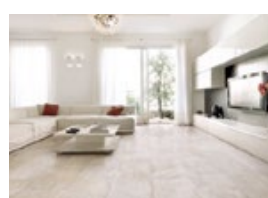
Terzetto

NATURAL STONE TILE IMPORTERS



*Stone and porcelain tiles
from around the world...*

www.terzettostone.co.uk



sales@terzettostone.co.uk

■ YORKSHIRE SHOWROOM ■

Unit 24 Centre Park, Marston Moor
Business Park, near Tockwith YO26 7QF
Tel: 01423 358855

■ CHESHIRE SHOWROOM ■

17 King Street, Knutsford, Cheshire
WA16 6DW
Tel: 01565 755884



HOMES OAK FRAME SELF-BUILD

The Project



Merry Albright
Border Oak

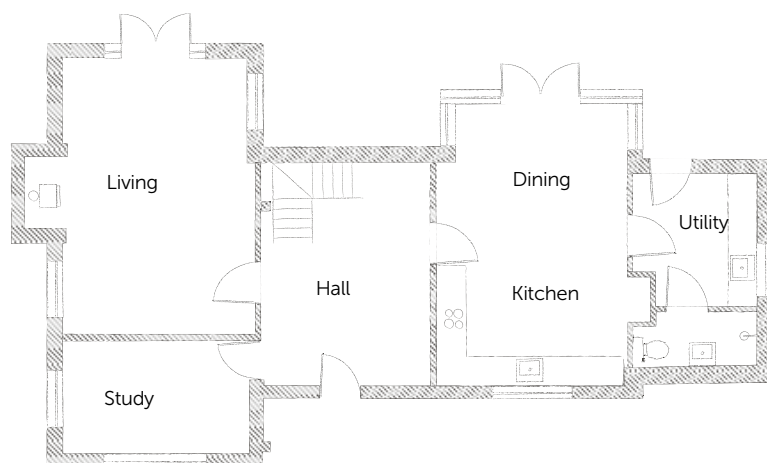
DESIGNER'S VIEW

What I love most about this design is the organic, relaxed ambience. This has been created by using a mixed palette of natural materials such as green oak, brick, glass, weatherboard and lime render — all of which will weather gradually without competing against one another. It is a classic palette that Border Oak has used many times over the past four decades and something we are confident will complement the surrounding landscape.

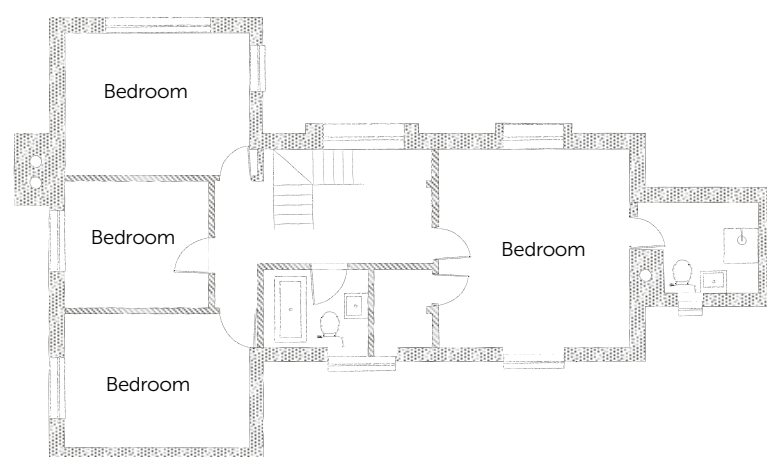
The combination of materials also works well because the design has architectural variation and interest — differing ridge heights, dormer windows, an oak jetty and the open porch, for example. These devices help diminish the volume and size and allow the building to integrate with the plot, but they also provide recession and projection and a distinctive 'informality', which is both easy to live with and pleasing to the eye.

It is always a pleasure to work with clients who prioritise craftsmanship and workmanship in their brief and hopefully this home is an excellent example of our artisan skills, traditional craftsmanship and high specification. Quietly blending modern technologies and construction detailing with incredible craftsmanship and a family-orientated layout that is light and bright was important to our clients and we hope we have achieved this for them. It was a joy to work on this project from the design and planning stage through to the complete build.

Ground Floor



First Floor



SUPPLIERS

Design, structural engineer, quantity surveyor and build Border Oak
.....borderoak.com

Arboricultural tree survey Mark Hinsley
Arboricultural Consultants
.....01202 840819

Building materials Travis Perkins
.....travisperkins.co.uk

Bricks (Flemish Antique) Hoskins Brick Company
.....hoskinsbrick.com

Tiles Heritage Clay Tiles
.....heritagetiles.co.uk

Fireplace Finesse Fireplaces
.....01225 783558

Drive and patio Scotiabuild
.....scotiabuild.com

Woodburning stove Clearview Stoves
.....01584 878100

Fencing supplier New Forest Fencing and Gates
.....023 8073 3442

Kitchen deVOLdevolkitchens.co.uk

Sanitaryware Vitravitraglobal.com

Brassware Crosswater...crosswater.co.uk

Bath Bathroom & Kitchen Academy
...thebathroomandkitchenacademy.co.uk

Shower controls Aqualisa..aqualisa.co.uk

Renewable heating and hot water system Worcester Renewable Energy
.....01684 892121

Code for Sustainable Homes designs and post-construction assessments
Ashmount Consulting Engineers
.....0161 337 4353

Chandelier My Home Lighting
.....01202 835002

Curtains, blinds and poles
Material Matters01420 82759

PROJECT TIMELINE

May 10 First enquiry to New Forest District Council

Dec 10 Planning application submitted, withdrawn on the advice of the planning inspector

Feb 11 Planning resubmitted

May 11 Planning permission granted

Nov 11 Non-material minor amendment approved and work began

Oct 12 Build completed

HOMES CONTEMPORARY SELF-BUILD



PROJECT NOTES

Project:
Contemporary
self-build

Location:
Cornwall

Build time: Mar
2013 – Feb 2014

Size: 350m²

Plot cost:
£1.75million

Build cost:
£1million
(£2,857/m²)

Value: £3million+

The Lookout

Colin Price and Sharon Toye's new Cornish cliff-top home was inspired by the site's dramatic coastal views

Words: Debbie Jeffery Photography: Ambience Images

HOMES CONTEMPORARY SELF-BUILD

THE QUICK READ

➤ Colin Price purchased the seaside house in Cornwall as a surprise birthday present for his wife Sharon Toye

➤ The couple considered extending and renovating the existing house but soon concluded that it made more sense to demolish the property and replace it with a new house

➤ Their architect designed a striking contemporary home with large expanses of glazing and, despite the tight and rocky ground conditions, the project was finished on time and within budget



Above and left: Front Elevation

The windowless front elevation of the house appears single storey and gives little clue as to what lies beyond the entrance door — including those stunning views

In the village of Porthcothan Bay in North Cornwall, on the UK's southernmost tip, stands an innovative new house that was designed around the site's remarkable position on the coastline, overlooking Will's Rock and the sea. Situated between Newquay and Padstow, in a designated Area of Outstanding Natural Beauty, the contemporary two storey house replaces a smaller, more traditional property.

"We were determined to find a house on a particular road we had fallen in love with, and waited for a full two years until one became available," explains Colin Price. "It was actually a surprise present for my wife, so intrigue was high, and we were delighted to bag it."

Building a Replacement

At first Colin and Sharon considered extending and renovating the existing 1960s property, but soon realised it would be more practical to demolish the house and build a replacement, which would take full advantage of the spectacular views.

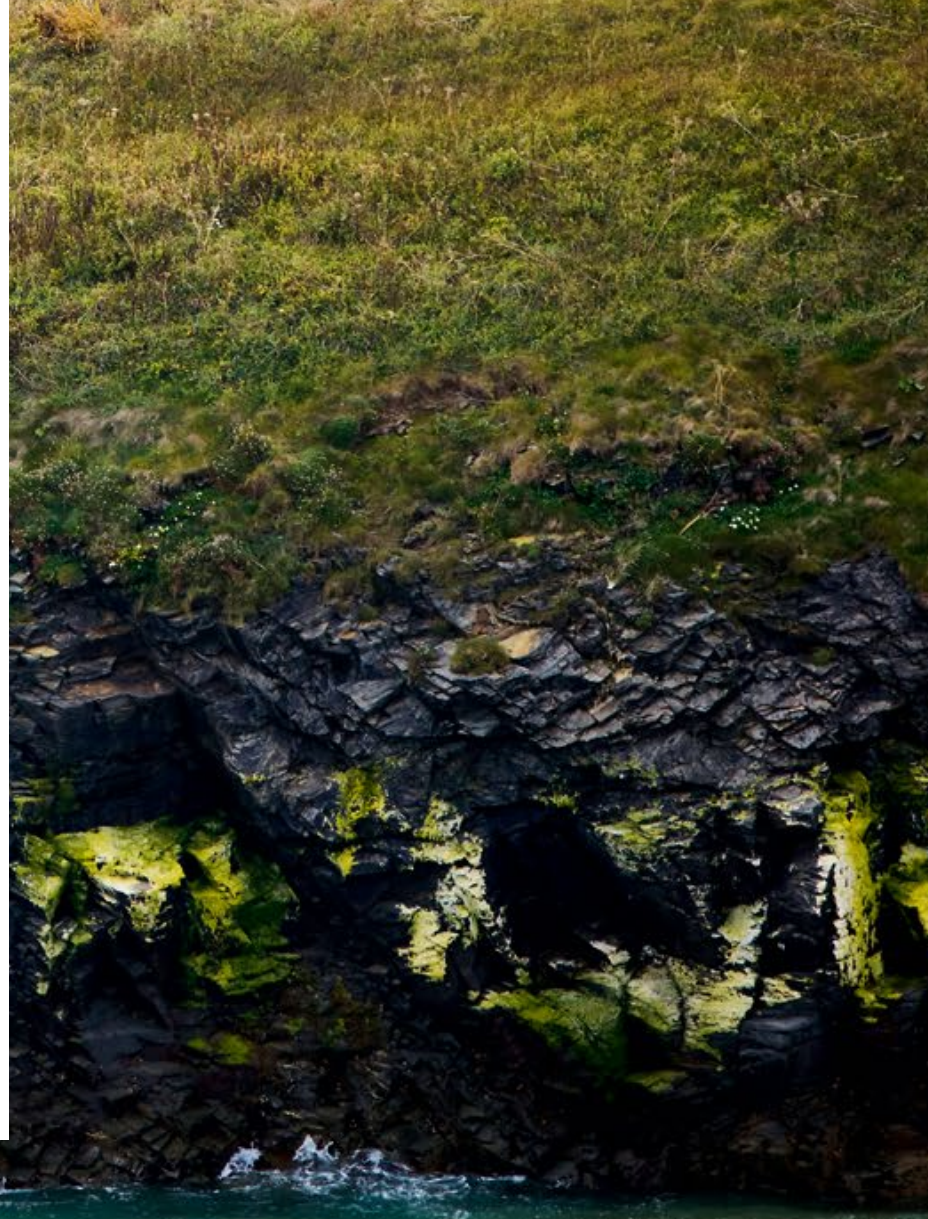
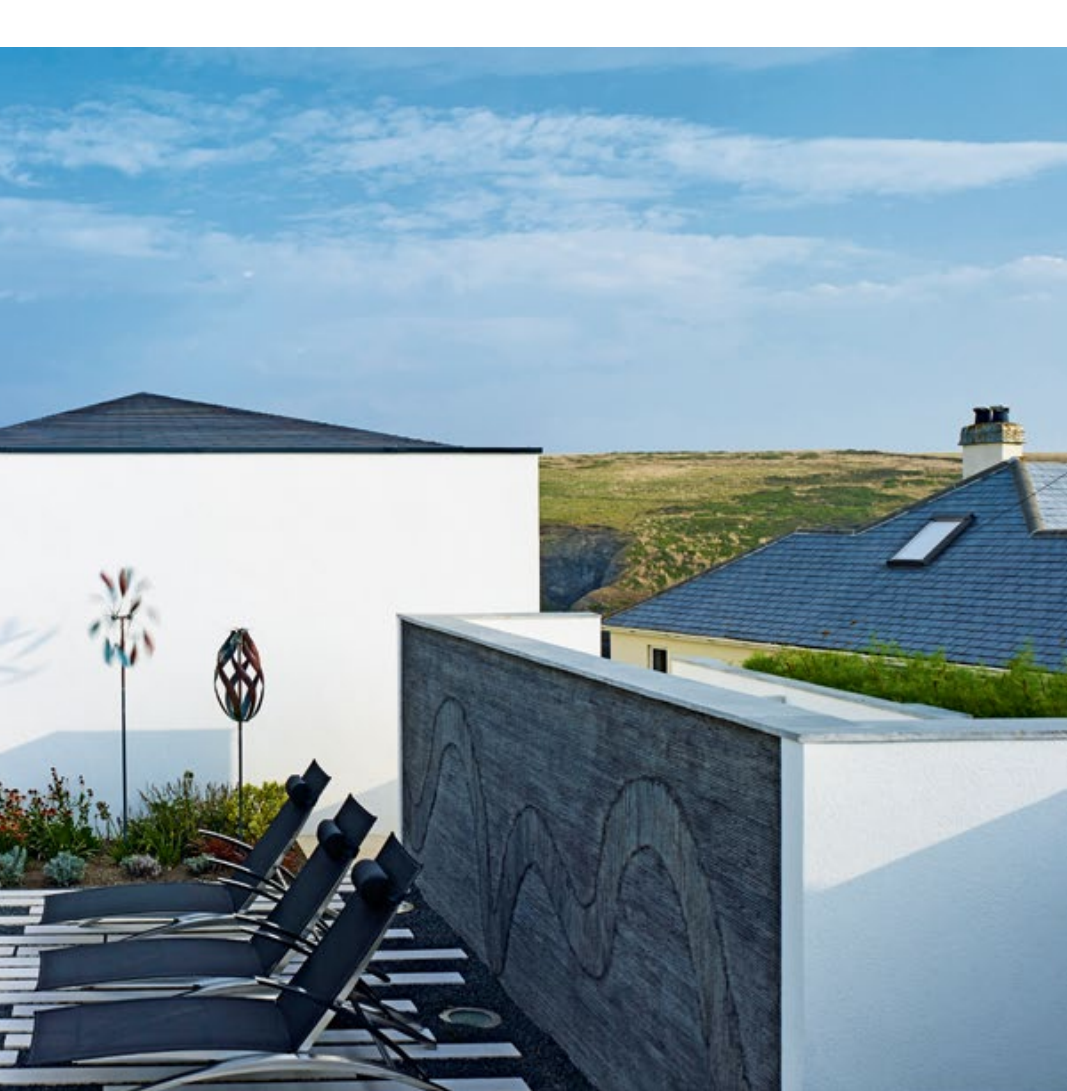


Right: Rear Elevation

Inspired by two sets of binoculars, the north-facing rear of the rendered blockwork house has been almost entirely glazed, and is angled to make the most of the sun and sea views



HOMES CONTEMPORARY SELF-BUILD





Kitchen-Diner

The open plan kitchen features high-gloss base cabinets and burr walnut wall cupboards, white Corian worktops and painted glass splashbacks. A walk-in fridge was also requested by the family. The dining space opens out on to a patio with breathtaking views

“The plot is in such a beautiful location it was critical that the design was sensitive to the environment, but we also wanted a contemporary statement,” Colin explains. “This is where the architects worked their magic.”

London-based practice Lacey & Saltykov Architects was appointed, and worked with Colin and Sharon to design a house that would suit the couple and their children, Cameron and Jodie. “My dad is a retired architect, who had also worked with the family on previous homes,” says Tom Lacey.

A Site-Specific Design

The shape of the plot dictated a long, tapered structure, which broadens out towards the sea. Responding to the site’s topography, the new house accommodates the slope of the land and is arranged in two distinct zones. All bedrooms are located in a rectangular block, which captures the morning sun from the east, and living spaces are situated in a triangular block arranged over two floors, with the sitting room above the dining area.

The main entrance is reached through a gap between these living and bedroom blocks, where a glimpse of sea and Will’s Rock to one side of an angled wall gives a hint of what can be seen from inside. The rear of the house is largely given over to glass doors and windows, which provide spectacular panoramic views of the surrounding scenery.

The new house is more than double the size of the original three-bed property which stood on the plot, and the first planning application was rejected following objections to a circular roof over the living room. This was changed to a more conventional pitched design, which was felt to be in keeping with other buildings along the coastline, and following meetings with neighbours, consent was finally given for the second scheme. ➡



HOMES CONTEMPORARY SELF-BUILD

Outdoor Space

The massive amount of glazing to the rear of the property ensures the stunning views are fully visible from the main living areas





THE FINEST TRADITIONAL
HANDMADE, WIRECUT & PRESSED BRICKS
FOR RESTORATION, RENOVATION
AND NEW BUILD



IMPERIAL BRICKS • METRIC BRICKS
PAVERS • SPECIALS • BRICKS SLIPS
BRICK MATCHING • BESPOKE BLENDS

Call us to discuss your project or
visit our website to browse our complete range

t 01952 750 816

e sales@imperialbricks.co.uk

@Imperial_Bricks ImperialHandmadeBricks

www.imperialbricks.co.uk



Vacutherm
vacuum Insulation Panels

Floor Solution.....Saving Space.....



Ultra Thin, High Performance Insulation
Quick and Easy to Install

Thicknesses from 10 to 50mm

016973 20483 - office@vacutherm.co.uk

www.vacutherm.co.uk



Discover timelessly elegant products
that will transform your home.

**Homebuilding
& Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 850



Specialists in bespoke windows, doors, orangeries, cutting edge
glass, timber and hybrid products.



t: 0333 323 9601

w: www.totali.uk.com

Factory & Showroom
Pontefract, West Yorkshire

e: info@totali.uk.com

HOMES CONTEMPORARY-STYLE SELF-BUILD



The Living Room

Large wall-to-wall full-height glazing overlooks sea views in the first floor sitting room (accessed via a centrally placed stairwell, right), where engineered oak flooring has been laid over underfloor heating and clads the fireplace wall

Doubling the Size

Colin had seen a house in Cornwall that had been built by Gordon Derry & Sons, who – following a tender process – was employed as main contractor for his own project. Building such a large property on the narrow, sloping site proved challenging, especially as access was along a lane and there was little space for storing materials on site.

“The build was tricky and it would have been something of a disaster if we’d damaged the cliff while digging down, but our builders managed it with great skill, and the project was finished on time even considering we experienced one of the worst winters on record,” says Colin.

Once the existing property had been demolished, the site was cleared and the rock excavated by specialist groundworkers for foundations. Blockwork walls were then built up on the concrete slab, with a beam and block first floor and a timber roof structure.

The external walls have been finished in insulated render, and the windows are made from thermally efficient aluminium — ensuring that the structure is highly insulated and energy efficient. Underfloor heating and a mechanical ventilation and heat recovery system were installed, with energy usage further reduced by the use of high-performance heat pumps to provide heating and hot water. ➡





Above: Master Bedroom

The bed in the master bedroom has been placed facing the wall of glass, which overlooks Will's Rock and the sea. A sunken bath (shown centre) is positioned directly in front of a window looking out to sea

The Finished Home

Living in Bath during the project meant that site visits were infrequent for Colin and Sharon, who relied on their builder's weekly emails and photographs for updates. The couple, who are both management consultants, have renovated and extended a number of properties, and this experience proved invaluable.

They chose to employ the same interior designer they had worked with on previous homes, who suggested a simple scheme using natural materials such as timber and stone. This ensures that the focus remains firmly on the view, with major pieces of furniture positioned facing out to sea.

The result is a tranquil retreat with stunning views, which offers the family everything they need. "We love the house and every time we arrive stress melts away," concludes Colin. "It was definitely worth the wait to find this site." 





Above and Far Left: Bathrooms

In keeping with the rest of the home, the bathrooms are contemporary and feature a subtle combination of dark slate and natural stone. The sanitaryware is from CP Hart

Left: Study

A study area on the first floor takes full advantage of the magnificent sea views

QUALITY BATHROOMS WITHOUT SPLASHING OUT



VICTORIANPLUMBING.CO.UK



INFO@VICTORIANPLUMBING.CO.UK

TRUSTPILOT 

12,000 HAPPY CUSTOMERS



DISCOVER MORE ONLINE



HOMES CONTEMPORARY-STYLE SELF-BUILD

The Project



**Tom Lacey and
Andrei Saltykov**
Architects

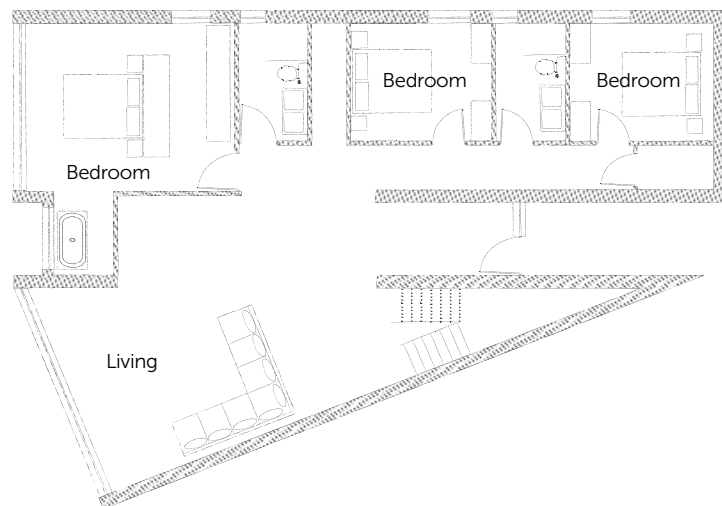
ARCHITECTS' VIEW

Creating a house that was both striking and worthy of the stunning setting was a real challenge, but the site gave us all the inspiration we needed on this project, and it was this that we kept coming back to as the design evolved.

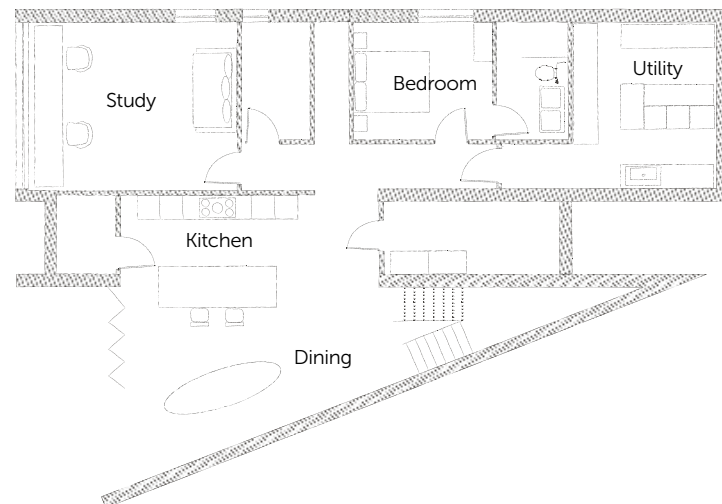
The starting point was the idea of two pairs of binoculars, placed one on top of the other, so that the four lenses of the binoculars were angled individually to capture uninterrupted views towards Will's Rock and out to sea.

We were limited to a traditional palette of materials, which we reinterpreted for a crisp, clean finish. The house has rendered walls and frameless double-glazed glass units. Built from engineered slate, the low-pitched roof adds extra volume to the living space.

Ground Floor



Lower Ground Floor



SUPPLIERS

Architect Lacey & Saltykov
Architects.....laceysaltykov.com
Structural engineer Expedition
Engineering.....expedition.uk.com
Services engineer Arup.....arup.com
Main contractor Gordon Derry & Sons
.....01208 812 975
Interior designer Amanda Burgess-Webb
.....abw-design.com
Landscape architect Jano Williams Garden
Design.....janowilliams.com
Architectural glass Trombe.....trombe.co.uk
Bi-folding doors Camel Group
.....camelglass.co.uk
Render system Knauf Marmorit UK
.....marmorit.co.uk
Roof tiles Nu-Lok Roofing Systems
.....nu-lokusa.com
Engineered oak floors and wall cladding
JFJ Joinery.....jffwoodflooring.co.uk
Architectural lighting
Occhio.....occhio.de
Lighting Artemideartemide.com
Fireplace Kernow Fires
.....kernowfires.co.uk
Kitchen Roundhouse Design
.....roundhousedesign.co.uk
Quatreau boiling/chiller tap Pure H2O
.....pureh2o.co.uk
Walk-in fridge Foster Coldstores
.....fostercoldstores.com
Sanitaryware CP Hartcphart.co.uk
Showers Hansgrohe.....hansgrohe.co.uk
Ocean low-line bath Bette.....bette.de

PROJECT TIMELINE

Jul 11 Plot purchased
Jan 12 First planning application
submitted
Jan 13 Planning approval granted
Mar 13 Start on site
May 13 Foundations completed
Aug 13 Glazing installed
Feb 14 House occupied
May 14 Garden and garage completed



HOMES CONTEMPORARY-STYLE SELF-BUILD

Home Grown

Christian Bonard's new larch-clad, steel-frame home – which replaces a dilapidated bungalow – is a welcome addition to its wooded site in Surrey

Words: **Daisy Jeffery** Photography: **Jeremy Phillips c/o FMB**



PROJECT NOTES

Project: Self-build

Location: Surrey

Build time: Mar
2013 – July 2013

Size: 175m²

Plot cost:
£425,000

Build cost:
£250,000
(£1,428/m²)

Value:
£1million

HOMES CONTEMPORARY-STYLE SELF-BUILD

THE QUICK READ

➤ Christian Bonard, along with the help of his architect Simon Skeffington of Architecturall, has replaced a run-down bungalow with a contemporary single storey home

➤ Blending in with the surrounding woodland, the new dwelling has been clad in larch which will eventually weather to a silver grey. It features a sedum roof too

➤ The project was constructed from steel frame with Porotherm clay building blocks, providing a quick build time. The house was also built to a tight budget of £250,000 without compromising on high-quality materials and finishes

➤ The project was a finalist in the Federation of Master Builders (FMB) Awards in 2015

Exterior Façade

Clad in larch from Vastern Timber, the vertical planks allow the single storey property to appear taller in size and blend in with the surrounding woodland. Tall picture windows and wide glazed openings help break up the façade

With many projects, what starts off as a simple idea can quickly evolve into something you'd never even dreamed of achieving. This was the case for Christian Bonard, who with the help of his architect Simon Skeffington of Architecturall, has built a beautiful larch-clad single storey home on a wooded site in Surrey — even though the original plan was to extend and renovate the existing run-down bungalow.

“We found the property by pure luck,” explains Christian. “My partner and I were looking to move out of London to the countryside but still be within a commutable distance. I’m from Surrey originally and we spent a lot of weekends here, so it made sense to move back. We came across this bungalow which is only a 30-minute train journey to Waterloo, which made it perfect. The old bungalow was very drab and had been lived in by a recluse who’d left it to ruin – there were even brambles growing on the inside, and it smelt of damp – and we knew we wanted to tidy it up and make changes.”

The Design Concept

“We’d never dreamt of being able to afford to demolish and rebuild the property, or achieve anything like we’ve got today, and so assumed that renovating and extending the bungalow was the only option,” explains Christian. “We were introduced to Simon through a family friend and discussed extending into the roof space. However, once we realised the roof was in a poor condition and would need replacing, with the extent of the work involved, Simon came back ➤



1ST FOLDING SLIDING DOORS LTD
www.1stfoldingslidingdoors.co.uk



- High Quality Folding Sliding Doors
- British, German & Belgium Designed
- A Fantastic Variety of Finishes & Colours
- Virtually Maintenance Free
- State-of-the-Art Security Features
- Full Fitting Available
- Free Survey & Design Advice

LIGHT SPACE STYLE
FOLDING SLIDING DOORS

1ST FOLDING SLIDING DOORS



Unit 26/3 Silicon Business Centre
26 Wadsworth Road
Perivale, Greenford
Middlesex UB6 7JZ

Tel: 0208 997 2448

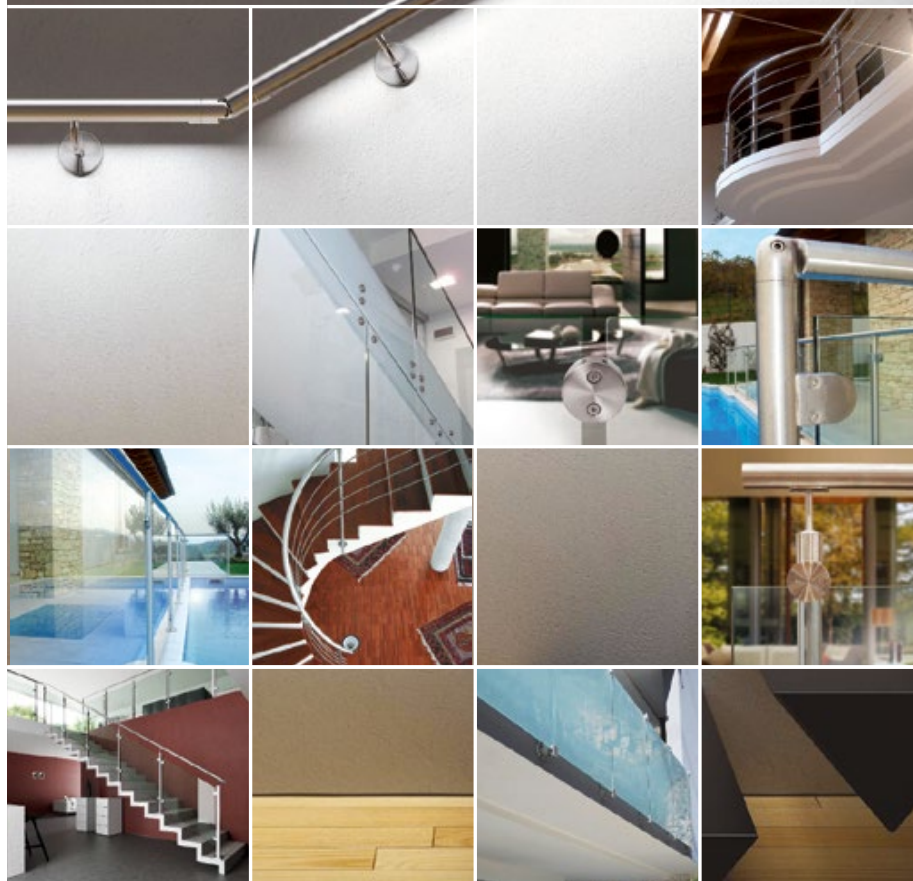
Fax: 0208 997 0611

email: foldingslidingdoors@btinternet.com

aalco®

High-quality Stainless Steel Handrail Systems for every home

Homebuilding & Renovating Show
SANDOWN PARK STAND 316
25-26 JUNE 2016



Aalco markets contemporary stainless steel handrail systems from Italy's leading manufacturer, IAM Design. They are innovative, design-led railing systems and glass balustrades manufactured and tested to the highest standards.

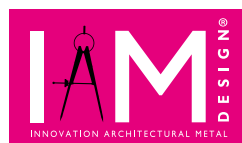
The products can be used as supports and handrails on steps and stairways, and as safety barriers for balconies and between floor levels.

The Aalco stainless steel railing systems and glass balustrades are already installed in homes, designer shops, hotels and restaurants. There are installations in commercial offices and public buildings, museums and stadia.

Working with expert installers, Aalco offers an unrivalled service to the homeowner, from site surveys and design proposals to the manufacture of bespoke products for 'statement' installations.

**For an initial, no-obligation discussion, call....
Ian Finney on 07557 288700**

www.aalco.co.uk/products/handrail.aspx



Aalco - the UK's sole distributor of IAM Design Handrail Systems



FLUE KITS

We design & supply your flue

You install it



Your fire works brilliantly

01432 839166
www.flue-kits.co.uk



to us with some designs for a new house and convinced us that we would be able to afford it and we'd get planning," says Christian.

"The design concept centred around two larch-clad boxes – one for living and one for the sleeping quarters – with simple openings around the boxes that opened out into the heathland," continues Simon, who designed, project managed and built the house. "We then focused on choosing materials that matched the surrounding woodland and so we went for larch timber cladding and grey aluminium frames to the glazing. When the timber silvers, the house will blend in nicely."

Living in the property prior to the rebuild helped shape the brief, too. "We had lived in the old bungalow for a while before work started and that really allowed us time to consider aspects of the new house such as the layout," says Christian. "The kitchen, for instance, was originally at the back, but living there for a while we realised just how much time we spent in there and decided we'd like to move this area of the home in order to make the most of the views to the front and sides of the plot."

With a design in place, Christian took Simon's plans round to each of the neighbours well in advance of applying for planning permission and they were incredibly supportive of the project. "They felt it would really enhance the area and was a big improvement on the previous bungalow," says Christian.

The project was submitted for planning permission; however, it kept going back to the same planning officer who found issues he didn't like with the scheme. Eventually, after several tweaks to the design, the project ended up going to a different planning officer and the project was given approval. Work started almost immediately after, with Christian living in a caravan on site during the build.

A Quick Build

"The house was constructed using a steel frame with Porotherm clay building blocks which provide a quick assembly solution,"



explains Simon. "We dug the foundations in week one, week two the Porotherm went up, week three the roof joists were assembled, week four windows were in and by week five we were watertight. The remaining weeks were just fitting out, snagging, etc."

The project ended up taking only four months on site, thanks to the quick build system, good communication between homeowner and architect, and careful planning prior to works commencing.

Quality on a Budget

The project was a real test of building to a budget – it ended up costing about £1,428/m² – while still achieving high-quality finishes and materials. For Christian, the main elements to factor in to the brief were the introduction of light and sustainability. "We have a large footprint for a single storey house, which meant that there was a lack of light in the centre of the plan. Simon designed a structural glazed rooflight in the centre of the house which completely changed the property; it really brings the outside in and allows you to live with the seasons. At night you can see the stars and it really makes you feel like you're somewhere special," says Christian. "Simon managed to save money on the structural glazing, too, by designing it and sourcing the glazing, and even ➔

HOMES CONTEMPORARY-STYLE SELF-BUILD



Above: Kitchen

In keeping with the light, bright interiors, white gloss overhead units and worktops sit above the walnut kitchen from James James Kitchens — the colour of which references the exterior cladding

Left: Living Area

In the open plan living space, a Dik Geurts woodburning stove acts as a main focal point and provides additional warmth to the property when required, as well as creating a cosy atmosphere. Oak flooring from Wood and Stone Flooring has been laid throughout over the underfloor heating





Silicone Coloured Renders



Transforming facades with silicone technology

Water repellent | Low maintenance | Allows structure to breathe | Natural looking finish | Extensive colour range



www.K-Rend.co.uk

HOMES CONTEMPORARY-STYLE SELF-BUILD



installing it himself instead of taking up any of the quotes from companies that were going to charge around £30,000.

Given Christian's job as a sustainability consultant, building an energy-efficient home was a top priority. "We initially wanted to install a ground-source heat pump but this proved too expensive so we opted for an air-source heat pump that serves the hot water and underfloor heating," he says. The energy rating of the original property was F — the new house has an A rating. The electrical bills have plummeted, too, and the heating is rarely on. The wood-burning stove provides additional heat if needed and the underfloor heating works well to heat the living spaces with the high ceilings.

"Now there are 3.5m-high ceilings in the living space, which bring a different feel to this area," Christian adds. "The lighting and woodburning stove create atmosphere and stop it feeling like we're living in an art gallery. The three bedrooms are now situated in the lower box to the rear, which doesn't have such high ceilings as the living quarters and therefore feels more cosy.

"We had an initial budget of around £200,000 but we didn't want to compromise on certain elements. We took Simon's advice to spend money on high-quality items that we knew we wouldn't look to change at a later date, so we spent money on things like the kitchen. We also spent more on the landscaping, but we made these decisions consciously in order to get what we really wanted.

We definitely shopped around, but we've been left with a house we love," Christian says. "The feeling of space is brilliant. We've had instances where it's been raining outside and have easily accommodated 30 guests in the living space for parties — we've had so many good times in the house with friends. Being able to open up the 8m glazed doors and move out on to the decking outside is great in summer, too.

"I also love the larch cladding. Considering it was the one aspect I was worried about to start with, I am so pleased with it and it really helps the house to camouflage with the woodland setting." ➡

Light-filled Accommodation

To meet Christian's brief for plenty of light, large expanses of glass from View Glazing puncture the walls, along with a large rooflight (right of shot) in the centre of the space, which allows plenty of natural light to enter the home. Recessed low lighting around room edges adds a soft glow in the evenings

HIGH PERFORMANCE TIMBER WINDOWS & DOORS



Whether you are upgrading original frames, restoring a home to its former glory or embarking on a new build project, Dale timber casement windows, sash windows and doors will add value and performance.

Combining British design with the world's leading window technologies, the result is a range of engineered timber windows and doors packed with innovation but entirely traditional in appearance.



www.dalewindows.co.uk

Call 0845 652 7399

E: sales@dalewindows.co.uk



HOMES CONTEMPORARY-STYLE SELF-BUILD

The Project



Simon Skeffington
Architect

ARCHITECT'S VIEW

The design of the house is centred around two larch-clad boxes – one for living and one for sleeping – with simple openings around both boxes that lead out to the outdoors.

In order to introduce daylight – a top priority for Christian – the solution was a large, frameless glass roof structure at the heart of the plan. Used to orientate the arrangement of spaces and circulation patterns within the house, the frameless roof structure offers wow-factor and also establishes a link with the outdoors – perfect for gazing at the starry night sky.

The building itself was quick and easy to construct, with a prefabricated steel frame structure and Porotherm building blocks. Inside, the property boasts three bedrooms plus an ancillary room used as a TV room in order to move the television away from the main open plan living/kitchen/dining space. The high ceilings and glazing add to the sense of volume and space – it was a lovely project to work on.



SUPPLIERS

- Architect and builder** Architecturall.....
.....architecturall.co.uk; 020 8244 1673
- Porotherm blocks** Wienerberger
.....wienerberger.co.uk
- Windows and doors** View Glazing
.....020 8244 1673
- Larch cladding** Vastern Timber
.....01793 853281
- Steel frame** Intersteelsintersteels.com
- Air-source heat pump** Terra Therma
.....terratherma.co.uk
- Woodburning stove** Dik Geurts
.....dikgeurts.uk
- Kitchen** James James Kitchens
.....jamesjameskitchens.com
- Oak flooring** Wood and Stone Flooring
.....woodandstone.co.uk
- Bathroom furniture** Splash Direct
.....splashdirect.com

SELECTED COSTS

- Groundworks and demolition.....£23,000
- Drainage and utilities.....£5,000
- Steel frame and superstructure...£32,000
- Glazing.....£26,000
- Roof.....£22,000
- External cladding.....£19,000
- Internal fit-out.....£30,000
- Bathrooms.....£10,000
- Kitchen.....£20,000
- Services and heat pump.....£29,000
- Woodburning stove.....£5,000
- Landscape.....£18,000
- Design and build fees.....£8,000

PROJECT TIMELINE

- Mar 12** Planning application submitted
- Feb 13** Planning permission approved
- Feb 13** Work started on site
- Mar 13** Superstructure/roof completed
- Apr 13** Built to watertight stage
- Mar 13** House occupied
- Jun 13** First and second fix completed
- Jul 13** House completed

Recommended books for self-builders

MAY MADNESS
BUY ALL THREE FOR JUST £45!
Saving an amazing **£30**

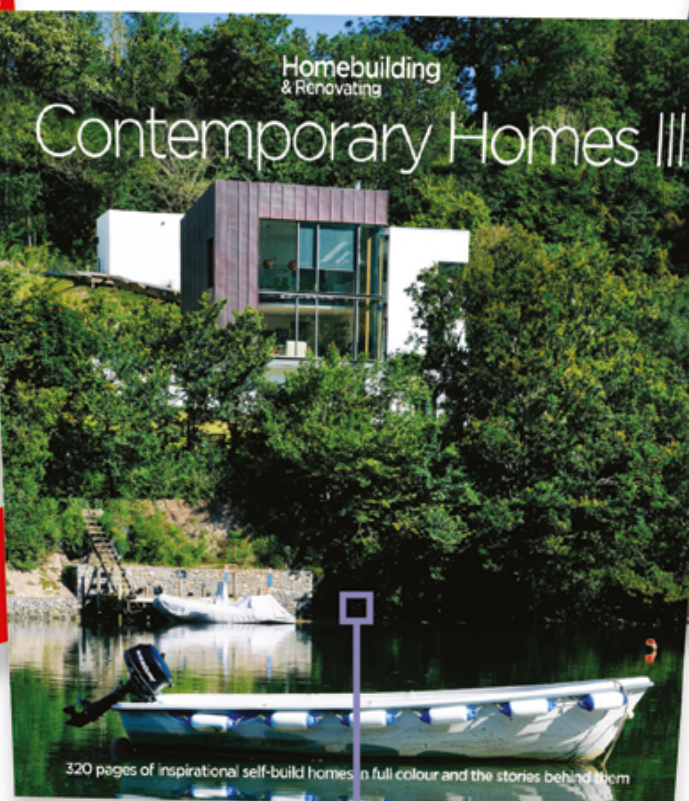


THE HOUSEBUILDER'S BIBLE ELEVEN

The UK's best-selling building book. Covers everything you need to know including managing a build, buying and using materials, and finding and employing the right people. Rating: ★★★★★

"Your book is great - it demystifies building and has probably saved me thousands"

rrp £25.00 H&R price £17.00



CONTEMPORARY HOMES III

320 pages of inspirational self-build homes in full colour in a hardback edition that's both beautiful and practical. With hundreds of full colour photographs, full details of the builds, costs and supplier's details. This book is a must-have.

Rating: ★★★★★

Our third big collection of Contemporary Homes. Now in a hardback edition!

rrp £25.00 H&R price £20.00



OAK FRAME HOMES

Brand new! Published this month. This collection of oak frame homes is truly amazing. 312 pages of case studies in full colour with details of the build. If you love the idea of an oak frame home then this is definitely the book for you. Rating: ★★★★★

This hardback is the ultimate if you're interested in oak frame homes

rrp £25.00 H&R price £20.00

Buy all three books and pay just £45.00
Save an amazing £30!

All the best books available through Homebuilding & Renovating at
www.homebuildingshop.co.uk

Offer ends June 30, 2016 and is subject to availability. Savings cannot be used in conjunction with any other offer or for any other product



HOMES CONTEMPORARY-STYLE SELF-BUILD

Building with Porotherm



Above: Clay Blocks

Wienerberger's Porotherm clay block system offers a rapid build time, thanks to its virtually dry construction method — the interlocking design means no mortar is required on vertical joints (wienerberger.co.uk)

Offering a fast, effective and virtually dry construction solution, building in Porotherm clay blocks was the perfect option for Christian Bonard's new home, according to architect Simon Skeffington of Architectural. "We discovered Porotherm from Wienerberger's own website and it is a very good product to work with due to its fast construction time — there's no limit to how many courses can be built in a day, and it doesn't necessarily require a bricklayer, which saves you a considerable amount of money on labour costs," says Simon. "While Porotherm can be used in load-bearing and non load-bearing applications, we adopted a monolithic wall construction due to the steel frame. We also liked the fact that the product is sustainable, being made from 100 per cent clay."

What is Porotherm?

"Our Porotherm clay block walling system is a modern method of construction with the reassuringly traditional values of clay," says Richard Brown of Wienerberger. "It's extremely fast, safe and simple to use, immensely strong and environmentally friendly."

"The heart of the system (and the secret of its speed and efficiency) is the precision-engineered clay block — the unique interlocking design of which rules out the need for mortar in the vertical joints, and consistent manufacturing quality that allows for true 1mm bed joints," he says. "With its lean laying process and rapid daily output, Porotherm brings cost and time-saving benefits throughout the build while its thermal and acoustic efficiencies bring further advantages for decades to follow — the design life for a Porotherm wall is over 150 years." 

ARCHITECT Q & A

WOODLAND HIDEAWAY

WORDS: NATASHA BRINSMEAD
PHOTOGRAPHY: JULIAN WINSLOW





Architect Rory Harmer (tateharmer.com) talks to *Homebuilding & Renovating* about a new home he has designed in Yorkshire, full of clever (and fun) design features and perfectly suited to its wooded site.

HB&R: What was on the site prior to the build?

Rory Harmer: The site was a private garden that belonged to the adjacent property. The previous owner had sold the site with planning permission for a new build home (which looked atrocious). It was a very difficult site to develop, due to the number of mature trees across the site and the steep slope that limited access and services.

What was your brief for the project?

The brief was to create a very low-energy, four-bed, sustainable home that would be hardwearing to the elements. The site is north facing and very shaded because of the surrounding woodland, so we tried to create a house that would take advantage of as much natural light as possible, with the main living area and outdoor garden/deck area raised up on the first floor. The sleeping accommodation was designed to be solid and robust to withstand the harsh wet conditions.

The advantage of moving the main living space to the first floor is that it gives the client the feeling of being in a giant tree-house, up in the tree canopy. Part of the brief was to include an element of fun. This is extended to the big slide (made from stainless steel) that connects the first floor external deck area to the ground floor garden — it's a slide that even adults can use!

How was the house constructed?

The house is a super-insulated timber frame construction with steel to support the large first floor roof. This enabled an efficient and quick erection period and minimised too many wet trades on ➡

Private Retreat

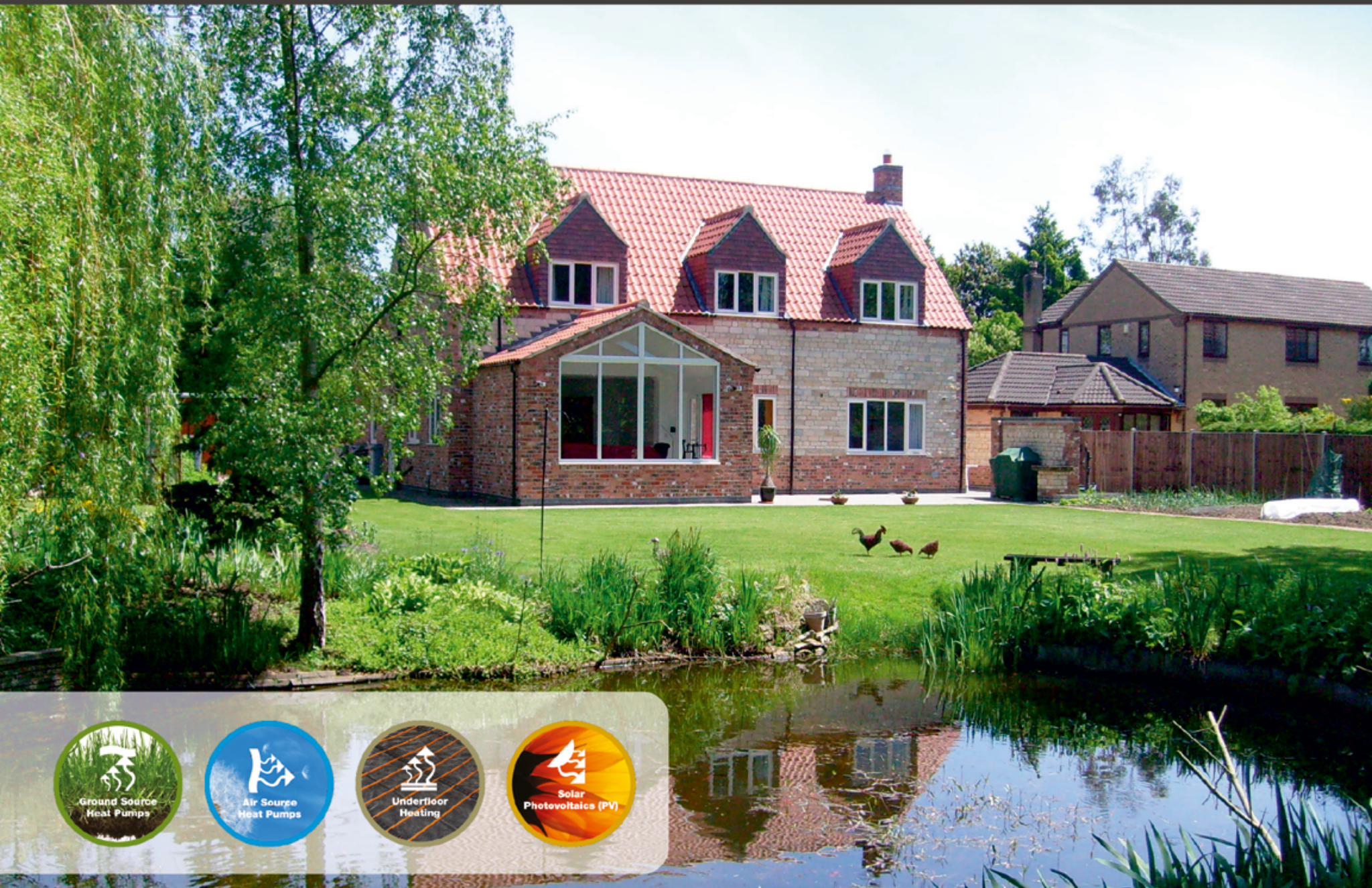
The main challenge for this project was getting plenty of light into the interiors while still blending in with the woodland setting.

The combination of larch cladding, natural stone and plenty of glazing meets the needs of the site perfectly.

A stainless steel slide connects the first floor deck (above) to the garden on the ground floor (right)



SUPERIOR PROPERTIES DESERVE SUPERIOR HEATING SYSTEMS



If you're looking for a heating solution which delivers constant heat and hot water, great savings AND an ongoing revenue stream, then a **Heat Pump** from **Ice Energy Technologies** is exactly what you need.

By harnessing stored solar energy in the ground or the air around us, you can avoid volatile energy prices and be rewarded for it thanks to tax-free, index-linked payments which are guaranteed for seven years.

Efficient, reliable and suitable for both new build or renovation projects, our award-winning range of ground and air source heat pumps are also the ideal partner for underfloor heating systems, delivering greater efficiency and a level of comfort you've never experienced before.

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





First Floor Living Areas

The kitchen-diner is located on the first floor to benefit from more natural light — sliding doors open out on to a decked terrace area that has a distinct treehouse feel to it. The triple-glazed windows are from Internorm

the external fabric. To protect the timber frame, we chose a local robust York stone cladding that would be extremely hardwearing and blend in with the local vernacular. The first floor is clad in a lightweight larch cladding that will weather in time and blend in with the tree foliage. The result is a simple but natural material palette, sympathetic to the Yorkshire moors.

Were there any restrictions on the site?

The main restrictions were the trees. The entire site is covered by tree root protection areas and the canopy of some of the mature trees prevented us from building too high (the flat roof has a single-ply membrane). Working with the engineers and arboriculturalists, we created a floorplan that managed to avoid many of the large tree root areas and minimised the impact of any undue loads to the surrounding roots. This floorplan also created a first floor deck and living area that would take advantage of the gaps in the tree canopies so that plenty of natural sunlight would stream into the house.

How long did the build take and how much did it cost?

It took approximately 32 weeks and cost £385,000. The finished house is 210m².

What is the layout inside like?

The ground floor is separated with bedrooms and service areas at the rear of the property. The first floor is a big open plan living/dining/kitchen area with very high vaulted ceilings. 





With the rising refinement in the Self-Build and Refurbishment sector, Sahtas range of bricks, tiles and clay pavements offer an unparalleled level of craftsmanship, quality and individuality. In today's 'One size fits all' marketplace, our commitment to being independent enables us to offer a genuine and authentic handmade product at affordable prices.

Our success is based on shunning mass production and remaining faithful to the time honoured methods of making a truly distinctive product. We still use the traditional Hoffman kilns, in place of the contemporary gas ovens favoured by other manufacturers, which contribute towards producing the mature seasoned appearance of our bricks and tiles. This is merely one reason why our competitors can only aspire to replicate our bricks and tiles.

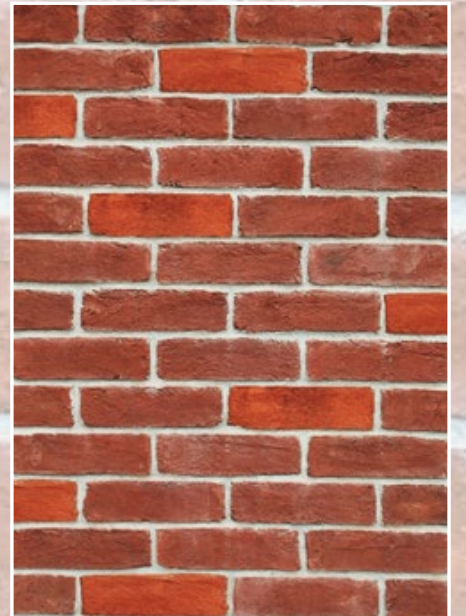
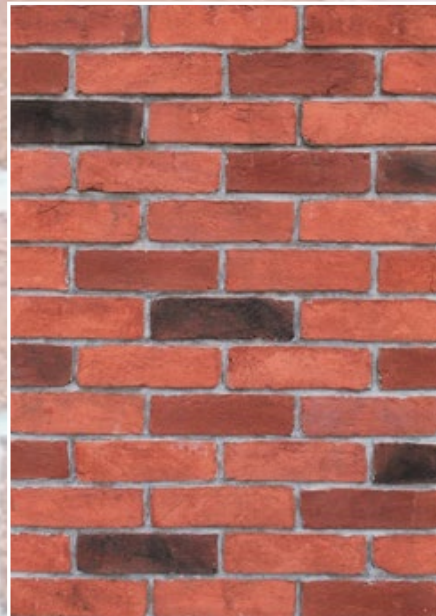
All of our products are available in a wide range of colourways – each having its own individual shade, with variations in character. This uniqueness is synonymous with handmade products and secures its continued position as a preferred choice, not only with Self-builders and Developers, but Local Authority Building Control, Conservation & Heritage bodies too. It's this exceptional standard of traditional craftsmanship, which will unquestionably differentiate your home as a premium product, ensuring its admiration from onlookers and visitors alike.

Should you decide the only products for you are Sahtas, we can supply in quantities to suit a small garden wall, right up to a large mansion and everything in between.

Why not visit our website for a more comprehensive and detailed overview:

www.sahtas.co.uk

Call: 01908 311411 Email: sahtasuk@sahtas.com



ROBBENS SYSTEMS®

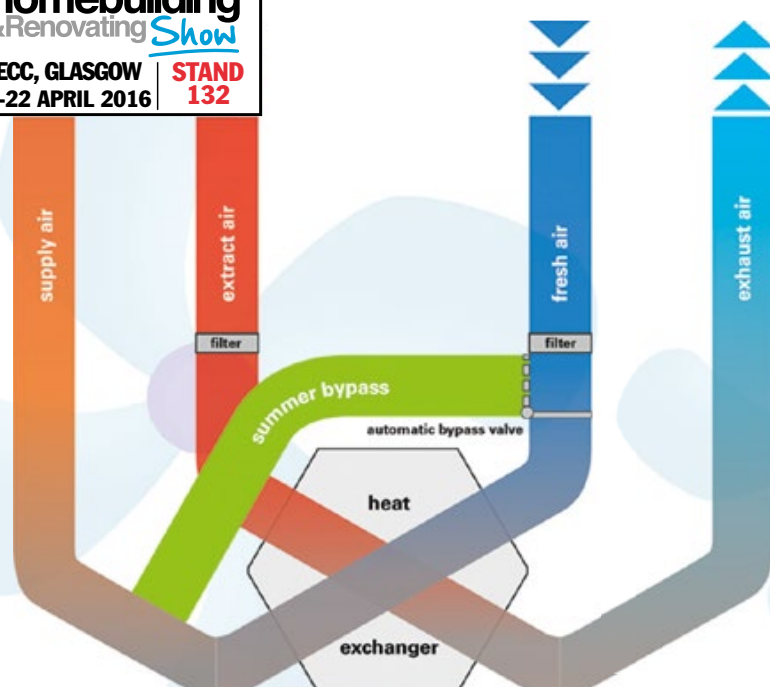
is a part of

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

**Homebuilding
&Renovating Show**
SECC, GLASGOW **STAND
21-22 APRIL 2016 132**



FREE QUOTE

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

underfloorheating.co.uk



SELFBUILD
& CONTRACT FLOORS LTD



Underfloor Heating & Flowing Screed On-time Right-first-time

We specialise in a wide range of projects including:

- Self Builds
- New Builds
- Renovation Projects
- Barn Conversions
- Extensions
- Basement Conversions

Visit: www.selfbuildfloors.co.uk
Email: info@selfbuildfloors.co.uk
Phone: 0114 231 5937



STUDIO4 - ARCHITECTURE + DESIGN



NEED MORE SPACE AT HOME?
LET US FIND IT FOR YOU!
CALL NOW TO BOOK YOUR FREE
CONSULTATION ON 01423 226 333

WWW.STUDIO4.CO.UK

Homebuilding
&Renovating

THE SOURCEBOOK

The ultimate directory to help you locate suppliers for all your self-build and renovation needs.

FEATURED ADVERTISER

LUXURIOUS LIVING
CONTEMPORARY SHADING, STYLISH PRACTICALITY

Battery operated
No wiring required

Choose
ONE TOUCH™ MOTORISED BLINDS
by Louvolite®

LOUVOLITE®
WWW.LOUVOLITE.COM

Do you want to reach an audience of enthusiastic self-builders and renovators? Then book a classified advert with Kay Dhillon on 01527 834496; kay.dhillon@centaurmedia.com

STAND 420 GLASGOW SHOW



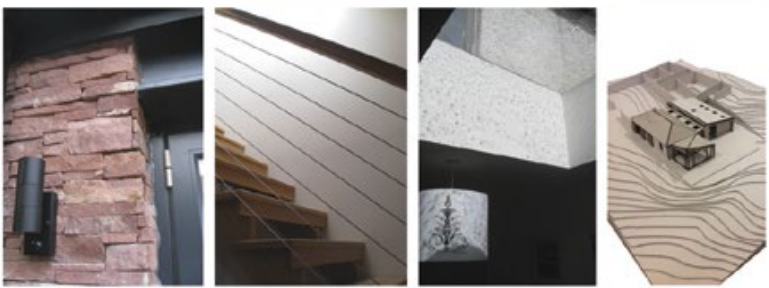
Simple, Efficient SIP Kit Houses

C A B E R  H O U S E



www.caberhouse.co.uk
email: contact@caberhouse.co.uk
North & Central Scotland - 01764 663 271 • Argyll & the Isles - 01369 701 988

STAND 129 GLASGOW SHOW

p a t e r s o n g o r d o n
A R C H I T E C T U R E
The Studio, 1 Roselea Cottages, Aldochlay, Luss, G83 8NU
T: 01436 860355. E: elaine@patersongordonarchitecture.co.uk
www.patersongordonarchitecture.co.uk

STAND 209 GLASGOW SHOW



Glasgow Slides

Specialists in fitted wardrobes, walk-in wardrobes, and sliding doors

2 Caledonia Road,
Strathaven, ML106AX

Tel: 0141 433 6622
www.glasgowslides.co.uk

STAND 716 GLASGOW SHOW

Passive House Performance By



AMVIC IRELAND

Insulating Concrete Forms

"A" Rated Homes

www.amvicireland.com
Call 028 86761023 or 00 353 45 889276

STAND 114 GLASGOW SHOW




Angus & Mack Ltd specialise in the design, manufacture and installation of feature staircases and fitted furniture.

For more information please visit our website:

www.angusandmack.com
01875 321 123 malcolm@angusandmack.com



Join the BBQ Revolution from £6,750



A barbecue cabin solves the issue of the Great British weather and allows the luxury of spending time with family and friends in a warm, cosy and exotic Lapland atmosphere just steps from home.

0115 932 8888 Info@arcticcabins.co.uk

TOWN PLANNING CONSULTANTS



countryside city extensions
planning applications appeals
urban regional **planning**
self-builds feasibility appraisals village
heritage conversions local plan

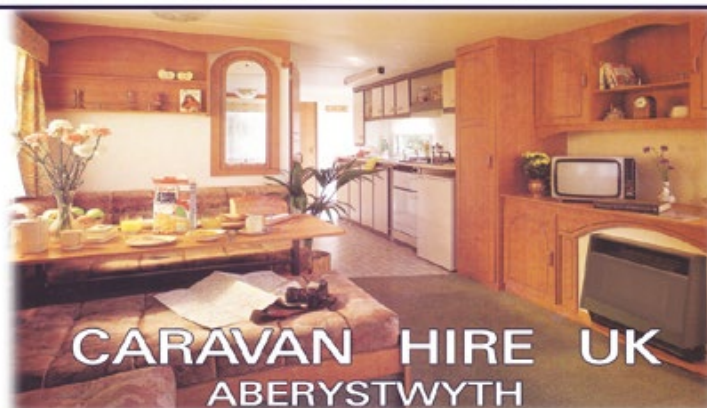


Based in Arundel, West Sussex

Website: www.corbil.co.uk

Email: administrator@corbil.co.uk

OFFERING THE SELF-BUILDER NEW CHOICE



CARAVAN HIRE UK
ABERYSTWYTH

BUILDING YOUR OWN HOME? WHERE ARE YOU GOING TO LIVE?

CARAVAN HIRE UK SPECIALISES IN THE HIRE OF CARAVANS FOR TEMPORARY ACCOMMODATION AT AN AFFORDABLE PRICE.

1, 2, and 3 BEDROOM LAYOUTS,
UTILITY ROOM OPTION.
NATIONWIDE SERVICE.

PHONE FOR INFORMATION PACK.
CARAVAN HIRE UK, ABERYSTWYTH
Tel: 01970 626920

IF YOU WOULD LIKE TO ADVERTISE ON THIS PAGE PLEASE CALL
KAY ON 01527 834496



Interior Design by Catherine Hastings

Quality New Build, Renovations
and Refurbishments from
a Chartered Building Company

Meet us at the Sandown Show on stand 542



Call us on 020 7788 7439

Email us at info@kisiel.co.uk

Visit us at www.kisiel.co.uk

1 Approach Road, London SW20 8BA



BATHROOM & KITCHEN EXTRACTORS



icon
The stylish face of ventilation

Unique, Discreet, Quiet!

Toilet, Bathroom & Kitchen extract

Call: 01494 560 800 Visit: airflow.com

AIRFLOW

- Anthracite
- Sandstone
- Silver
- Chrome

PROFESSIONAL SERVICES

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.

OAK FLOORING

OrlestoneOak
Solid oak flooring manufactured at our Kent sawmill



- Solid oak flooring in 3 grades
- Floor matching service
- Multi-width and extra-length
- Engineered hardwood flooring

01233 732179
www.orlestoneoak.co.uk

NEW!
Phone for our 52 page brochure

OAK SAWMILL OAK BUILDINGS OAK JOINERY OAK FLOORING

OAK BUILDINGS

Oak Designs Co.

Oak frame garages, ideal for self-assembly or by our expert team.

THE PILTDOWN
Spring Offer **£4,900**
Expires 30/06

*Excludes groundworks, bricks, roofing, assembly, delivery & VAT

- Over 480 designs in our Acorn Range
- Free planning drawings with every order
- Free site survey subject to location
- Try our 'Quick Quote' on our website

www.oakdesigns.org t.01273 400411

ARCHITECT

Wherever you are,
Whatever your needs,
We provide a professional service
at a sensible price.

Mike Free
Architectural Designer
Glastonbury

We can turn your problems into possibilities,
Your dreams into reality.
Planning permissions
Listed building consents
Extensions & Alterations
Disabled access & Conversions
Kitchens & Bathrooms

For Information
design@mikefree.co.uk
www.mikefree.co.uk
0771 4343 760
01458 832168

You can obtain our full design service complete with all plans and consultations from £1,250.

INTERIOR DESIGN

Property Search
Helping you to find your next project or dream home

Interior Design
Including room design, colour, soft furnishings and furniture

Barbara Spence Interiors
barbaraspenceinteriors@yahoo.co.uk
07999 851 554

XTREME Security

"Extremely satisfied with the neat installation of latest HD camera's to the shop. Excellent quality products at a great price. We definitely recommend Xtreme to install a security system for you"
- Mr. Craig Percy - Kenilworth

CCTV

Bell Box

keypad

- CCTV SYSTEMS
- INTRUDER ALARMS
- LED MOOD LIGHTING
- AV CINEMA ROOMS
- NETWORKING

Xtreme Security offer one of the largest range of HD security and lighting products.

Find us on

CALL NOW ON : 024 7736 0005
info@xtremesecurity.co.uk www.xtremesecurity.co.uk

INSULATION

SuperFOIL Insulation

The Past

FOAMBOARD

The Future

SF40 SuperFOIL Insulation

WHICH WILL YOU CHOOSE?

SuperFOIL SF40

01636 639 900 www.superfoil.co.uk

Boulder Developments Ltd, SuperFOIL, BHF, Main Street, Norwell, Newark, Notts, NG23 6JN

WINDOWS



Timber windows and doors made with traditional skills and modern technology

Period style windows and doors, made by combining the very best quality timber, highly efficient Planitherm double glazing, high security integral locking and a factory paint finish in any colour of your choice.

All this together with the skills of our craftsmen provides lasting warmth and security whilst retaining the original style and character of your home.

0161 456 0501

www.gbsjoinery.co.uk

nigel@gbsjoinery.co.uk

Visit our showroom



ROOFLIGHTS

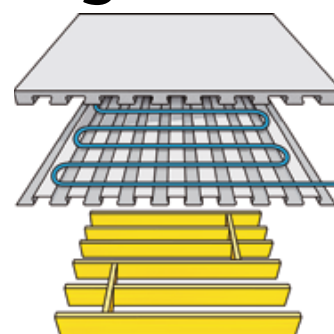
rooflights.com
the online rooflight shop

architectural quality rooflights at online prices
order online at rooflights.com
fixed • walk on • lantern • vent • access rooflights

info@rooflights.com 01379 658333

CONSTRUCTION

High Performance Floors



- **Acoustics**
- **Underfloor Heating**
- **Wet Rooms**
- **Nationwide Delivery**

LEWIS®
Deck

01388 728833
info@CDI-ICM.co.uk
www.CDI-ICM.co.uk

IF YOU WOULD LIKE TO ADVERTISE ON THIS PAGE PLEASE CALL KAY ON 01527 834496

HEATING

THE SUSSEX RANGE

100% Stainless Steel Heated Towel Rails

www.sussexrange.co.uk
Tel: 01444 831200

25 YEAR GUARANTEE

SPLASHBACKS

CREATIVE GLASS

We specialise in the manufacture of Splash-backs for kitchens, bathrooms and wetrooms. Offering an extensive menu of colours and special effects.

Blue Ribbon Award Winners at the prestigious Daily Mail Ideal Home Exhibition. Recently Featured on BBC's 'The House that 100k built'

CONTACT US FOR A FREE QUOTE

CRI
CREATIVE RESINS INTERNATIONAL
00 44 (0) 1795 411820
info@creative-resins.co.uk
www.creative-resins.co.uk

HEATING

agadon
heat & design

Unique wall-mounted low energy IR picture radiators
Any picture can be printed
From just £351.99

0845 450 5160
www.agadon.co.uk

CARAVANS

 **STATIC CARAVANS TO SUIT ALL STYLES**

If you're looking for a static caravan, Statics 2 Go should be your first stop. With years of experience and one of the most extensive and variable stock listings available on the market, we can give you the caravan you want. We provide free delivery for static caravans across the UK, and at an excellent rate across Europe.



Tel: 01223 260 000 or 07478 708 868
Email: info@statics2go.com or sales@statics2go.com
www.statics2go.com

KIT HOMES



HEBHOMES
Architecturally designed kit homes
www.hebrideanhomes.com 0141 550 7360

DESIGN & BUILD

Progressive Design & Build

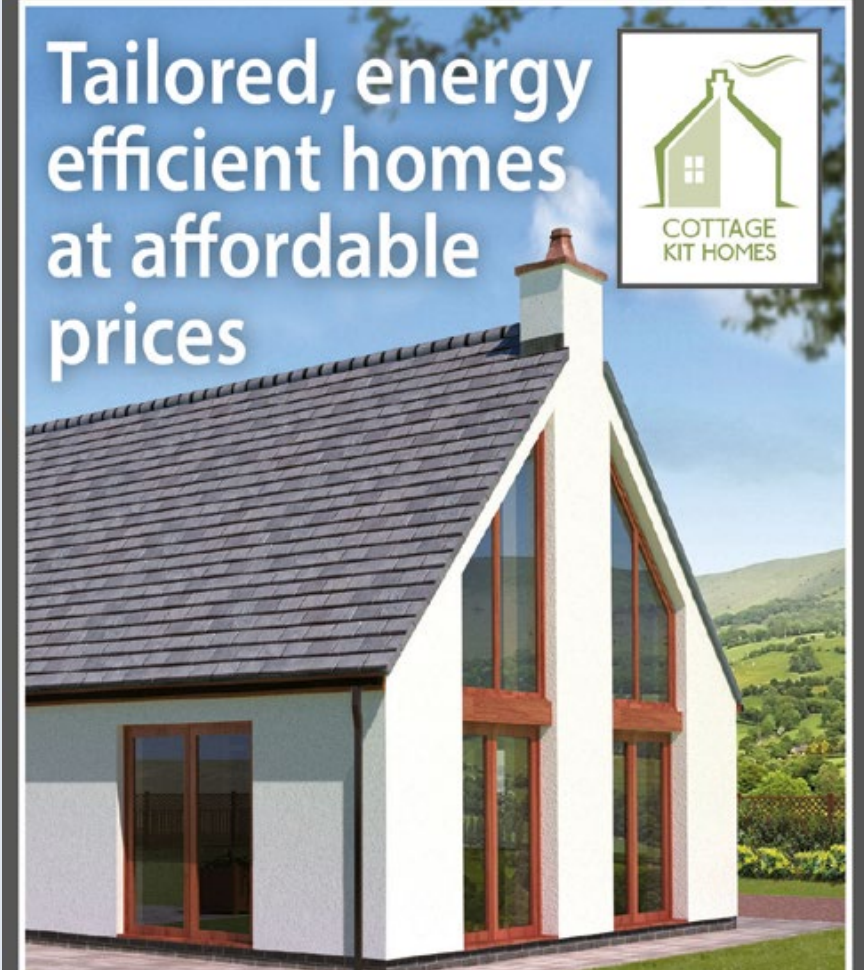
Certified Passivhaus Design
Timber Frame & SIPs Specialists
Architecture
Self-Build



Tel: 01422 416 107 WWW.PDAB.CO.UK

KIT HOMES

Tailored, energy efficient homes at affordable prices



Choose one of our 37 cottages or design your own
One concept, many, many options

COTTAGEKITHOMES.COM

DOOR ACCESSORIES

sliding-doorstuff.co.uk
everything but the door

sliding door gear | pocket doors | frameless glass kits | folding systems | accessories



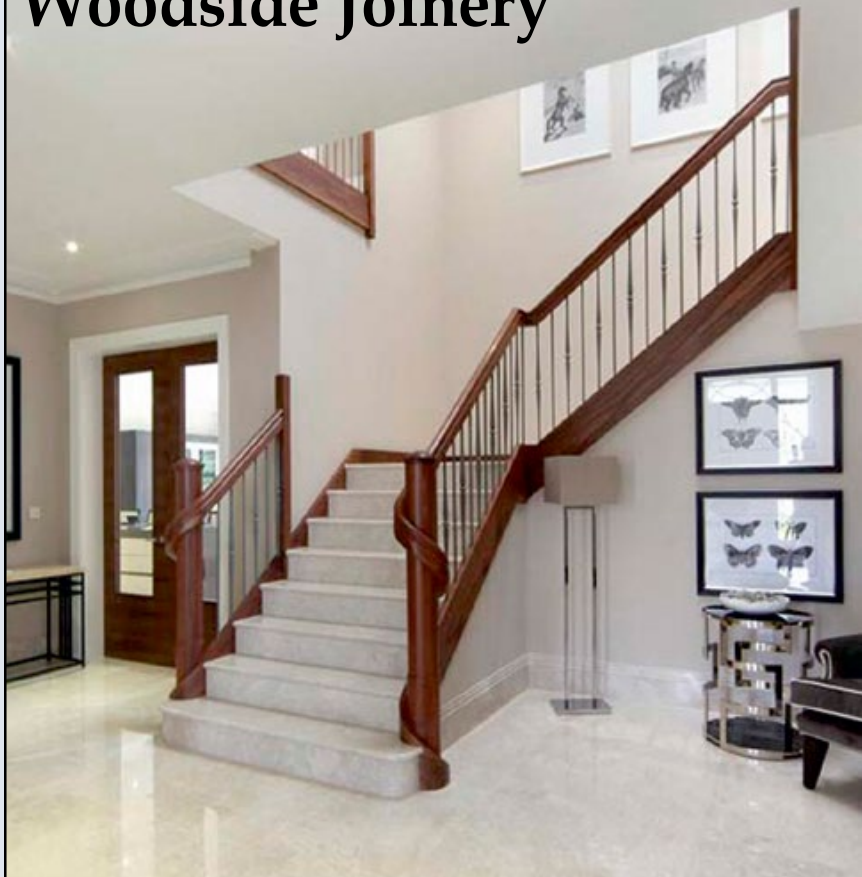
model shown: Projeto Xtra



TRUSTPILOT
★★★★★ 0207 099 2822
10 Estuary Court, Broadmeadow Ind. Est, Teignmouth TQ14 9FA

JOINERY

Staircases of Distinction from Woodside Joinery



For free advice, information and further details please contact us on:

T: 01633 875232 E: sales@woodsidejoinery.com
www.woodsidejoinery.com

Nationwide Service

WOOD PROTECTION

Call us
01296 481220

osmo[®]

Learn more
osmouk.com

NO MORE WATER MARKS



TOPOIL: Highest quality food safe protection for wood worktops

✓ MICROPOROUS | ✓ NATURAL | ✓ OIL-WAX BASED | ✓ DURABLE | ✓ HIGH COVERAGE

BUILD COSTS

price my plans

Get an independent cost for your building project
NEW BUILDS • EXTENSIONS • CONVERSIONS

Also project management and builders quote analysis - Nationwide Service

0121 406 2301 or 07581 312121 pricemyplans@gmail.com pricemyplans.co.uk

OAK BUILDING

OAK BEAMS

Ancient Oak Beams, Bricks,
Roof Tiles, Floorboards, etc.
Immense Stock

01483 200477

www.antiquebuildings.com

Antique Buildings Ltd, Dunsfold, Surrey

CARAVANS

Worcestershire Caravan Sales

Used Static Caravans ideal for
Temporary Accommodation.

Appliances Gas Safe Tested.
Delivery arranged. 01299 878872
Over 200 Caravans in stock.

www.worcestershirecaravansales.com

SPLASHBACKS

SKYWATER



**Bespoke
Splashbacks**
for Kitchens and Bathrooms

03300 200 495

www.skywaterglassdesigns.co.uk

WORKTOPS

HARDWOOD WORKTOPS & END GRAIN CHOPPING BLOCKS

Made to measure



BORDERCRAFT

www.bordercraft.co.uk

Email: sales@bordercraft.co.uk

TEL: 01981 550 251

GARAGE DOORS

ARRIDGE GARAGE DOORS

Est 1989
• BIG DISCOUNTS •
• TOP BRANDS • NATIONWIDE DELIVERY •



Quality Installation Service Available
Remote Controls, Trade & Retail

Suppliers of:

Hormann, Woodrite, Carteck, Garador,
Gliderol, CedarDoor, Cardale, Aluroll,
Wessex, Alutech, Ryterna



Tel: 01691 670394

www.arridgegaragedoors.co.uk

IRONMONGERY

Finesse

Fine Pewter Hardware

Tel: 01427 871467

Door & Window Furniture

www.phg-uk.com

FD033

Swirl Knob



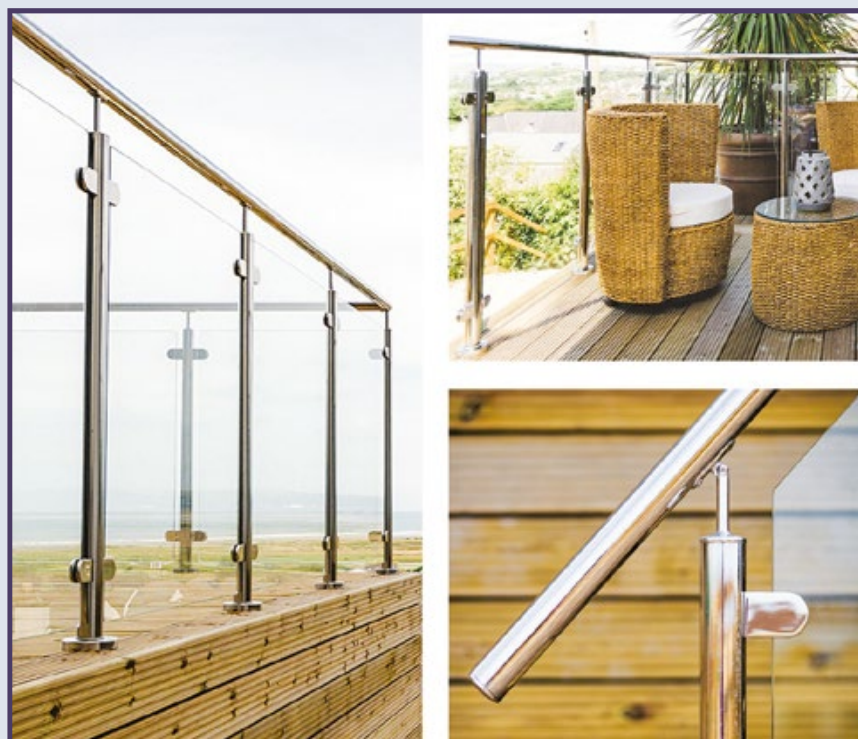
LIGHTING

Fibre optics for your
new-build or
refurbishment made
easy.

Star ceilings
are our speciality



www.starscape.co.uk



Search

S3i balustrade



Tel 01302 752 504

Email sales@s3i.co.ukVisit www.s3i.co.uk
S3i
GROUP

PROFESSIONAL SERVICES

Planning a self build project this year?

Every year jhai approves thousands of Building Regulations applications across the UK. Our Building Control surveyors provide an exceptional service to self-builders.

We offer pre-application meetings, solution focused plan checking and fast response site visits. We aim to make your project easier and save you money.

All the approval you need

Call us on 01308 428020 or email our team at info@jhai.co.uk. Visit our website www.jhai.co.uk

jhai
limited

KIT HOMES

These are the most thermally efficient buildings available . . .

. . . here are the 8 steps that go into building your Canasip home

1

DESIGN

We create a design to your specification and, once planning permission is approved, we create detailed drawings for building regulations and produce a 3D drawing. Finally, the whole building package is collated and presented to Building Control.



2

FOUNDATIONS AND UNDERFRAME MANUFACTURE

The foundation is done by using screw piles to ensure the building stands off the ground. This system minimizes the embodied energy of any foundation whilst lasting as long as conventional foundations. A metal underframe is manufactured and is fastened to the screw piles.

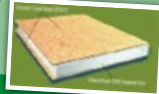


3

SIPs

SIPs (Structural Insulated Panels) are used for the loadbearing walls, floors and roof panels. They fit to the steel frame and avoid thermal bridging*. Walls and floors are joined together to avoid air leaks using special sealants and tapes. This enhances thermal efficiency and ensures air tightness - making them stronger than brick and even bullet proof!

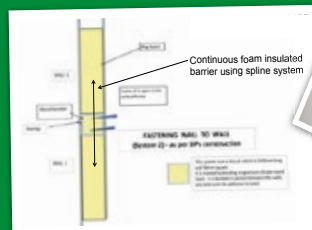
* If thermal bridging does not occur, you do not need to worry about cold or damp spots. Heat and energy is saved at this point.



4

SIP JOINTS

All wall joints are protected from thermal bridging by using a continuous foam insulated barrier/spline system.



5

WINDOWS AND DOORS

Triple glazed windows give the best insulation properties and maximum solar gain. We install a flexible weatherseal air tight gasket. Thermal bridging is eliminated by using Aerogel (a gel with low thermal conductivity).



deceuninck



6

ROOF

The roof surface can be made from a choice of materials. We always try and fit the most sustainable and lightest roof. The internal roof structure does not need trusses and gives you a high ceiling 'look', which is warm and enhances the living space.



7

HEATING

Airtight buildings mean little or no energy is required to heat or cool the building. Once the building is airtight we then provide efficient ventilation. This is achieved by using a heat recovery ventilation system (HRV). Air sealing our buildings and heat recovery ventilation means that our carbon neutral buildings will benefit the environment and save you money.



8

EXTERIOR AND INTERIOR FINISHES TO WALLS

A choice of exterior/interior finishes include: Outside - render or wood. Interior - an airless spray - no plastering required!



When properly sited, with no air leakage, all our buildings comply with carbon neutral international standards.

And finally . . . your state of the art home doesn't have to compromise your lifestyle in any way. We'll build it ready for you just to move into!

FOR BESPOKE SOLUTIONS
PLEASE CONTACT US:
TELEPHONE 01361 883917

www.canasiphome.co.uk


KITCHENS



FRONT DOORS



our feature bronze door

steel reinforced
natural hardwood doors

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

urbanfront.com
01494 778787

KITCHENS

Terence Ball Kitchens A name you can trust

- High Quality Complete Rigid Kitchens
- The Best of British Manufacturing
- Delivered direct to site throughout the UK
- Over 300 doors & 50 carcass colours.
- Blum Drawers and Softclose Hinges
- Keenly priced & impressive brochures.



PROUDLY MADE IN BRITAIN

www.terenceballkitchens.co.uk
sales@terenceballkitchens.co.uk
01984 624640

PROFESSIONAL SERVICES

VAT REFUNDS

Specialising in VAT REFUNDS for new builds and conversions. Professional and helpful service offered by self-builder and converter. Final fee payable once funds received from HMRC.

J.M. Daniel Business Services Ltd

Contact Jayne Daniel FCCA on:

0161 763 5304 j.m.daniel@accmail.com
www.vatrepayments.co.uk

GLASS REPAIRS

CLARITY GLASS REPAIRS



Specialists in Scratched Glass Repair
And Etched Graffiti Removal

0800 772 0194 www.clarityglassrepairs.co.uk

PROFESSIONAL SERVICES

Period Property Renovation

Expert and sympathetic advice on period and stone built property renovation

Latest high tech diagnostic equipment for detection and analysis of the source of dampness

Years of experience makes us the ideal people to deal with

We have offices in Sheffield and mid-Wales and cover the whole of the UK

Visit our website or call to discuss on
01142486308 or
07786182257

www.reddockconsultancies.com



COOKERS

MARSHALL

MARSHALL ONE ALPHA - NOW ELECTRIC

Probably the most beautiful 3 oven electric cooker in the world.

Also available, to stand alongside the Marshall cooker, is the electric mini cooker for use in the summer when you do not want a hot kitchen.

Also available Oil & Woodfired.

Please contact Tel No. 01332 833000
for brochures

(A division of Sandyford Cookers)

www.sandyford.co.uk
www.marshallcookers.co.uk



EXTERNAL BLINDS

Make the most of your Home and Garden

with stylish external shading from Caribbean Blinds

SPECIAL OFFERS



PATIO AWNINGS

LOUVERED ROOFS

EXTERNAL ROLLER BLINDS

EXTERNAL ROOF BLINDS



CARIBBEAN BLINDS UK LTD

UK MANUFACTURERS OF INNOVATIVE EXTERIOR BLINDS

T. 0344 800 1947 E. info@cbsolarshading.co.uk
W. www.cbsolarshading.co.uk



FLOORING - STONE

FLOORS of STONE



01509 234000 - www.floorsofstone.com
Cotes Mill, Nottingham Road, Loughborough, LE12 5TL

COLOUR SEALANT

FIXOLOGY

OVER 85 COLOURS STOCKED!

SPECIALIST RAL COLOUR SILICONES SUITABLE FOR SEALING JOINTS IN CONSTRUCTION AND SANITARY APPLICATIONS.

AVAILABLE BY THE BOX. CONTACT US FOR FULL COLOUR LIST AND PRICING.

VISIT
www.ralsilicone.co.uk
FOR MORE INFORMATION.

FCS COLOUR SEALANT



THE SOURCEBOOK

ELECTRICAL

10% Discount for Homebuilding Readers Quote HBR10



Sockets & Switches

www.socketsandswitches.com

We are pleased to introduce our latest range of Retrotouch contemporary Glass Touch Switches available in Black Gloss or Ice White in plain glass or with a Chrome trim. We also have the Simplicity collection that offers something new and exciting in a variety of colours with simple clip on, screw free front covers. Smooth and Stylish these new ranges are keenly priced and are sure to impress.

Tel: **0845 812 3838**
Email: enquiries@socketsandswitches.com
www.socketsandswitches.com

BALCONY SYSTEMS

Balconette

makes the most of your view



Glass Juliet Balconies
Glass Balustrades
Curved Glass Sliding Doors
Composite Decking
BalcoNano® Self-Cleaning Glass

01342 410411 - WWW.BALCONETTE.CO.UK

GARAGE DOORS



THE FASTEST DOOR IN THE WEST!

Somerset based Garador is recognised as Britain's leading garage door maker... but this innovative company also leads the way for fast and easy fixing.

Ordering a precision engineered Up & Over door with a steel frame will give you the quickest and most accurate fit possible. All you need to do is fit the frame straight onto the brickwork with as little as 7 fixings for a canopy gear door and 11 fixings for a retractable gear door and the job is done. The frame can be fitted either between or behind the opening. The frame comes factory painted to exactly match the colour of the garage door, so no additional painting is required.

Garador's Managing Director Simon Hipgrave says "Garador's wide choice of designs and colours plus good pricing is a big selling point; now with our fast and easy fixing, our Up & Overs with a steel frame will ensure Garador remains the top favourite among all builders, installers and home owners across the UK."

This saves time and money, and so it is no wonder that Garador's Up & Over garage doors are now Britain's top selling garage door.

Find out more from Garador on **01935 443706** or visit www.garador.co.uk

PROPERTY SERVICES

THE PROPERTY EXPERTS

*FOR ALL NEW INSTRUCTIONS RECEIVED FROM 01.06.2016 – 31.12.2016 QUOTING REF: TROLLEY/HOMEBUILD16



WHAT WE DO:

- *PROPERTY SEARCH
 - *PROPERTY SALES
 - *PROPERTY LETS
 - *LAND INVESTIGATION
 - *TITLE INVESTIGATION
 - *LEASE EXTENSIONS
 - *LIASON WITH LEGAL ADVISERS
 - *OVERSEEING CONVEYANCING SERVICE
 - *AUCTION PROPERTY
 - *MANAGEMENT SERVICES
 - *ENFRANCHISEMENT
 - *MAINTANENCE SERVICES
 - *DRAFTING DEEDS SERVICE
 - *DECLARATIONS OF TRUST
 - *STATUTORY DECLARATIONS
 - *DEEDS OF COVENANT
 - *DEEDS OF RECTIFICATION
 - *TRANSFERS OF PART
- And many more.....
See website for full list!

Visit our website at
www.landsight.co.uk



Get a
FREE
consultation

0800 999 8849

A TRADITION OF TRUST
Serving your community since 2008

We are not lawyers or a law firm and we do not provide legal, business or tax advice



limited stock!
Free gift
Trolley coin with every
new instruction *

CONSTRUCTION



TeleBeam™ registered
the unique loft conversion & flooring system **LABC**

Forget steel beams and cranes – TeleBeam is the new way of converting lofts in modern properties with roof trusses. It is the first pre-fabricated lightweight and adaptable system which deals with a wide range of roof spans and pitches. TeleBeams have LABC Registered Systems Approval giving you peace of mind.

www.telebeam.co.uk
01380 739000



FENCING

FENCEBUFFER

Choice of 3 colours

Enough for 5 panels

£5.00 inc VAT
plus postage and packaging

Tel/Fax: 0113 239 3636

Email: mk.precision.tooling@btconnect.com



**STOPS RATTLING
FENCE PANELS**

PayPal
also on ebay



The Tuscan wood flooring collection offers a beautiful range of stunning surfaces and finishes to suit both traditional and contemporary interiors, bringing elegance and style to your home.

range additions & new brochure now available

t: 0845 7298298

e: info@tuscanflooring.co.uk

w: www.tuscanflooring.co.uk

Pegasus Whirlpool Baths



Design your own bespoke whirlpool bath online with the latest Technology, Features and Performance from the UK's premier manufacturer. Bespoke positioning of Pump, Jets, Controls, Chromotherapy lighting, Glass 'Touch Sensitive' wall/bath mounted control, 4th Generation total draining 'Silverline' pipe-work – Not all Whirlpool Baths are made the same! **Quote voucher code HR40.**

Tel: 01633 244555
www.pegasuswhirlpoolbaths.co.uk

Frozen Damp-course System



Freezeteq is a water-based product used to form a complete barrier against rising damp. It can be used on all types of stone or brickwork (any wall thickness), is easy to use, cost-effective and requires no specialised equipment. Can be applied DIY or by contractor. Thirty-year guarantee available.

FREEZTEQ®

www.freezeteq.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



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



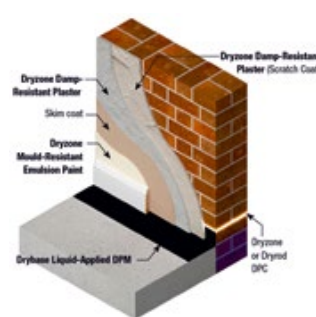
Websters Insulation Sprayed P.U. Insulation and P.U. Cavity Injection



Polyurethane sprayed foam for insulation, roof stabilisation and the prevention of condensation. Websters Insulation Ltd recommends the Webtherm™ system, suitable for new build, renovations and barn conversions. For use on roofs and walls, the Webtherm™ system provides an exceptional alternative to dry lining non-cavity walls and 'hard to treat' cavities.

Tel: 01405 812682
www.webstersinsulation.com

Beating damp with Renovation Plasters



Dryzone Damp-Resistant Plaster from Safeguard Europe is a breathable pre-blended plaster developed to control dampness and salt migration in walls and a modern alternative to traditional sand and cement mixes. The high-performance plaster is ideal for replacing existing plaster that has already deteriorated or for use in new-build and conversion projects to limit potential damage caused by minor ingress of dampness.

www.safeguardeurope.com/dryzone-system

SHAWS OF DARWEN RIBBLESDALE SINK



The Ribblesdale from Shaws is a 'British made', beautifully crafted sink and the ideal choice for a stylish kitchen or utility room. The sink has a ledge with pre-formed tap holes and soap recesses and has a 3-hole overflow and standard 31/2" waste overflow for basket strainer or waste disposer. This innovatively styled, deep single bowl, handcrafted fireclay sink measures 595x547x260mm and is available in white and biscuit finishes.

www.shawsofdarwen.com

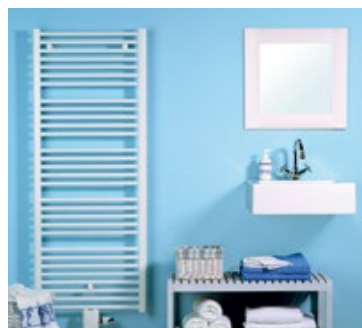
KINGSPAN INSULATION UNVEILS U-VALUE CALCULATOR APP



Kingspan Insulation is taking U-value calculations mobile with a free app for Apple, Android and Windows devices. The new application features over 6,000 calculations, all approved under the BBA/TIMSA competency scheme. The intuitive interface will be familiar to anyone who's used Kingspan's popular online U-value Calculator. With just a few taps, users can easily adjust everything from rafter depth to masonry thickness.

www.kingspaninsulation.co.uk

Flores from Purmo – value without compromise on quality



The Flores towel warmer range represents the best possible value for money in a designer radiator, combined with the quality for which Purmo is renowned. Available in white, chrome and a range of specialist colours, Purmo's CE marked Flores allows homeowners on a budget to add a designer touch to any bathroom.

www.purmo.com

Unsure what to do with Your Period Property Renovation?



Expert and sympathetic advice from professional Consultants experienced in period and stone built property renovation and dampness elimination. We specialise in identifying and resolving problems created by inappropriate management, materials and technologies. We have the latest high-tech diagnostic equipment for detection and analysis of the sources of dampness which combined with years of practice makes us the ideal people to deal with.

www.reddockconsultancies.com

Xtreme Security



Xtreme Security offer one of the largest range of HD security and lighting products.

- CCTV SYSTEMS
- INTRUDER ALARMS
- LED MOOD LIGHTING
- AV CINEMA ROOMS
- NETWORKING

Tel: 024 7736 0005
www.xtremesecurity.co.uk

A New Concept in SIP Kit Homes



Caber House has developed a range of carefully considered two to four bedroom SIP kit houses. Designed using expertise in both SIP construction and Passivhaus, these innovative designs provide excellent value for money and outstanding energy efficiency. Have a look at **www.caberhouse.co.uk**; the designs speak for themselves.

Tel: 01369 701 988
Email: contact@caberhouse.co.uk

DOWNLOAD THE HOMEBUILDING & RENOVATING APP



For help, advice and inspiration for your self-build, check out our extensive collection of special publications available for your device

Search Centaur Media on your app store to view the latest tablet editions



Available on the
App Store



Next Month

On sale 26 May 2016

C/O CDMS ARCHITECTS



NIGEL RIGDEN



IN THE JULY 2016 ISSUE:

- »» Special Report: Building on a Budget
- »» Big Design Ideas for Small Plots
- »» A Cottage Renovated for Just £25,000
- »» Extending a Period Home for Modern Living
- »» What to Look for When Hiring an Architect
- »» Masonry vs Timber Frame Construction:
The Build Costs Explained
- »» A Striking Contemporary Self-build
- »» ...and much more!



The Internal Window

Architect Neil Turner shares one of his favourite design tricks

If you have a particular view that you want to capture, try and open it up — even if this means introducing glazing in the centre of the house. During my own extension and remodelling project, Treetops (above), we decided to include an internal window in our son's room, which was the only north-facing bedroom in the property. While the room already had views to the north and east, this south-facing internal window allows the room to enjoy the hillside views, and benefit from the sun's warmth. This creates a great dynamic feature within the bedroom itself, as it made way for a deep window seat which offers a quiet reading

spot. It also provides a great focal point and adds interest to the double-height kitchen situated below.

For privacy at night, we built in a concertina screen made of the same oak plywood as the seat (this material is used around the rest of the house, too); the hinges and brackets for the screen were from a yacht. The screen folds back to sit flush with the window frame when open, allowing plenty of light to enter during the day, while at night the window can be shut off. The total cost of the window was around £2,000.

When building new or renovating, do consider adding design features like this — it's the small details that can add wow-factor and surprise to a home. 



Neil Turner is director at Howarth Litchfield Partnership and specialises in residential designs (howarthlitchfield.com)

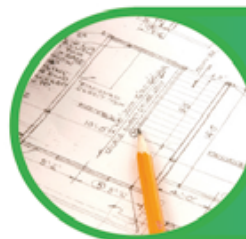


Whole House Ventilation with Heat Recovery...

**Homebuilding
& Renovating Show**
SANDOWN PARK | STAND
25-26 JUNE 2016 | 851



- 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

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-hr.co.uk

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