

selfbuilder + homemaker

ISSUE 03 2020

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REASONS WHY YOU NEED SUDS

Modern approaches to sustainable drainage are vital to prevent more UK flooding – Interpave answers FAQs

A Victorian reinvention

A London home gets not one but two contemporary extensions

System addicts

The Maliks loved the building system used for their Graven Hill home so much, they started a business

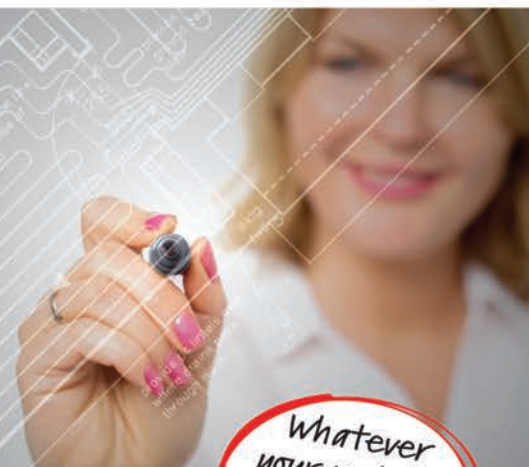
Hope springs eternal in Devon

Acquiring a fantastic site in Hope Cove, South Hams at auction gave the Hoggs the chance to create their dream home



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FROM THE EDITOR...

Everyone here at netMAGmedia hopes that this issue finds you well, and not too worried at what is undeniably a very difficult time for the whole nation. Today as we go to press we hear that our Prime Minister (a man who is undoubtedly doing the best he can in circumstances he can't have imagined even a few weeks ago) has been admitted to hospital after having coronavirus for 10 days. It's like something from a disaster movie, unfortunately it's very real.

You are probably very aware of the rules, as they have been updated by Government in relatively clear briefings, including on construction sites in the past few weeks. However, although most self-build sites might not be scenes featuring many employees, it might be worth restating for anyone in doubt.

The Government has stated that despite the lockdown announced on 23 March, tradespeople are allowed to continue undertaking work in people's homes, "provided the tradesperson is well and has no symptoms." This is of course while obeying the constraints of the 2 metre social distancing rule.

However, the Government states that no work should be carried out in any household which is isolating, or where an individual is being "shielded," unless it is "to remedy a direct risk to the safety of the household, such as emergency plumbing or repairs." The "shielded" term refers to the NHS' list of types of people with conditions who are highly vulnerable to complications from the virus.

It's worth getting further advice on this from Public Health England on whether or not you should be continuing work (via gov.uk).

Although a stop on work on sites – which have no doubt had their share of stops and starts over the winter – due to a persistent and highly dangerous virus is highly irritating, it's probably the least we can do to help limit the spread.

It's easier for us who can work from home, although the businesses that tend to be focused around IT (such as those in the trade media) are in the main shutting up shop temporarily so that we can help give our nation the best chance it can to recover from this pandemic. Events have been rescheduled or cancelled – as far as we know the Homebuilding & Renovating Show is taking place at the NEC in July, and we have previewed it in this issue, however that is subject to change.

Thankfully, the scheduling of your bi-monthly issues of *Selfbuilder* and *Homemaker* haven't yet been impacted too much. We hope that this magazine, full of great builds, will give you some distraction from all of the bad news out there. Also that it provides a reminder that one day your project will be finished, and possibly much sooner than that, we will be free of the dreaded COVID-19!

JAMES PARKER



ON THE COVER...
 © EWEN MACDONALD (PAGE 16)

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METALLIC MOMENTS

Ally Dowsing-Reynolds of home decor specialist Dowsing & Reynolds explains why metallics are a great trend for interiors, and gives practical advice on how best to bring striking accents to your home



Whether it's handles, light fittings or switches and sockets, incorporating metallic finishes into your home can bring a sense of magic to an interior scheme. They reflect light, adding a level of sophistication and attracting the eyes to each area of detail in the room.

The best general tip is to focus on design accents and replace existing fixtures with metallic alternatives to subtly but effectively upgrade your space.

DO YOUR RESEARCH

The trend for metallics is as popular as ever but it's important to do your research before investing in metallic fixtures and decor. Finishes can vary between designs so bear this in mind when choosing between tones.

Gold and copper are great alternatives to chrome, but if you love silver, a softer, satiny, brushed nickel finish will make your interiors look more up-to-date.

As a general rule, be selective and stick to one metallic finish and repeat it around your space. But that's not to say you can't mix metallics within the same product. For example, the backplates of your light switches could be tarnished copper, but the toggle itself could be a contrasting nickel or gold.

FEELING INSPIRED

The influence of the Art Deco aesthetic is strong in interior design, and remains popular in many homes. The contrast of black and gold, which is synonymous with this glamorous period, has influenced many of us to revisit gold fixtures and fittings when decorating.

When it comes to planning a room scheme and deciding whether to use metallic accents, a great place to start is with a mood board. Combine the colours that speak to your personality with a few different metallic finishes to see how they might work together in your space. Once you have your colour scheme, it's easier to feed in accents and details.

Jewel tones and brushed metallics complement each other beautifully, creating a sense of eclectic glamour. Copper works particularly well in lighting fixtures and is popular in kitchens, with softer gold finishes sitting well in bedroom schemes against navy or dark green walls and geometric prints. Touches of metallics in soft furnishings will heighten the effect of any metal flashes on your walls or in your lighting.

Once you start gathering inspiration it'll become clearer which hues and tones excite you the most. A carefully

placed gold detail can dramatically elevate a neutral scheme from 'nice to look at' to subtly sophisticated. Metallics work well in a number of ways, and the same accent will add punctuation to deeply saturated hues by catching the light, leaving the possibilities almost endless.

DARE TO CONTRAST

Add visual interest in your room by contrasting materials. Bringing in metal details is an easy way to achieve this. By swapping the handles on your wooden units for detailed knurled metal handles, you can quickly update your kitchen and bring together old and new. Contrast the hues for a stronger look, or tone them for something more subtle; gold against navy or brushed steel against grey.

Equally, replacing plain white switches and sockets on your walls with metallic equivalents immediately adds a point of interest and this shiny metal detailing contrasts with the softer textures and earthy tones of curtains or blinds, creating balance and depth.

Mixing materials such as velvet and wool with rattan and then finishing with metallic detailing helps prevent a room looking one-dimensional.

A CHOICE OF FINISHES

If you're looking for truly remarkable accessories then more adventurous metallic options are available. Tarnished copper and smoked gold are stunning choices above the usual shiny chrome and gold, instantly making a statement wherever you use them. They work well with both dark 'cocooning' interiors, or light and airy spaces. For a modern take on classic silver, try brushed nickel for added depth and reduced shine, creating something more visually interesting.

Think beyond metallic bowls, vases and photo frames when you're adding your finishing touches. Consider the often overlooked, more 'boring' items too. A gold dimmer switch with beautiful detailing can be as eye-catching as purely decorative objects.

However you choose to incorporate metallics into your home, through small changes or a full fixtures overhaul, previously dull spaces will now capture your attention and become subtly luxurious.

Fixtures and fittings no longer have to be simply functional, they can be beautiful and striking too.

Ally Dowsing-Reynolds is co-owner at Dowsing & Reynolds



1



2

INTERIOR INSPIRATION: BATHROOMS

It's now something of a cliché to say that for homeowners, the bathroom is an essential sanctuary to get away from it all, as well as a functional space. However perhaps now it's more important than ever to have somewhere to escape from the stresses of life. Here are some great products to finish off your perfect bathroom!

3



4



1. Designed to give the appearance of multiple 'hex' tiles in one, Hexagon is ideal for those looking for a hexagonal mosaic effect but who don't want to contend with the grouting and installation effort associated with mosaics. **Hexagon Blue Mix Tiles** by **Tons of Tiles** are made from porcelain and measure 26.5 cm x 51 cm. Priced at £25.99.

www.tonsoftiles.co.uk

2. Guest towels, fancy towels, beach towels, hand towels – keep them all organised and out of sight with this beautiful and practical **Shrewsbury Towel Cabinet** by **VonHaus**. Use the two internal shelves to pile the towels neatly. In a modern ash grey, this cabinet will complement most bathroom suites and interior styles. Priced at £49.99.

<https://www.vonhaus.com>

3. Break with the norm and embrace a mid-century modern design with the **Kompass 2 Drawer Unit** by **Frontline Bathrooms**. It features a classic 1950s vintage design offset finished in an oak and matt white blend. Perfect for anyone looking for creative and retro-inspired bathroom furniture.

The unit is priced at £795.

www.frontlinebathrooms.co.uk

4. **Square King 2-in-1 Matte Black Shower Rail Set** by **Meir Australia Pty** is designed to impress and function at the highest level; you have a choice of either 200 mm or 300 mm square showerheads. With a simple twist of the in-built diverter, you can engage the precision shower wand for close-up and high-power washing.

The shower is priced at £656.

<https://www.meir.com>

5. The **Albion Bath Company's** wall mounted **Beaufort Bath Filler** gives a contemporary twist to a traditional design. As it is wall mounted, all water feeds are hidden behind the wall giving a clean, tidy look.

Shown here in Bright Nickel at £445.

www.albionbathco.com

6. The **Campastyle Holiday Radiator** by **The Radiator Centre** comes in a choice of white, black or mirrored for the base and white black, grey or copper for the rail attachment. It is also possible to control this radiator remotely with an additional modem that is accessed via a free app.

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www.radiatorcentre.com



5



6



Eco-friendly shower solutions with contemporary design

wedi is renowned for the variety of 100% waterproof, directly tileable products it offers for bathroom and wet room projects. Last year, answering the market's demand, the German manufacturer introduced its high-quality, ready-to-use design surfaces as alternatives to traditional tiling. The success of wedi's Top wall panels and Fundo Top shower surfaces prompted the expansion of wedi's Top Line further and new pre-formed design surfaces are now available for benches, niches and wall-hung toilet cladding. They impress with their natural feel: a homogenous pure white to match existing sanitary ware or Carbon black, Concrete grey, Stone grey and Sahara beige with a natural stone look.



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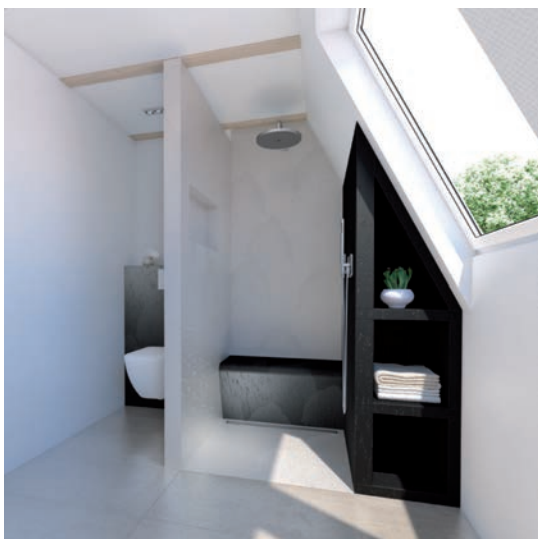
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Why we need permeable paving & SuDS



Chris Hodson of Interpave answers the questions on why a responsible approach to rainwater drainage – in both new and existing homes – is key

WHAT'S WRONG WITH OUR DRAINAGE?

As our towns and cities continue to grow, more rainwater is captured on streets, car parks, drives and roofs – which then flow into sewers, rivers and streams. Existing drainage systems simply cannot cope, causing downstream flooding. In addition, roads, car parks and driveways collect pollution – from car exhausts, tyre-wear, oil leaks and other sources – and when it rains this gets washed into sewers, then harms our rivers and streams.

WHY DO WE NEED TO ACT NOW?

Climate change means more frequent and heavy rainstorms, and flooding. But

'Sealing up' our towns and cities also stops rainfall soaking into the ground. The water table levels drop causing more water shortages, streams and ponds to dry up, and trees to be deprived of water. It could also affect the foundations of your home, particularly on clay soils, as they dry out and shrink.

WHAT DIFFERENCE COULD MY GARDEN & DRIVE MAKE?

These problems are made worse when gardens are sealed-up and water runs straight to roads and sewers. Of course, one small area of paving in itself is not going to cause major flooding – but the cumulative impact can. For example, the area of paving in front gardens for car

parking in London is already equivalent to around 5,200 football pitches. Simply allowing rainwater to run straight off roofs and paving into drains is no longer an option.

SO, WHAT ARE SUDS?

For years, it has been recognised that 'Sustainable Drainage Systems' (or SuDS) are essential in curbing flooding and pollution from rainwater runoff. SuDS manage rainwater by slowing it down and cleaning it up – copying, as closely as possible, the natural drainage from a site before any building work or paving takes place.

SuDS manage rainwater near the surface and as close to its source as possible, slowing the flow and providing additional benefits including clean water for wildlife or recycling. Typical SuDS include living (green) roofs and permeable paving, as well as planted features like rain gardens.

ARE SUDS NOW A LEGAL REQUIREMENT?

For new developments, SuDS will generally be required as part of the planning process, although this will depend on which part of the country. In some cases, a single house may be exempt but, increasingly, local policies affecting planning applications will demand SuDS. For example, the 'Draft London Plan' says that: "Development proposals for impermeable paving should be refused where appropriate, including on small surfaces such as front gardens and driveways." In any case, using SuDS is a low-cost solution, and the responsible thing to do.

WHAT ABOUT EXISTING HOMES?

Installing drives or other paving anywhere in your garden used to be considered 'permitted development' – in other words an automatic planning permission. But changes a few years ago took away these rights from new or replacement paving, unless it's 'permeable paving' or drains onto a permeable garden area or soak away within the property.

Otherwise, you will need to apply for planning permission, involving an application, drawings and a fee. Anyway, with policies in favour of SuDS, the application should be rejected. If you go ahead anyway, this could result in local authority enforcement action or legal problems when the house is sold.



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ASK THE EXPERT



OK, HOW DO I MAKE SURE PAVING IS PERMITTED?

Interpave's 'Paving for Rain' guide offers two straightforward methods:

Concrete Block Permeable Paving – which allows rainwater to filter through grit-filled joints between the blocks into a sub-base below with enough space to store the water for a short time.

Rain Gardens – where conventional paving simply drains to a landscaped depression, maybe with plants, in the garden to temporarily hold water.

In both systems, water is held back on your property during heavy storms to avoid flooding, and filtered to remove or trap pollution. What happens next depends on the ability of the ground to absorb water (known as 'permeability') and whether you want to recycle the rainwater.

HOW DOES PERMEABLE PAVING WORK?

There is a wide choice of products available from Interpave manufacturers, specifically for permeable paving – with more shapes, styles, finishes and colours than ever. They are said to have the same performance as conventional concrete blocks and slabs: slip resistant, durable, strong and sustainable.

The difference with permeable paving is the presence of larger joints, which are filled with stone grit (but never sand or mortar). This ensures that water will continue to pass through the joints over many years. Concrete block permeable paving can be laid level and still avoids puddles without the need for drainage gulleys and pipes. It also provides a safe surface for all homeowners, unlike gravel and other loose material.

Chris Hodson is an architect and consultant to the trade association Interpave

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CASE STUDY

HOPE FOR THE BEST

Nicki Hogg's self-build saw her and her partner go from surprise auction to acquiring a desirable south Devon plot in Hope Cove for their forever home

TEXT & IMAGES EWEN MACDONALD

It was a chance visit to a fishmongers in Kingsbridge, Devon that brought Hope Cove to the notice of literary agent Nicki Hogg. Her shopping trip ended in more than breakfast when she spotted an advert for a run down post-war bungalow in an estate agent's window.

Soon she found herself and architect husband Ruairidh in the slightly shabby upstairs room of a nearby pub, bidding in an auction for the South Devon property.

Nicki and Ruairidh, originally from Long Ditton in Surrey, had spent many a happy holiday with their children in the South Hams area of Devon. But after many years staying in holiday homes, the couple were ready to create a forever home.

"I was a bit scared," she admits of her first time buying a home under the hammer. "I have never been to an auction before. I have friends who went to auctions in London and they were so busy, but there were only two houses being sold. There were lots of people there and I thought we would never be able to buy the house. The auctioneer was delightful; he explained how it would work and it was much less stressful than I imagined. The other property sold first so I was able to observe what happens."

In the end her only competition was a developer – who dropped out of the bidding quickly. "My husband was telling me to sit on my hands so that I didn't bid too soon."

LOW POINT

Decisions have to be made quite quickly and from 200 miles away from the build. "Ruairidh travelled up and down the country many times to oversee the project alongside the builder and project manager."

– Nicki



And so, within minutes, they found themselves £160,000 poorer and owners of an uninspiring 1947 bungalow called Penlea which had a great potential, but no planning permission.

"It was an exhilarating experience," says Nicki. "We knew we had to have it. As an architect, Ruairidh had the vision to design a house that would sit perfectly in the landscape and maximise views in all directions."

The small village of Hope Cove sits in the South Devon Area of Outstanding Natural Beauty (AONB) and boasts two beaches. Many of the houses sit on the slope down towards the cove, and the unexceptionable post-war houses are slowly being renovated

or replaced with architect-designed, bespoke homes.

Top of the stylish newcomers is Nicki and Ruairidh's Runic House. Cleverly built into the natural steep slope of the land, the stunning uninterrupted views of the cove and the countryside behind it didn't come without effort and some seriously clever design. "There's about seven storeys between the top of the plot and the bottom of the plot," explains Nicki. Despite its size and being set across four levels, no part of the house sits above the height of the chimney stack of the previous building on the site.

This design ingenuity is one of the reasons the house passed through planning without a



hitch – that and an incredibly helpful planning department, adds Nicki.

Because of Ruairidh's experience and skills as an architect, he was able to wow the planners with his sophisticated presentation which visualised the whole building – even down to showing where shadows would fall.

"There was a pre-planning meeting with some of the local councillors and Ruairidh had to put together a presentation that shows where the shadows would be, to make it easier for them to see how it would look."

The house was built using concrete panels which were precast and brought on to the site. There are only two companies in the UK that do this, and the couple chose Cornish Concrete in Truro. The house itself is clad in copper and cedar wood, and the remaining exterior walls are painted a shade of peach which reflects the vibrant colours used inside the house.

Another element that visitors wouldn't necessarily notice, but which the couple are proud of, is the frameless windows that were created using the same technique as car windows. "In *Grand Designs* it's always the windows that cause a problem," Nicki laughs. "The windows are triple-glazed and we had to make sure the window could withstand the wind forces that hit it."

It's these kinds of details that have made building their own home such a pleasure. Nicki points to the ceramic tiles that cover the living room floor that continue uninterrupted on to the

terrace, separated only by floor to ceiling windows which retract to expose the corner of the living space. The tiles are perfectly lined up to create a truly seamless floor. "It's the kind of detail that is really important to architects," says Nicki. "If it's perfect you don't notice it, but if it isn't you keep noticing it."

The large balcony outside is enclosed by a glass balustrade, and there's an external spiral staircase here that leads down to the sloping lawns and swathes of wildflowers. A sedum roof visible from the master suite creates another haven for wildlife. "The sedum roof gets lots of wind and grows quite high in the summer," says Nicki, who has taken some of it to grow in the garden's rockery.

The four bedroom house is set more on 'levels' than actual floors. The floating stairs connecting the levels throughout were designed by Ruairidh. The bespoke metal structure that supports them is almost a piece of sculpture in its own right, and sits at eye level as you enter the house. The front door – which is actually at the rear of the house – opens to a hallway where the eye is drawn up to the mezzanine where a seating area and floor to ceiling disappearing windows enclose the terrace.

Two of the bedrooms have bathrooms 'in-room' that sit behind the bed head so you can gaze at the horizon while you brush your teeth. In the master bedroom, the bath sits on its own dais to make the most of the views while having a soak.

NICKI'S TOP TIPS

- * Work closely with the planners – try and have a pre-planning meeting to discuss ideas to avoid plans being rejected
- * Consider everything – this is your chance to create the perfect home, so add everything to the shopping list, no matter how unusual
- * Shop around for contractors – rather than have the same person do everything, consider employing specific contractors for their special skills
- * Be prepared to make decisions quickly, especially if you are managing the project from a distance



SCULPTURAL STAIRS

Designed by Ruairidh Hogg and built by Perkins Engineering, the stairs' steel structure is almost a piece of sculpture in its own right

HIGH POINT

"Waking up to the view: The large window is framed by a curving wall, and waking up in this bedroom gives me immense pleasure"

– Nicki



Eschewing the white box on the outside, the interior is similarly distinctive. Forget stark white walls or contemporary neutrals: instead these interiors have a vibrant coastal colour scheme that features sunset peach walls and sea blue units.

"It's fun doing a house from scratch: you can do anything you want! Usually in a house you do one room at a time and have to make compromises," Nicki explains. "I wanted subtle seaside colours."

The end result has bespoke kitchen units sprayed turquoise, and several different shades of blue. "Because there's a lot of kitchen it was always in my mind that I knew it was going to be turquoise: I wanted a warm colour," she explains. The kitchen also features a built-in bar where the views can be enjoyed. They installed glass everywhere they could, to allow every opportunity for glimpses of the sea and to let

Forget stark white walls or contemporary neutrals: instead these interiors have a vibrant coastal colour scheme that features sunset peach walls and sea blue units



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that glorious coastal light flood in.

Her favourite element of the build? The master bedroom, she says without pausing. The large window here is framed by a curving wall that was created to reflect the curve of the waves below and the gentle swell of hills behind the house. "Waking up in this bedroom in the morning gives me immense joy; you can look out of the window everywhere you are: even in the bath you can lie and relax and watch the trees growing."

There were plenty of 'wow' moments in the building project, but also a few groans along the way. Decisions sometimes had to be made quickly, 200 miles away from the build, which brought its own challenges. As an architect, Ruairidh is more used to working on commercial properties. For their house he travelled up and down the country many times to oversee the project alongside the builder and project

manager. Between the house purchase in September 2013, it was three years later that demolition was completed with work starting on Runic House in January 2017.

"One of the challenges stemmed from Ruairidh being used to working with very high end property and high spec is the norm. We realised that some people don't have the same vision and attention to detail. Outside was really straightforward, but the interiors required quite a different skill set."

"We started renovating 12 years ago and it is so different now," she says of the process. "Even with the basics of what you put into the kitchen now is totally different." Their top spec kitchen features a Quooker tap and two dishwashers.

Cutting edge technology controls the lighting, music and heating in each room. The subterranean level houses a plant room where



LEVELS

The Hoggs' four-bedroom home is set more on 'levels' than on actual floors


all the technology hides that supports this modern home (there's also space for a cinema room, adds Nicki).

The house has been created with solar panels and heat pumps to ensure maximum energy efficiency.

The most surprising element is that the couple installed a dumbwaiter which allows the shopping to be brought in to the front door. The mini lift goes from the bottom level to the top and can be used for everything from shopping to laundry.

"Because the house was being built from scratch, the pleasure was in thinking about how we are going to do things and considering practical issues," says Nicki. ■

"Because the house was being built from scratch, the pleasure was in thinking about how we are going to do things and considering practical issues"



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It's what's underneath that counts

OPEN HOUSE LONDON

Despite having no initial plans to alter their traditional Victorian family home in Greenwich, David and Nicola Fleming ended up reinventing it, building two highly contemporary extensions which dramatically improve look and layout

TEXT DEBBIE JEFFERY IMAGES JOSEPH TRAYLER/HENRI BREDEKAMP

When David and Nicola Fleming bought their detached, double-fronted Victorian house, just a short stroll from Greenwich, they had absolutely no plans to tackle any building work. The couple and their children – James, now 27, Lottie, 25, and Issy, 20 – moved into their new home in 2008, feeling pleased that the property was in such good condition.

"We'd always bought houses which needed improving, and had been living in a rundown, rambling old wreck of a Victorian house, so down-sizing and finding somewhere which had already been renovated was a relief," says Nicola.

"We were fed up with constant maintenance and outgoings at the other house, so we ended up doing a house swap with the woman who bought it, and it seemed like a treat to be able to move straight in and enjoy living here."

Years passed, and the three children grew up. Gradually, the three-storey house began to lose its appeal, and no longer served the Fleming family's needs. "The kitchen and dining room were long and thin, stretching across the back of the house, and we were always getting in each other's way and tripping because of the different floor levels, which was particularly annoying," Nicola continues.

"There was an awkward island unit cutting up the kitchen space, and our dining table was pushed up close to a set of French doors, obscuring the lovely fireplace. Other rooms in the house were also starting to look quite tired and in need of an update, so in 2014 we decided to put the property up for sale and look for somewhere else to live."

However, when the sale fell through, the family began to have second thoughts about trying again, realising that there were many aspects of their home which they still enjoyed. With three reception rooms, six bedrooms and three bathrooms, it offered bright accommodation and period features, including sash windows, fireplaces, cornicing, ceiling roses, and stripped wooden floors.

"After some discussion, we decided to stay put, and the Stamp Duty and legal fees we saved went towards improving the house instead," says David (who works in IT). "We



Henri's design for a glass box extension with sliding doors reveals a wide aspect and fills the space with light

knew that the layout just wasn't working for us, and approached Henri Bredenkamp of Studio 30 Architects to come up with a feasible solution."

Henri is an award-winning architect who established his London-based practice in 2010. Specialising primarily in contemporary residential developments for private clients, the practice has also been commissioned for projects in Henri's native South Africa.

Prior to setting up Studio 30 Architects, Henri worked for a number of high-profile practices, where he was project lead for several RIBA Award-winning schemes. His projects have been widely published in the press and online, which is where Nicola first spotted his work.

"We clicked immediately and didn't need to look elsewhere once we'd met Henri," recalls Nicola. "I absolutely loved the whole design process, working with him to come up with an improved layout, without sacrificing too much of

FACING PAGE

The new glass-box extension has added space without impacting on the garden, with large format floor tiles laid both inside further blurring the division. Reclaimed bricks ensure the first-floor bedroom extension suits its setting

LOW POINT

"Work did take longer than planned, and we ended up moving back in before the builders had quite finished, which wasn't ideal."

– David Fleming



our fairly small garden. He put forward three quite different ideas, and we ended up going with an amalgamation of two of them."

The final design sought to open up the previously cluttered house – stripping away the ground floor rear facade and internally consolidating the mess of partitions and changes in level, to create a single, open plan kitchen/dining/living space which would be far more conducive to family life.

"By pushing utility and storage spaces to the edge and into the underused garage, as well as extending a modest 2.5 metres out into the garden, even more space was created for a large kitchen-diner,"

explains the project's architect.

This essentially 'dissolved' the interior – offering a continuous view from the front door into the tree-lined rear garden, and Henri's design for a glass box extension with sliding doors reveals a wide aspect and fills the space with light, while level access and continuous large-format floor tiles reinforce the link with outside.

"I like to think about how people live and, now that I have a son myself, I find I have a particular empathy with clients who have children," says Henri. "Designing for the needs of families is something I enjoy. For me, it's important to be fully involved with each project, so



that I'm familiar with every detail. The whole process is quite personal, and all about the people we work with."

The house stands within a conservation area, and special attention was therefore paid to preserving the character of the building by restoring Victorian features. Traditional corning and ceiling roses define the formal front spaces; sitting in pleasing juxtaposition to the rear. Subtle changes in texture and detail define semi-private spaces like the study, while maintaining the home's openness.

The complete refurbishment of the first floor maintains generously proportioned rooms – again with a modest extension to the rear, which creates a new master bedroom suite where one did not previously exist. Overall, the size of the house has only increased by 29 m² to 252 m², but these small interventions have made an enormous impact on the entire layout.

"We absolutely loved the design," says Nicola. "Planning permission was passed really smoothly, Henri went out to tender to choose a builder, and we all moved to live in a rented house for eight months, because we knew the building work would be too invasive to consider staying here."

"Almost the entire back of the house came off, so it was like a shell, and we had builders working in virtually every room. David was on site most days, watching the work progress, and it was quite shocking to see just how much of the building was demolished."

A structural engineer was employed to produce calculations for the necessary

Subtle changes in texture and detail define semi-private spaces like the study, while maintaining the home's openness

steelwork, with minimal exposed columns in the new glass extension, leaving the space as open as possible.

The complexity of removing the rear wall and load-bearing partitions was resolved by installing two steel portal frames, in order to support the existing house above. A bulge in one external brick wall also meant that this needed to be taken down and rebuilt, which was an unexpected expense.

"Foundations are standard concrete strip, and the varying floor levels were rationalised to create a seamless flow out into the garden and eliminate the existing small steps," explains Henri.

The garden itself has also been reshaped and slightly manipulated, with matching low-slip tiles laid inside and out on the terrace, further

NICOLA'S ADVICE

"Be extremely organised and clarify everything clearly from the start to avoid delays and confusion."



KITCHEN/DINING

Extending in glass has given the family a spacious kitchen/diner overlooking the garden and visually connected to the older part of the house

HIGH POINT

"I absolutely loved the whole design process, choosing things like the kitchen, and seeing it all come alive."

– Nicola Fleming

merging spaces through the glass. "The problem with old houses is that they're never quite level, so it's a delicate process getting flooring to match up across different rooms," Henri continues.

Three rear sliding doors in the kitchen extension have extremely slim aluminium frames, with UV-control glass which limits heat gain and protects furniture from the bleaching effects of direct sunlight. These run in both directions on a flush track, with a discrete drainage system concealed within.

The glass box dining element of side panel and roof was provided by another contractor, who installed high performance self-cleaning glass, which also reduces heat gain and UV rays, creating a comfortable environment year-round. A frameless junction of silicon and glazing tape secures the panels, and white pebbles were used externally to conceal the drain grid.

"Drainage is often an overlooked factor, which can really make or break a design," explains Henri. "Previously, the rear of the house was covered in an ugly web of downpipes, which have been removed for a far sleeker look. Now, water from the monopitch roof on the new bedroom extension runs down into the pebbles, which prevent splashback onto the glass."

The first-floor box extension has been faced externally in reclaimed London stock bricks to match the existing house and its neighbours in the conservation area. Two double glazed timber sash windows were also installed.

"Some of the bricks were salvaged from the demolished rear wall and re-used," says David. "The house's upper level is much more traditional than the lower level, as it's more visible, and the design was favourably received





SITTING ROOM

The sitting room is open plan to the kitchen, with reclaimed parquet flooring and an original fireplace

MASTER BEDROOM

Two double-glazed sliding sash windows and a bank of built-in wardrobes were fitted in the new master bedroom, which overlooks the rear garden and was extended by two metres

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by the planners," he adds.

Underfloor heating has been installed throughout the ground floor, with radiators upstairs. "We wanted to retain as much as possible of the Victorian character, but to also introduce more contemporary features in the new extensions," explains Nicola, a former teacher in textiles, who spent a great deal of time researching interior finishes – attending exhibitions, reading magazines and using Pinterest for gathering ideas.

"David prefers far brighter colours than I do, whereas I was adamant I wanted to keep things more muted, with 'pops' of colour in textiles rather than on walls," she explains. "As a compromise, we've painted our larder bright pink!"

The couple considered laying a polished concrete floor downstairs, but the large format

grey tiles they eventually chose create a similar effect and offer an ideal backdrop for furniture and the greenery of the garden.

An expert carpenter then installed new parquet flooring without a threshold in the adjacent library/study, which was formerly the dining room. Parquet was also used in the open plan sitting room, behind the kitchen, and in the separate TV room retained to the front of the house.

"Open plan living is great, but if David wants to watch sport, he can go into the quieter TV room," says Nicola. "I love the fact that I can be standing at the island and still be able to chat to people sitting on the sofas, rather than feeling cut off from what's going on."

Sleek dark grey matt kitchen cabinets, wood-grained wall units, and white quartz worktops were fitted, with the island positioned end-on to



ABOVE RIGHT

Mirrored cabinets reflect light in the new master ensuite shower room, where dark grey tiles have been laid and a double sink was installed

the glass doors for maximum visibility throughout the space and into adjoining rooms.

"We had a strict budget, as we'd borrowed £300,000 for the whole project, and although we like the look of some high-end kitchens, we didn't feel we needed to spend so much to achieve what we wanted," explains Nicola.

Work was completed in January 2018, and the garden has also been given a complete makeover to complement the house, with a landscape gardener employed for this phase. The old fence was replaced with a more contemporary design, and fresh planting – including an acer – creates an interesting outlook. Surprisingly, everyone agrees that the

garden now looks larger than it did before, despite the new glass extension.

"We moved out from our rental place and in with friends for a month, because the project ran on longer than intended but, in the end, we had to move back into the house before it was finished. Everything was covered in dust, so it wasn't ideal," says Nicola.

"Now we're so pleased that we didn't go ahead and sell the house, because it's so dramatically different. It just goes to show that older properties can be extended in a modern way without losing their character, and we really do feel like we have the best of both worlds." ■

Mapei at the Homebuilding & Renovating Show

Mapei is happy to announce it will be one of the many exhibitors to feature at this year's Homebuilding & Renovating Show, NEC Birmingham on 9-12th July. The 'go-to' exhibition for self-builders and renovators will bring together the latest products, expert seminars and tailored advice, as Mapei continues to cement its status as a brand that can provide a solution to any project – no matter the scale.

On display at Stand E232 will be a range of Mapei products, with full systems in place that demonstrate solutions available for any project from the foundations to the roof. Systems include those for basement waterproofing and waterproofing showers and bathrooms to receive finishes including traditional tiles and LVT! Protective and decorative wall coatings for interior and exterior



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A celebration of self-building



2020 sees the Homebuilding & Renovating brand celebrate the 'Year of Self-Build', including the launch of an awards ceremony celebrating the best in the industry at the event due to be held this July

The annual National Homebuilding & Renovating Show is scheduled to return to the NEC in Birmingham from 9-12 July. West Midlands' largest event of its kind is sponsored for the first time by Spectrum Architectural Glazing.

The show is hosting the inaugural ceremony of *Homebuilding & Renovating* magazine's awards to recognise the success stories across the property sector. The awards form part of Future Plc's year-long initiative entitled the 'Year of Self-Build' to celebrate the publication's 30th anniversary, and the show promises to offer an expanded portfolio of new products, services and expert advice, while also premiering a new collaboration with John Lewis & Partners.

The John Lewis Home Design Service will be presented by local stylists from its Midlands department stores within a designated John Lewis Design Lounge at the event. Across the four days, the Home Design Service will assist homeowners in devising a new look for their rooms or restyling a whole house and provide them with a personalised shopping list of curated items. The retailer's Midlands department stores are also showcasing their latest colour swatches, fabrics and furniture, designed to create a cohesive scheme for everything from flooring and curtains to the finishing touches.

'Lady builder' Sian Astley, project manager for BBC2's *Your Home Made Perfect* and experienced interior designer and renovator, joins the event for one-on-one consultations and to host a seminar called 'Building Secrets Explained: How to run your building project,' in which she shares her wealth of knowledge accumulated over the past 23 years.

Over 500 exhibitors and 13 daily seminars and masterclasses will demonstrate top quality, specialist advice, products and services from industries including kitchens; bathrooms; doors and windows; extensions and conversions;



eco and heating; architecture; design; financial services; planning permissions and much more. People who have successfully finished a project will also be present to share their experiences with those at the beginning of their journey.

A key area at the show is The Advice Centre, which abounds with impartial guidance for those who are interested in discussing their ideas with industry leaders. Visitors keen to find out more about the design, planning and construction process are recommended to book an Ask the Architect consultation, where chartered specialists from RIBA (Royal Institute of British Architects) can assist with visitors' specific issues. The Ask the Builder area, will see members of the Federation of Master Builders on hand to guide people on hiring accredited, highly skilled construction workers.

For more general tips on all aspects associated with self-build and renovation, the Ask the Expert zone offers 15-minute consultations through interactive sessions with property experts Michael Holmes and Jason Orme; master builder Andy Stevens; building expert Bob Branscombe; eco expert David Hilton; serial renovator Jo Dyson; planning expert Sally Tagg; and



finance expert Tom McSherry.

All visitors can navigate their way on site with the help of the show app, available on iPhone and Android. They will be able to schedule and receive alerts for key seminars and masterclasses, browse through the list of professionals available and access the latest offers and information.

One-day tickets to the National Homebuilding & Renovating Show are £12 in advance or £18 on the door and two-day tickets are £18 in advance or £24 on the door (children under 16 go free).


WHEN & WHERE

The National Homebuilding & Renovating Show takes place at the **NEC, Birmingham from 9-12 July**. For more information and to book tickets visit **national.homebuildingshow.co.uk**



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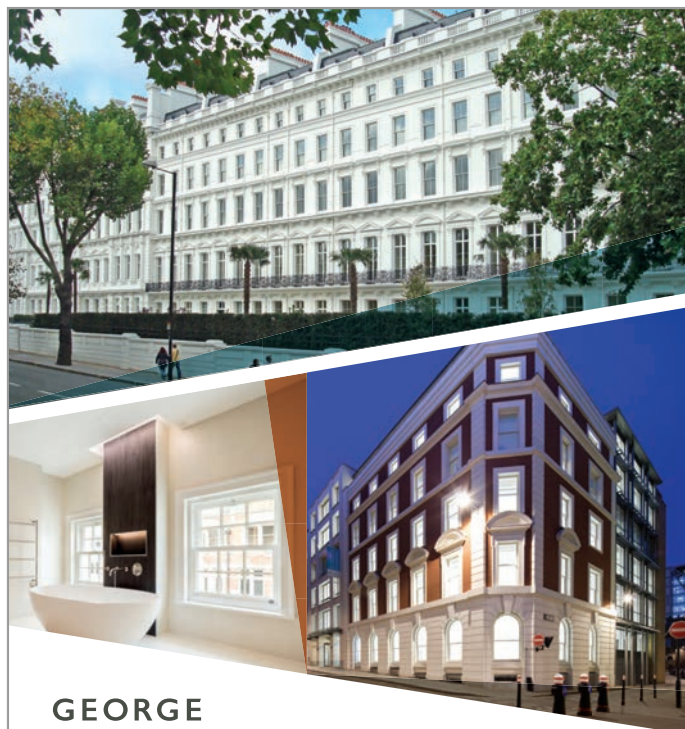
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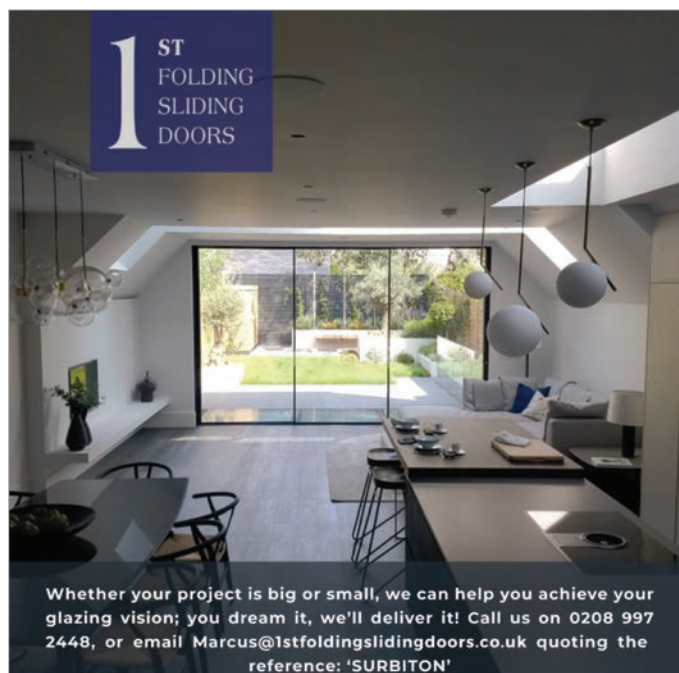
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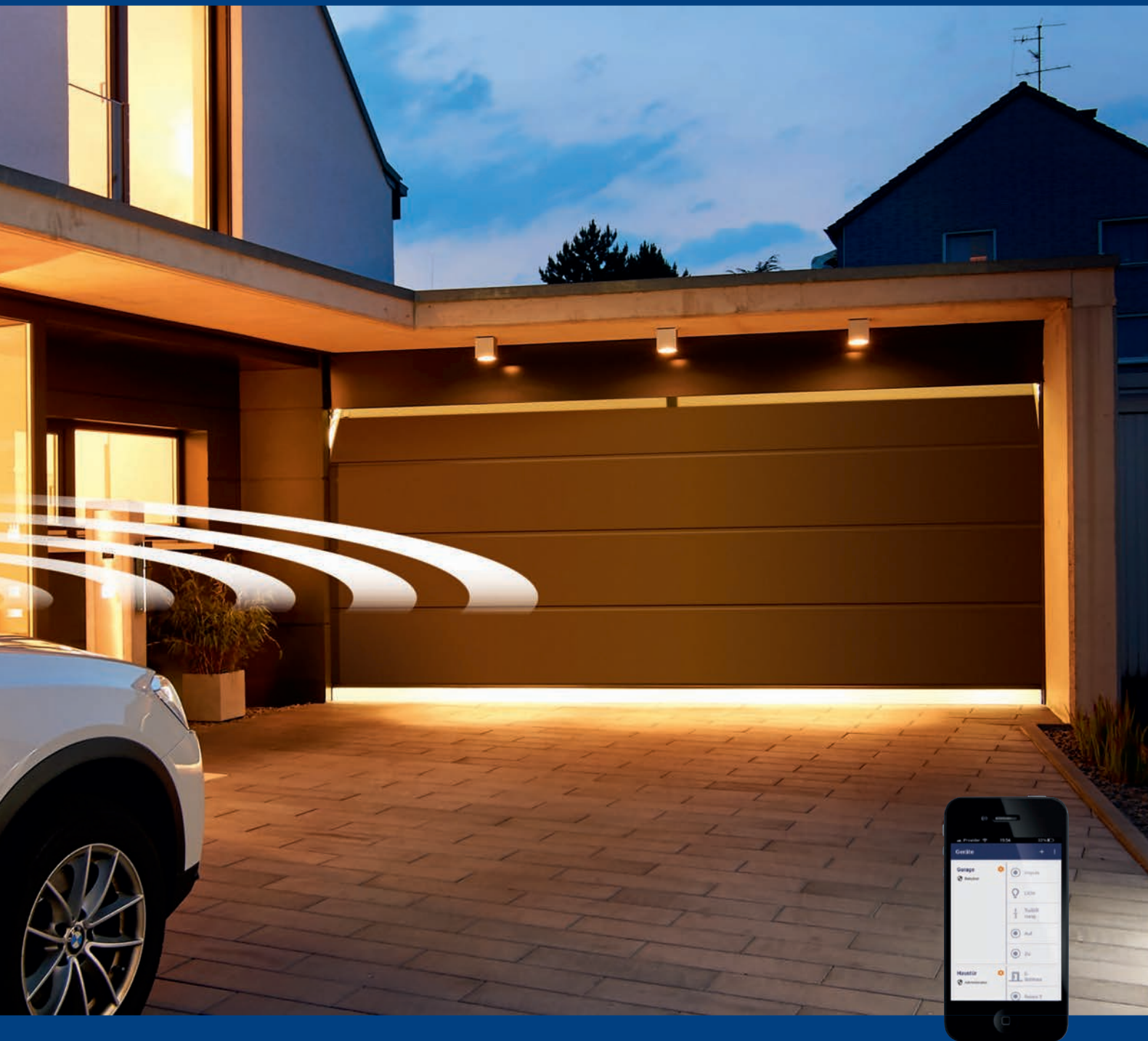


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Stunning, unique features can be achieved by the use of glass within your building. But when it comes to considering glass for your self-build project, where do you start if you don't have an architect or engineer on board?

You could pick a glazing company from the internet and hope for the best, however we would strongly recommend first doing some background research. To find a suitable glazing contractor, ask for recommendations and look at their portfolio of completed projects. Seek references, don't just rely on online reviews, and – this is vital – check that they have suitable insurances. When you've made your choice, ensure that all information you are given (and may rely on in a dispute) is confirmed in writing. Back up all assurances given to you in electronic format to a secure location, or as hard copies.

Next, consider the specification of the glass, which will depend greatly on the intended use of the building (with most self-builders it would be domestic use), and where the glass is within the building. Does the glass protect occupants from a fall? Should the glass ever get broken, how do you ensure it will break safely and not risk injuring the occupants, or passers-by?

A fall is defined in Document K of the Building Regulations as any change in levels greater than 600 mm in domestic dwellings (380 mm in commercial). So the glass specification would be the same for a patio raised 1 metre off the ground as for a first floor balcony.

There are two main types of glass used in balustrades, toughened glass and toughened laminated glass. Toughened glass is around four times stronger than regular float glass and is very strong in most conditions, but is fragile on its edges and corners. If it fails it breaks into

very small cubes, making it less likely to cause injury from cuts. It also means there is no protection left if it fails. Toughened glass panels on their own can be used as infill panels within framed or posted systems, and will always require a handrail fixed to the walls or adjacent glass panels, to provide support and fall protection if the panel breaks.

Toughened laminated glass is where two (or more) sheets of toughened glass are bonded together using a clear interlayer. They hold the glass together if one or more panels break, providing some protection. There are three different materials used for the interlayers PVB, EVA and SGP, and each has a particular use and benefit.

PVB (PolyVinyl Butyral) is the most common, and has been around for decades. It is used in car windshields. PVB holds the panels of glass together and, when used in a balustrade, is very successful when one panel of glass breaks. If both panels of glass break, it becomes very flexible, but still holds together in a big sheet.

EVA (Ethylene-Vinyl Acetate) is relatively new compared to PVB. The major advantage of EVA over PVB is it has better water resistance, so is recommended for external balustrades (PVB can be used outside, but the edges require sealing to prevent water creeping into the interlayer).

SGP (Sentry Glass Plus) is an 'ionoplast' interlayer; SGP being a brand name by DuPont although there are other ionoplasts entering the market from all the major manufacturers. Ionoplasts are the ultimate interlayer. Developed in the USA for storm resistance, they are capable of withstanding large forces when laminated in glass. Ionoplasts are very stable but also rigid. This means they provide structural support even when both panels of glass



When it comes to balustrades, size and performance are the driving factors

are broken. In addition, due to the added strength, they can be designed to reduce the thickness of the glass, making the installation lighter.

Where glass is concerned, size always matters. The bigger the panels you wish to create, the stronger and thicker the glass (and supporting framework) needs to be, and don't forget that on a restricted site, the glass will have to be transported safely to the area in which it is to be installed. If the panels are so large as to require a crane, the hire costs can be significant.

Glass companies that specialise in the installation of architectural glass usually offer free general advice on the safe use of glass and how it needs to be supported, so seek advice early. Don't just build an opening and hope it will be suitable for the glazing later. Additional



support may be required to meet local wind loads and meet the Building Regulations. It will be expensive to install such support retrospectively.

As an example, one of the most common errors is constructing a balcony from timber then deciding to install a frameless glass balustrade. This usually requires load-bearing steelwork

within the timber balcony structure.

Remember, even if you do not need planning permission, you will still need to comply with Building Regulations.

When it comes to balustrades, size and performance are the driving factors. Small spans can be accomplished using simple glass clamping brackets, however if you are looking for large spans, especially

using frameless glass, the glass thickness will increase, requiring additional structural supports. If you are looking for an 'all glass' look, then the glass will end up acting as a structural element in the building. At the extreme you may become limited by the manufacturing sizes available, the physical weight of the glass and the budget.

As a rule of thumb, glass weighs 2.5 kg per square metre, per millimetre of thickness. Therefore 1 m² of 10 mm thick glass will weigh 25 kg. When considering a structural glass balustrade panel, 1.1 m high x 4 m wide, using 21.5 mm thick toughened and laminated glass, the weight of the glass alone would be over 230 kg, and would need special lifting equipment or a crane to install it.

The glazing contractor may be able to provide engineering calculations, but be prepared to employ your own structural engineer to check the supporting structures are suitable.

To conclude, the key is to seek advice early. There are a number of small architectural and structural glass companies who specialise in this area who have the experience with the problems and challenges facing the self-builder.

Dominic Meakins is managing director of Demon Designs



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The best bricks for your build

Jason Hughes of Imperial Bricks has tips on choosing bricks for your self-build

Many self-build projects may be on hold while we work through the COVID-19 crisis, with homebuilders and renovators using the time to research the right products for their projects and compare for value, durability and the all-important kerb appeal.

The choice of brick is one of the most important aspects. So it's worth taking the time to choose carefully, and research what's available – and appropriate – first. Size and colour have to be right, particularly if it's an extension to or a conversion of an existing property. Planning and conservation officers often have strong views on what is acceptable, and usually look for something which will work with existing architecture.

There's a huge selection of bricks on the market to choose from now, and your architect, contractor or merchant will be able to advise on local requirements. Reputable brick suppliers will also be able to support self-builders through this process.

Handmade bricks are particularly popular for self-builds or small, upmarket developments. Adding depth of character, charm and kerb appeal to any project; the face of each handmade brick is unique. An authentic match for the local area can ensure new builds instantly blend in with their surroundings. In conservation areas, some planning officers may request reclaimed bricks, but these are expensive and increasingly difficult to source in the quantities required. Moreover, the quality is unreliable at best and there is usually a high amount of wastage. A new handmade brick can achieve the reclaimed look, without the drawbacks.

COLOUR CHANGES EVERYTHING

The first step is to select the right colour for the geographic area and the style of building. The UK is a relatively small country but the regional variations are huge. In the past people made bricks from their local clay, so within the space of a few miles the predominant colour can



change from red to yellow, taking in pink, blue or grey along the way. London, for example, has yellow and red – and even within a small area the colour can vary as the bricks have endured different conditions (e.g. smog, weathering) over the years. Repeat this across the country and you have some idea of the range in what was traditionally used.

New handmade bricks can be produced to match any of these variations. Brick manufacturers offer many colours as standard, but if there isn't a perfect match from stock a bespoke blend can be mixed.

Another variation is the sizing. Before 1965 all bricks were imperially sized, so any repair or extension should be imperial too for a perfect match. And imperial sizes differ depending on the area, with bricks in the north traditionally larger than those in the south. But it's worth noting that for a complete new build, handmade bricks also come in metric sizes, to work with modern lintels and blocks. A weathered or aged finish can ensure metric handmades sit perfectly alongside existing properties, whether that's an infill site in an urban setting, or a new development in a rural village.

Paul Lockwood, who specialises in

Choosing the right brick may seem daunting, but there's plenty of support available; take your time, and always ask for sample bricks

building bespoke family homes, comments: "Given the volume of new build construction in our area, we prefer to use materials which set us apart; handmade, reclamation-style bricks in metric sizes can give us the traditional look we want."

Meanwhile, for modern methods of construction, handmade brick slips can



be used with timber or steel framing, for fast track builds that still deliver on kerb appeal. Slips (cut from whole bricks) are also increasingly being used internally to create feature walls that either match external brickwork or draw on new trends e.g. lime washed, linear, or glazed options.

QUALITY COUNTS

Finally, and above all, go for quality. The bricks you buy will cost maybe 6 per cent of the total materials bill, but are one of the biggest contributors to its overall value. The first defence against the elements, bricks have to stand up to the harshest of conditions. They should be

CE marked, which will ensure each batch meets current British standards and has been tested for freeze-thaw performance, compressive strength, water absorption, soluble salts, and dimensional tolerances at the minimum.

HELP IS ON HAND

Choosing the right brick may seem daunting, but there's plenty of support available; take your time and always ask for sample bricks. Many merchants have sample boards of locally suitable bricks, so the customer can get a better idea of how a brick mix or 'blend' would work on a larger area to create an overall effect, and what colour mortar works best. Lime mortar should always be used with handmade bricks, as it is breathable and allows for natural movement.

In normal circumstances site visits can be arranged but in the current Coronavirus pandemic they may be difficult to arrange. However, you should be able to get further advice direct from the manufacturer who can offer expert guidance over the phone, via email or even apps, checking photos of the desired look against their product portfolio, or offer a bespoke solution.

Jason Hughes is managing director of Imperial Bricks

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MVHR: sourcing the essential resource

EnviroVent's Larry Soper gives his top tips on specifying the correct MVHR (Mechanical Ventilation with Heat Recovery) system to provide fresh air to your air-tight property

Self-builders are increasingly choosing MVHR as their preferred choice for ventilating a new home. MVHR offers a sustainable long-term solution while generating good indoor air quality and energy savings.

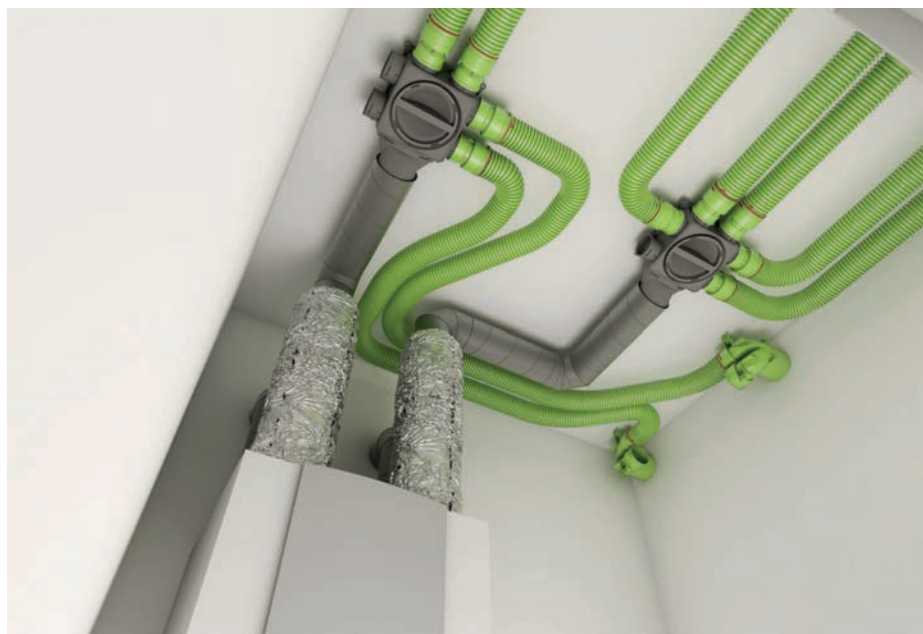
WHAT IS MECHANICAL VENTILATION WITH HEAT RECOVERY?

All new build properties require adequate ventilation, which means specifying a system which will remove any excess moisture and prevent condensation and mould growth. Extract fans and centralised extract ventilation systems can be inefficient and reduce the energy efficiency of a dwelling. However, MVHR addresses the issue by recovering the heat from the extracted stale, moist air within a property's kitchen, bathrooms and ensembles. The energy from this extracted air is transferred through a high efficiency heat exchange cell to fresh filtered air and is re-supplied to the habitable areas of the home.

A typical MVHR system comprises a heat recovery unit containing a high efficiency heat cell. This is typically installed in a utility room, cupboard or loft space and is connected to the habitable and wet rooms in the property via a network of ducts, which open into the rooms via extract or supply valves in the ceiling.

WHAT ARE THE BENEFITS OF MVHR?

For many new properties, MVHR is the most efficient form of ventilation currently available. The right system, correctly installed, will take care of any condensation problems and will help reduce the cost of heating. MVHR naturally provides all-year-round fresh, filtered air. By maintaining an optimal indoor climate and removing condensation, MVHR not only saves energy but can also reduce wear and tear on paint, wallpaper and furnishings, reducing maintenance costs. Having good indoor air quality also helps to



reduce symptoms of asthma and other respiratory illnesses, which can be triggered or worsened in humid, moist conditions where dust mites can be prevalent.

GET THE SIZING RIGHT

It is essential that the MVHR unit is sized correctly for your property. The type of MVHR unit selected depends on the size of the property, the number of rooms, 'wet rooms' and occupants. An oversized unit may be inefficient and use more power; an undersized unit will be noisy, inefficient and consume too much power. On a very large property the use of multiple units is recommended because it can provide a quieter and more energy efficient system with improved heat recovery.

The sizing of the duct is also important. A duct that is too small for the airflow rate will result in high resistance and velocity of air creating noise issues. A reputable manufacturer will be able to advise on the optimum

It is therefore essential to get the installation of an MVHR system right, from the start, by working with a competent and certified ventilation installer

duct size for a given system.

GOOD INSTALLATION IS ESSENTIAL

The Building Research Establishment (BRE) recently conducted a study into the installation of MVHR units. Their findings suggest that as many as nine out of ten heat recovery units in UK homes have been incorrectly installed, and that many systems required subsequent changes to air inlet valves, ducting or insulation.

It is therefore essential to get the installation of an MVHR system right, from the start, by working with a competent and certified ventilation installer. The most efficient unit on the market will perform worse than the least efficient unit if it is poorly installed. The efficiency promised by a particular unit can only be reproduced in the installed environment if it is properly implemented as part of a well-planned system.

Correct commissioning of the system is also crucial to ensure that the right airflow is delivered, and that the system is properly balanced.

FILTRATION

In choosing an MVHR unit, noise pollution and air quality in the area must be considered. That's because MVHR draws in air from outside the building, transferring heat from the outgoing stale



air to the new fresh filtered supply air. Obviously, if the air from the outside is polluted with particulate matter then this could be introduced into the house. MVHR units come with filters that may be capable of filtering particles up to PM10 or PM1. However, in some scenarios, greater filtration may be required.

Filters help to protect the heat exchange unit as well as ensuring consistently clean air inside the property. Over time, filters can clog with dirt and other substances. A clogged filter can no longer effectively clean the air, and, just as importantly, the heat recovery system will be unable to run at maximum efficiency.

The worse the pollution outside, the more important a filtration system will be, and the more often filters will need changing. If filters are simply allowed to

clog up and to be left clogged, the heat recovery system will not be able to maintain its performance.

CHOOSE HIGH QUALITY DUCTING

A heat recovery system is only as good as the ductwork installed. It can be false economy to specify the most expensive type of MVHR unit and install it with sub-standard ducting. When ducting is selected and installed correctly, it improves and prolongs the efficiency of the whole system, leading to long-term low maintenance. On the other hand, a ventilation system that has issues with the ducting, which can range from 'slump' of flexible types, through to inadequate jointing mechanisms, is always going to underperform. Poorly installed ductwork can potentially damage the ventilation unit and the fabric of the building. It is worth ensuring that the ducting is as high quality as the ventilation unit to avoid any long-term issues.

EnviroVent offers a complete system design, supply and installation service. The company can ensure that a suitably sized unit is specified and the customer is provided with a detailed breakdown of costs.

Larry Soper is technical training manager at EnviroVent

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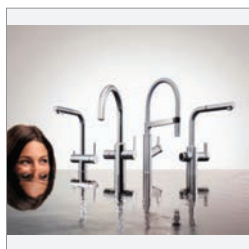
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CASE STUDY

PASSIVE IMPRESSIVE

A retired eco building enthusiast fulfilled a dream to create an ultra low energy home by upgrading a barn he originally built in North Yorkshire using 'Passive House' principles

TEXT JAYNE DOWLE IMAGES GREEN BUILDING STORE



When Pete Smith heard that his new family home had passed the Passivhaus airtightness test with flying colours, he stood on his head to celebrate.

Friends and family of Pete, who is now 72, were not surprised at this eccentric gesture. The retired college manager is known for doing things his own way. His energy-efficient retrofit of The Barn House in Great Busby, North Yorkshire, is the crowning glory of a lifetime spent innovating and renovating. A low-energy home built along Passive House principles, it now achieves 0.4 air changes per hour.

"I was brought up by my grandfather and spent most of my childhood in his shed in the days of thrift, making do with whatever timber he could get hold of," he says. "The first skill and pleasure I learnt at a very young age from him was to make architectural and technical drawings, anticipate problems, and then modify the drawings." He went on to study philosophy for five years at Sheffield University and the London School of Economics, "which had little connection with sheds," he admits.

Pete eventually became head of the faculty of health, care and basic education at Middlesbrough College of further education, and lived in a large, old Victorian house in Middlesbrough for 42 years with his wife, Joy, and their three children, William, Emily and Tom, who are now in their thirties and forties. The family renovated this home over the years before selling to a neighbour and moving into The Barn House in 2017.

The original barn originated while they were living in Middlesbrough, 32 years ago. Despite being "pretty hard



up," Pete had managed to persuade Joy that "the logical thing to do" was to borrow enough money to buy nine acres of agricultural land at the foot of the Cleveland Hills. He recalls that this was a massive undertaking at the time, especially as the children were young, and there were lots of demands on time.

Nevertheless, here Pete and his family built a 16 x 9 metre portal frame barn – the frame being recycled from a previous agricultural building – added an outdoor stage, a wood-fired hot-tub and a secret log cabin. "For many years we used the barn as an opportunity for our children to engage in forest school type activities, hold mini rock festivals, and carry out various teenage nefarious exploits about which I know nothing!," he laughs.

The barn was the venue for 10 wedding parties for family and friends, including Tom and Emily's own nuptials. And surrounded by nature with a two-acre wood planted by Pete and Joy, it was also home to a vegetable growing scheme for young people with learning difficulties and disabilities, which Pete ran for several years following his retirement.

Then, five years ago, thanks to the change in Class Q planning law, which allows certain

buildings with an agricultural purpose to be converted into dwellings, Pete gained permitted development rights to turn the barn into a home.

The Yorkshire planning consultancy Rural Solutions handled the prior notification to Hambleton District Council, and their architect did a day's work on the necessary sketches.

The curtilage of the build was restricted to about 400 m², which allowed for subsequent development of a double garage and carport, fire escape, terrace and loggia.

"It took five years to – nearly – finish the conversion to a very comfortable house," he says. While he supervised the build, Joy "kept the home fires burning," and looked after the family and their aged parents.

"We moved in just over two years ago, and I still have plenty of little things to finish off, including the second fix on two bathrooms," continues Pete. "I did most of the work but had invaluable help from Meheri, an Eritrean refugee who I trained up as the air tightness champion."

Pete met Meheri though Joy, a retired sixth form English teacher who volunteers with the Methodist Asylum Project (MAP) in Middlesbrough. "He turned out to be quite

LOW POINT

"Generally feeling overwhelmed with too many competing pressures from a variety of sources at the same time. (I found that this can be overcome by concentrating on one specific area of work at a time and making lists – and even lists of lists!)"

– Pete Smith



RECLAIMED MATERIALS

The house uses 100 metres of redwood timber from a demolished railway bridge

HIGH POINT

"When we wake up and open the external shutters on the large window, it's amazing to see the view of the Cleveland Hills."

– Pete Smith

PETE'S RENOVATION ADVICE

"Don't wander around scrap yards unbidden wearing flip flops and a bandana! Wear all the safety gear and go to the office first and tell them what you are looking for. They will send you to a place you certainly won't find but you can have a good scout round while you are lost. Get to know the staff, and take cash."

remarkable, seeing as he was a shepherd in a remote village in Eritrea where all the buildings were of adobe, and there was no electricity," says Pete. Meheri now works as an Uber taxi driver in Birmingham.

Pete sourced the rest of his build team as locally as possible, speaking to people in the Middlesbrough building trade for recommendations; an electrician, Ecodan (under-floor heating) installers, a tiler and plasterer, excavator driver, and a layer and polisher of the floating concrete floor.

Pete's son William did some first fix plumbing, but the rest he did himself, along with brickwork, joinery, dry lining, insulation and window and door installation.

In the early stages of his project, Pete engaged the services of Phil Bixby of Constructive Individuals, a 'Passive House' specialist architect, to help him devise a low-energy building designed using the Passive House Planning Package. He also engaged a structural engineer to check the load-bearing capacity of the recycled beams, and The Green Building Store in Huddersfield, west Yorkshire, to advise on and supply the kit, including an MVHR system. However, he undertook the design and planning of the building and service routes for the two-storey, 220 m² house himself.

How did he organise such a complex project without becoming overwhelmed?

"Psychologically I found it very helpful to divide the project into small discrete components which when they were complete, I could stand back and admire the end result," he replies.

They built a 16 x 9 metre portal frame barn – the frame recycled from a previous agricultural building – plus an outdoor stage, a wood-fired hot-tub and a secret log cabin

Downstairs there is an open-plan double-height living and music area, a kitchen, dining room, circulation area, staircase – hand-built by Pete out of reclaimed Dutch elm, like some of the internal doors – and a lobby. Also on the ground floor is a fully accessible bedroom/play room, wetroom and utility room housing the MVHR and other technical apparatus.

Upstairs, the main bedroom has an ensuite and wide access to the internal balcony, where 4.5 metre external shutters open to a fine view



of the Cleveland Hills. There are two further double bedrooms, both with French door access to a balcony, an ensuite, and a smaller box room.

The use of reclaimed materials has helped to bestow a sense of solidity, character and depth to what was effectively, once a rough and ready barn. Around 90 m² of used scaffolding boards for flooring, hand-made bricks from St Patrick's church in Middlesbrough and Northallerton prison, and 100 metres of redwood timber from a demolished railway bridge helped to slash the project's carbon impact. There was also extensive use made of new (but scrap) stainless sheeting from a local lift manufacturer which had moved production to India. This was used as shower boards, some sills and kitchen shelving.

And, ever-thrifty, Pete saved a selection of Victorian panelled doors which his neighbour had thrown out years ago; now, weathered to a fine grey, they have found a place downstairs. Pete estimates that using all these reclaimed materials instead of sourcing new prevented the release of at least 40 tons of carbon dioxide into the atmosphere.

Externally, he points out that the terms of permitted development assumed that the original, weathered board-on-board cladding in local vernacular style would be retained. The large external shutters were made of scaffolding boards, which have weathered to a similar soft grey.

The design aimed to fit in with what he calls

an "agricultural industrial aesthetic", its form following function. The outer barn wall was protected with board on board rainscreen cladding. The inner box was made of 18 mm structural ply, 220 mm timber studwork, Rockwool insulation, and Kingspan panel boards – which he bought as 'seconds,' to save up to 40 per cent on standard prices.

There is a 50 mm void around the inner box of the building with numerous ventilation channels to prevent moisture build up on the inner structure. There are also 70 mm holes in the structural ply to allow for transmission of moisture-laden air.

Inward-opening triple-glazed timber windows, entrance doors and tilt and slide doors were chosen for their energy efficiency and were finished in a neutral cream (RAL 9001) inside and out. These were carefully positioned in the middle of the insulation. "They are somewhat set back, with splayed reveals to allow more daylight into the building," explains Pete. "Most of the external window frame is covered with insulation so the windows appear virtually 'frameless'."

The house is all-electric with heating provided by an air source heat pump, supplemented by a maximum efficiency airtight woodburning stove, with all firewood produced on site. "It costs about £2 a day to run everything," says Pete. "And there's an extreme comfort you feel throughout the house. Everything is the same temperature. If you turn it off, it will only drop by

CONTACTS/ SUPPLIERS

PLANNING ADVICE

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The house's total running costs come to around £2 a day

one or two degrees a day."

He's less impressed with the noise factor created by having a double-height, open-plan living space and concrete and wooden floors with no carpeting. This is further exacerbated by the 10 mm between gap door heads and frames required in Passive House design. Sound travels easily throughout most of the building, despite the inclusion of Rockwool between ground and first floor. "I'm working on the problem before grandchildren want to stay for thrash metal sleepovers!" he smiles.

The Green Building Store designed, supplied and commissioned the MVHR system, a PAUL Novus 300 MVHR unit, for the project, and Pete installed the system himself including insulating the ductwork pipes. He says that the ducting "went together like a dream," and he's pleased that the system is very quiet.

This would be demanding enough for a younger man, but Pete took it mostly in his stride. "The main challenges were around not getting daunted by the size of the undertaking, which involved design, procurement, scheduling and all the detail of project management, including project managing myself," he says. "There was also the concern that my back might give out – although I did lose at least 30 mm in height from lugging heavy materials around! In the event I found that building was probably less damaging to the back than sitting at a desk."

In a further move to help the planet, Pete plans to plant another half acre of trees for

"I did most of the work but had invaluable help from Meheri, an Eritrean refugee who I trained up as the air tightness champion"

carbon sequestration. He is justly proud of his achievement: "I can hold my head up at meetings of the local action group against climate change" – but even prouder of the fact that he is passing on his skills to the next generation of his family.

"My wife and I brought up our children to be immensely practical and I am proud to say that my four-year-old grandson, Fonzy, could use a handsaw very effectively when he was two!" It's perhaps not an approach to be recommended for every self-build project, but certainly Pete's story should be an education in itself. ■



BUYING INTO THE CONCEPT

Wanting to be part of the self-build hotspot that is Graven Hill, Dheeraj and Taniya Malik found a building system that they liked so much, they set up a business based around it

TEXT JESS UNWIN IMAGES JESS UNWIN & DAN ABRAMS



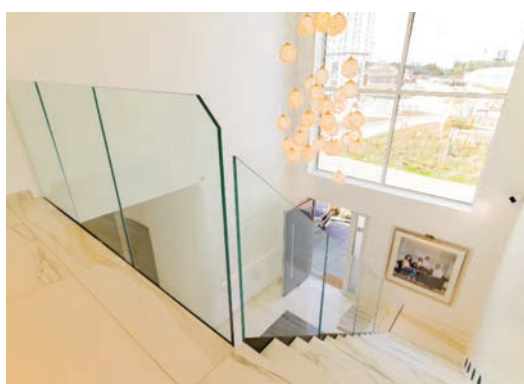
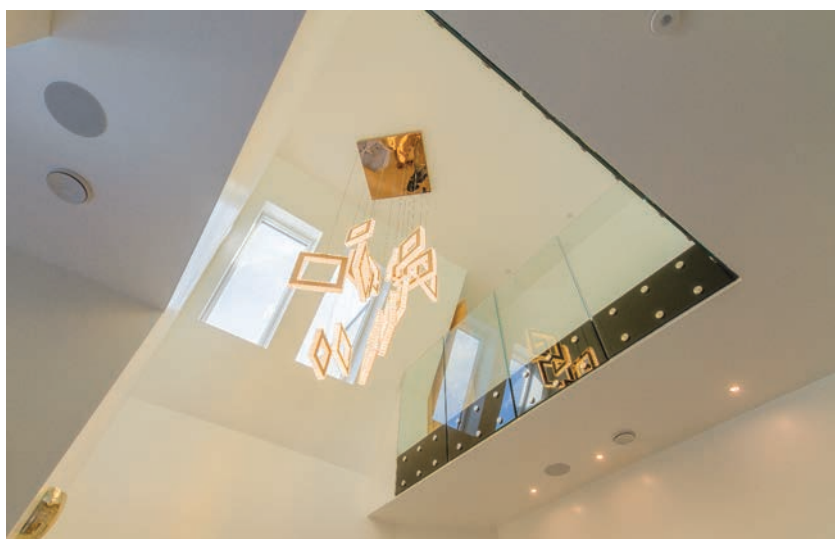
Dheeraj Malik could be speaking for all self-builders when he explains why he and wife Taniya decided to take on the challenge of creating their new home from scratch: "We wanted to build a house that we could customise to suit our lifestyle, rather than settle for someone else's idea of how a house should be and make our lives fit around that."

Like so many before them, the couple were brave enough to take on and overcome the challenge of self-building with no previous experience – and now they and their two children are enjoying the rewards of living in a stunning three-storey, five-bedroom detached home in Oxfordshire.

To help them achieve their dream, they joined the growing number of people who have been drawn to the unique self-build experiment that is Graven Hill, near the town of Bicester.

The project began when Cherwell District Council bought 188 hectares of land from the Ministry of Defence with the aim of creating the UK's first self-built and custom-built town. Up to 1,900 new homes will spring up there over the next 10 years, surrounded by open, green spaces including woodland, allotments and a network of cycle and footpaths.

So bold is the idea that the very first Graven Hill plots to be developed starred last year in a Channel 4 TV show (*Grand Designs: The*



Street), fronted by Kevin McCloud. The Malikis had already decided in the summer of 2017 – long before that show hit the small screen – that they wanted to be part of the Graven Hill experiment. Dheeraj says: “We were living in Slough in a townhouse, but we wanted a home where we could easily entertain family and friends. We’d always wanted to self-build but to have what we wanted – open-plan space, high ceilings and a little more countryside on our doorstep – we knew we needed to get ‘more bang for our buck’ in the housing market. That’s part of the reason for moving along the M40 and further away from London. Graven Hill seemed a golden opportunity.”

Another key driver was the so-called ‘plot passport’ system that’s operated by Graven Hill Village Development Company Limited (owned by Cherwell District Council). In short, self-builders can design the home they want and get planning permission within just 28 days – so long as they abide by some agreed parameters for the plot they choose. This includes the total size of the plot, maximum gross internal area (or floorspace), maximum building height, a palette of building materials and how main services are provided.

Dheeraj says: “The beauty is there’s very little design restriction. There are some checks and balances – you still want a residential housing feel rather than something that looks like a Disney theme park – but otherwise the house can be any style or shape.”

The Malikis took a plot with a gross internal area of 291 m² and a build volume of 400 m². The maximum height allowed was 11.1 metres, but at its highest point the building is actually 10 metres tall. From the external materials palette for their street, the Malikis chose a mix of white render and a strikingly attractive manufactured stone veneer imported from California – a concrete mixture cast in flexible moulds and hand-coloured with iron oxide pigments.

Where the roof is pitched, they opted for Brazilian slate tiles and a reinforced elastomeric polymer-bitumen waterproofing membrane where it is flat. Double glazing features throughout with a thermal efficiency value of 0.9U, exceeding the minimum standard set in the Malikis’ ‘plot passport.’

Dheeraj wouldn’t reveal how much he paid for the plot except to say it was a “competitive” price, but adds that another attractive part of the deal was the ‘golden brick’ approach offered regarding the foundations. “Foundations can be a nightmare because you don’t know what you’re going to find until you dig. But the Graven Hill team will assess ground conditions and give you a fixed fee for the foundation work, regardless of what they might later find. After all, it is a former MoD site!”

The design of the house itself is mostly all Dheeraj’s own work. His job in the financial services sector doesn’t seem to be ideal preparation for such a challenge, but, he reveals, “Before I came to the UK I did start my working

INDIAN-INSPIRED CEILINGS
While average UK ceiling height is 2.4 metres, the Malikis’ home has a 3.2 metre ceiling height on the ground floor



HIGH POINT

When we had all our friends and family over for the first time for my wife's birthday, and the 'wow' reaction I was getting from everyone. We love the house, but when something you've created is appreciated by other people, too – that takes it to another level.

– Dheeraj Malik

life as a graphic designer back in India, so maybe this house has been a way for me to channel my creative side."

He continues: "I made a 3D polystyrene model of how I wanted the house to be designed. Of course, I didn't know anything about making it structurally sound – I went to the professionals about that – but the finished house looks exactly the same as that model."

One of those professionals was architect David Paynter, recommended because of his experience of working with insulated concrete form (ICF), which was the building system that Dheeraj decided to use for the Maliks' new home.

Dheeraj says: "We came across ICF when we were researching building technology. It was fine in terms of planning approval – at Graven Hill they're open to a range of construction techniques. We talked to a contractor, viewed some properties built using ICF, and we quickly became convinced it suited our desire for open spaces and high ceilings."

As well as being impressed by the high thermal insulation qualities of the 8 metre ICF blocks, being able to make use of offcuts ensured they kept site wastage to a minimum. Dheeraj also calculated the increased construction speed ICF allows would be better than a traditional brick and block method in delivering within his desired timescale. He was right. While the family rented nearby, building work began in September 2018 and the Maliks



The couple were brave enough to take on the challenge of self-building with no previous experience

moved into their new home just seven months later in April 2019.

That was achieved despite the fact the ICF contractor went bust and Dheeraj had to hire the



While Dheeraj's relationship with the contractor went sour, his enthusiasm for ICF is undimmed

companies' employees himself to finish the job. However, while his relationship with the contractor went sour, his enthusiasm for ICF is undimmed. So much so that he joined forces with a friend to set up his own business constructing 'turnkey' ICF houses, and at present has contracts to build four homes at Graven Hill.

He says: "Having worked with ICF, and living

in an ICF house, I believe in this way of building and it's important we share the knowledge we have. The insulation is great, the ease and speed of building is fantastic. It's structurally strong and has design flexibility."

That design flexibility helped the Malikis achieve the Indian-inspired higher ceilings that they wanted inside. While average UK ceiling height is 2.4 metres, their home has a 3.2 metre ceiling height on the ground floor, with the exception of two elevated areas of 6.2 metre height – one of which is the spectacular entrance hall. All the rooms on the first floor boast 3 metre-high ceilings. Those dimensions did mean extra was spent on doors that were taller than the usual 1.98 metre size: "As soon as you go above standard, it's bespoke and that costs triple," says Dheeraj.

Although his architect was "brilliant" in advising him on costs, Dheeraj was comfortable with overspend where he decided he didn't want to compromise on design and quality of finish. He says: "My experience in finance means I'm pretty hot at sticking to budgets, but we have gone overboard here and there. However, it was always calculated. I knew we could afford it and it didn't happen by accident – it was a conscious decision."

Topping the Malikis' new home is a roof on two levels – one part is pitched, the other is flat. "I didn't want a traditional full-pitched roof or something completely flat, which looks boxy, so I went with a hybrid," Dheeraj explains. "The

CONTACTS/ SUPPLIERS

ARCHITECT

DP Architecture
dparchitecture.co.uk

TILES

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www.roccia.com

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ROOF

Topping the Malik's new home is a roof on two levels – one part is pitched, the other is flat

LOW POINT

The ICF contractor threatened to pull out just weeks before they were due to start. They changed their mind but then I wasn't sure I could trust them. I took the calculated gamble to go with them because it would have taken months to find someone else.

– Dheeraj Malik

pitched roof allows a 6 metre-long bi-fold door on the third storey that gives views of the nearby hills. The space is essentially an attic now but could be converted for living space in the future."

With the family renting nearby, Dheeraj was able to be onsite during construction before and after his working day. He also took one six-week period off work to focus on the build, and says that he "loved" project managing the building process himself – with occasional input from architect David Paynter. "I was surprised to find that I was a natural," Dheeraj adds.

Other features at the Malik's new home include underfloor heating on all floors and a mechanical ventilation with heat recovery (MVHR) system. The MVHR, like so much of the house, is fully automated. Switches in each room, which in a traditional house might only control the light, can be programmed to perform eight different touch functions including heating, ventilation, light and music. Says Dheeraj: "The electrician said our house has got more cabling than a small factory, but I see it as future-proofing as much as I can in a world where technology is evolving so quickly."

The plot, foundations and complete build, including professional fees, cost a little over £1m. It was funded from the sale of the Malik's house in Slough, another property and some savings. Dheeraj says: "We do have a residual mortgage – but that's really down to the overspend. We could have finished the house



Self-builders can design the home they want and get planning permission within just 28 days

for £200,000 less but then we wouldn't have quite the house we wanted. We've already had a party for 60-odd people here and it didn't feel overcrowded. That was our target all along, and we're delighted with what we've achieved." ■

A compelling case for composite

Indi Sarkaria of Arbor Forest Products talks through the pros of choosing composite decking, including aesthetics and sustainability, while outlining the most important factors for installation

Given the love that Brits have for outdoor spaces, it's no surprise that the decking market has maintained its good health over the past three decades – with it proving an ever-popular addition to self-build projects.

Gardens have become an extension of indoor space, and popular interior trends are making their way outdoors and onto decking, with grey shades currently in high demand. And not only can decking provide the finishing touches to a home project, but research by the Homeowners' Alliance has shown that it can add thousands onto the value of a property.

With this in mind, it's clear that the UK's love for decking is set to keep growing and that it's going to remain a popular investment amongst homeowners and those carrying out renovation works.

THE DIY DREAM

Decking has been growing in popularity since television shows like *Ground Force* and *Changing Rooms* hit our screens in the 1990s, with homeowners recognising its ability to transform an outdoor space and keen DIY-ers able to install it themselves.

30 years ago, softwood timber decking in particular conquered the market thanks to its ease of installation, relatively low cost and natural appearance – even now, these qualities make it the first choice for some. Another key benefit of softwood timber decking is that it's relatively simple for experienced users to establish whether it's a quality product or not: high quality boards are often heavier with fewer knots, and there shouldn't be any issues such as splitting or rot.

For those less experienced in purchasing softwood timber however, local merchants are a great way of gaining valuable advice, as many will have undergone training in order to steer customers in the right direction.

SIGN OF THE TIMES

While softwood timber decking has long been the popular choice for homeowners and DIY-ers, times change and we've started to see a growing demand for composite decking which isn't showing any signs of slowing down – and it is well suited to the increasing desire for Instagram-worthy, visually impressive outdoor spaces.

Unlike softwood timber decking, composite decking combines a flawless appearance with minimal maintenance – making it perfectly suited to those with a fast-paced lifestyle who want to enjoy the space without having to spend hours maintaining it. Good quality composite decking tends to only require a wash with soapy water to bring it back to its best.

This type of deck won't rot or split, and leading brands can offer a guarantee of up to 25 years for residential use; without the need to regularly stain or oil the boards. And not only does composite decking provide the ideal solution for those wanting a combination of style and practicality, it also provides a good option for the environmentally conscious.

With environmental issues consistently dominating the headlines in recent months, people are looking to make more eco-friendly choices, including when it comes to their decking. Composite decking is usually made from a combination of recycled plastic and wood fibres – with boards from leading brands consisting of up to 95 per cent recycled materials. And because the boards won't rot or splinter, there's no need for it to be replaced – lowering its impact on the environment even further.

THE IMPORTANCE OF INSTALLATION

Regardless of whether softwood timber decking or composite decking is the right fit for a project, it's essential that the installation is done correctly.



Composite decking is usually made from recycled plastic and wood fibres – boards from leading brands can be up to 95 per cent recycled material



Commissioning an experienced installer means that the deck will not only have the often desired 'wow factor' but it will also be installed correctly and to the highest standard, so it can be enjoyed for longer.

However, for those who do choose to install a deck themselves, it's important to purchase boards from a reputable supplier who can offer advice where required. Knowledgeable merchants will be able to give guidance on the quality of the product and its suitability to a particular project.

When it comes to the installation itself, some leading suppliers, including ourselves, also provide product-specific guidance on how to install decking through brochures and online videos.

Softwood timber decking and composite decking both offer a number of advantages, and can add both monetary and emotional value to a home as long as the decking has been installed to the highest standard. It's important to research the decking market and work with suppliers and installers to be able to truly enjoy the extension of a home's living space that decking can offer.

Indi Sarkaria is assistant product manager at Arbor Forest Products

Decking installation has long been seen as a task for keen DIY-ers, but for a deck to add value to a home it must be carried out to a high standard. Because of this, it's best to use a qualified decking installer, with a number of

specialists working across the UK. In particular, some composite decking brands offer both dedicated training and special initiatives like the TrexPRO installer scheme, which recognises the standard of experienced installers' work.



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Arbor introduces Trex Lighting range



Arbor Forest Products, exclusive UK distributor of Trex, the world's number one decking brand, has unveiled the new Trex lighting collection. The Trex Lighting Collection features a versatile range of three lighting options which can be used in isolation or together to suit any deck and to create the desired ambience. The range includes the recessed deck light, which sits flush with the surface of the deck; the stair riser lights for use on raised decks; and finally the post cap lights for use with Trex

railing posts. The lights are available in black and bronze colours and feature high-performance energy-efficient LEDs which are weatherproof and salt-air resistant. The lighting level can be controlled via a timer.

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New higher specification for deck substructures

The specification requirements for pressure treated softwood deck substructures are set to change in BS8417, the British Standard for wood preservation, when it is next revised later this year with key trade bodies incorporating the changes now. This means that all softwood components used for the structural sub-frame of a deck will have to be treated to the same level as components in permanent contact with the ground, referred to as Use Class 4. Janet Sycamore from the **Timber Decking and Cladding Association (TDCA)** explains why and how it will mean better performance for timber decking. Pressure treated softwood is commonly used to build decking substructures to support timber and composite deck boards. Preservative treatment provides wood with added durability and BS 8417 requires that the loading and penetration of preservative, impregnated into the wood, is tailored to the desired end use. End uses are grouped into 5 categories; use class 3 relates to exterior above ground use whereas Use Class 4 relates to exterior ground contact use. Janet explains further 'Ground contact use presents a higher biological risk to timber and therefore, in order to work well in this situation, a higher level of wood preservative needs to be impregnated into the timber'. Clear information about using wood correctly for decking and landscaping projects has been promoted widely in the UK for many years with organisations like the TDCA leading the way in providing supply chain and end-user good practice guidance.

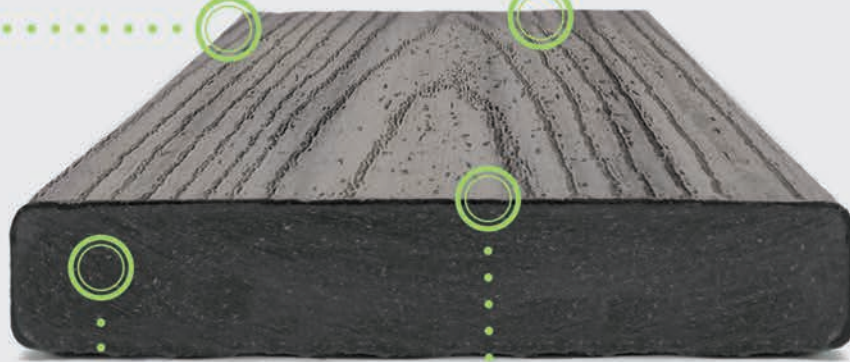
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CASE STUDY

A DIFFERENT VIEW

Despite a distinct lack of windows and character in general, Philippa Neilson-Factor and husband Tony took a punt on reinventing an uninspiring Essex bungalow with potential for an amazing outlook

TEXT KAREN WILSON IMAGES ODC DOOR & GLASS / PETER MAY PHOTOGRAPHY

Having grown up in an old rectory, Philippa Neilson-Factor's dream home was a barn conversion with huge kitchen, Aga and open fire. It couldn't have been further from the characterless 1940s chalet bungalow she ended up buying with husband Tony in November 2014.

"I asked our neighbour, who'd lived there for over 30 years, what the house used to look like because I wanted to give it some character back," explains Philippa, 53, a freelance PR / marketing consultant and mortgage advisor. "He said it had never had any character! That set the tone to go totally modern."


Philippa had sold her previous home in the

Midlands, and the newlywed couple were renting near Epping while they looked for somewhere to buy together. As Tony, 60, owns an office fit-out, commercial relocation and finance business, the couple both needed space for a home office with easy access to London. They also wanted decent entertaining space and ample guest bedrooms for when Tony's four grown up children and grandchildren visit.

After struggling to find anywhere they both liked within their budget, the couple extended their search east of London. They soon discovered a property in rural Essex for £700,000 that had been extended in the 1960s and again 10 years ago.

ENTRANCE WAY

A new wall has been built to replace the old fencing and a new gravelled driveway laid, which leads to the impressive new glazed entranceway.



"It felt dark as none of the ground floor windows were south or west facing and I wasn't keen on the black floors, and tired looking kitchen with granite worktops," says Philippa. "There wasn't a lot right with it to be honest, but we loved the countryside location and generous plot of almost an acre."

After initially deleting it from their shortlist, the couple returned for a second viewing and had a change of heart. "We never intended to tackle such a major renovation project, and Tony isn't that good at visualising," admits Philippa. "But he trusted that I'd be able to turn it into something that suited us much better. He didn't just sit back though – he contributed by doing all the goods ordering, receiving and delivering to site and managing the money side."

At first the pair had hoped to live in the house for six months before starting work, but it actually took three years to hone the design, get planning permission and line up a suitable builder.

"The first architect we spoke to didn't come up with any new ideas, but then a friend recommended Brendon Robins of Spatial Designs, and we loved the look of his past projects," says Philippa.

As their main aim was to create more

HALLWAY

A small bedroom was sacrificed to create a stunning full height entrance hall with glazing from ODC Door & Glass and long drop pendant lights



light and maximise the countryside views, it made sense to extend the kitchen within the constraints of permitted development rights and open up the previously blocked view of the paddock and fields using large spans of glass. Philippa also had the idea of taking some space from the long and narrow sitting room to incorporate an additional seating area into the new kitchen diner. This would leave them with a smaller but squarer sitting room with a cosier feel, which allowed for a more sociable seating arrangement.

Another bugbear was a somewhat pointless room in the middle of the ground floor that the previous owners had used as a dining room and then a bedroom. "We'd tried to use it as a study, but it was a weird, north-facing, 'nothingy' room that just felt lost," explains Philippa. "I decided to split the room into a walk-in pantry and toilet instead."

The pair also loved Brendon's idea of sacrificing the fourth single bedroom to create an impressive glazed and vaulted entrance hall. By moving the staircase away from the wall, they were also able to incorporate a full-height recessed bookcase too. "The only storage we lost was a small cupboard under the stairs but we've more than made up for it elsewhere," says Philippa. "For instance, I still have some empty kitchen cupboards which is such a luxury,

and moving the toilet means we have a larger utility room with ample storage too."

Their main indulgence though was a new six by nine metre garden room featuring a living room/entertaining space and spiral staircase leading down to a two metre deep wine cellar. Dubbed 'the wine box,' it's split into four quadrants incorporating a shower room, bar, seating area and 'man cave' with TV where Tony can watch football. Finally, the detached garage was converted into an office where Philippa and Tony work three to four days a week.

Luckily the plans were approved and permission was given to swap the old wood effect PVCu windows for aluminium ones and add white render. Brendon tendered the job out to five building firms, but as there was no shortage of work in the construction sector at that time, they only got three quotes back.

"Mark Hamm at MKH was the only one who came to see the project, which made all the difference," says Philippa. "He told us later he didn't really need to see the job to price it, but he understood that it helps with trust. When you're going to give hundreds of thousands of pounds to someone, it's nice to have actually met them!"

Despite a wobble when the couple realised their initial £200,000 budget would need to be doubled at the very least, work finally began in

VIEWS

Paulmann track lighting was fitted for the pendants and spotlights to give a degree of flexibility when positioning the dining table

PHILIPPA'S TOP TIPS

- * Tap into your builder's ideas and contacts. For instance, ours suggested things like magnetic doorstops, bathroom design tweaks and a great little tile supplier I would never have found otherwise.
- * One wall in the hall has been finished with magnetic plaster so I could create a photo display without the need to drill holes.



REAR EXTERIOR

By converting the garage into an office, building a garden room with wine cellar and extending the main chalet bungalow, Philippa and Tony have created a truly future proofed home with ample space for entertaining and working

LOW POINT

"Getting the build quotes in and realising it would cost far more than we'd anticipated. We did consider selling up and moving on, but after sitting in the garden with a glass of wine enjoying the amazing views, we decided to plough on and take a leap of faith."

– Philippa Neilson-Factor

October 2017. Brendon and his team project managed everything and Philippa visited the site two or three times a week, while they rented a house 20 minutes away. "My first career was as a civil engineer, so I have a better understanding of plans than Tony and my work is more flexible so it made sense for me to be onsite," she says.

The 11-month build wasn't without its challenges. "Building Control wanted more concrete in the foundations, so that was a big extra chunk of money on day three," she explains. "They also discovered a double septic tank where the wine box was going to built, and we had to upgrade to a full treatment tank which pumps cleaned water to a nearby ditch, as the land doesn't drain very well."

Being so exposed was also problematic. "The builder said it was both the hottest and coldest site they'd ever encountered, as they had to deal with the Beast from the East and a heat wave," says Philippa.

In the end the final cost of works was £450,000, which they paid for with savings, an

inheritance and by re-mortgaging. It would've been higher still if they hadn't abandoned their idea of installing steels to create more head height in two bedrooms with sloping ceilings, and saved money on artificial slate roof tiles. "We plan to have solar tiles in future when we can afford it, so we didn't want to overspend on the roof," she explains.

Despite these hiccups, the house has been valued at £1.3m, so the couple are still in a good position financially. "The goal was to create a home that suited our needs for the next 20 years rather than solely focusing on adding value," she adds.

One area Philippa is glad she didn't scrimp on is the glazing from ODC Door & Glass.

"Brendon showed us three different brands, and we chose a good quality middle ground," she says. "We originally thought we'd have bi-fold doors, but a friend told us you can't open them fully and you have more of the view obstructed by frames. In the end we decided on sliders, and we're really happy with the ones we chose."



CONTACTS/ SUPPLIERS

ARCHITECT

Brendon Robins at Spatial Design
www.spatialdesignarchitects.com

BUILDER

MKH Builders
www.mkhbuildersltd.co.uk

WINDOWS & DOORS

ODC Door & Glass
www.odcglass.co.uk

KITCHEN

Kitchens from Design
www.kitchensfromdesign.co.uk

FLOORING

Hallmark Floor Coverings
www.hallmarkfloorcovering.co.uk

RENDER

Cantillana
www.cantillana.com/eng

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Todd Doors; Howdens
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www.apcobathrooms.co.uk

BUILDING MATERIALS

PGR Builders & Timber Merchants; Chandlers Builders Supplies
www.pgrtimber.co.uk
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She's also pleased with the Heatmiser smart system, and believes adding underfloor heating and upgrading the insulation has really helped with energy efficiency. CAT6 cabling to all three buildings and fibre broadband has also helped future-proof the property.

Having to decide on lighting for a room before it even existed was one of the biggest challenges for Philippa. She ended up sourcing different designs from a variety of global suppliers, including a wine glass chandelier from eBay, a triple ring pendant from China for the wine box, and Japanese LED wall lights in the sitting room that project the shape of a lampshade. In addition, there are geometric hall pendants from Amazon and track lighting with interchangeable spotlights and pendants from Germany.

Few signs of the old bungalow have survived. "The only thing that stayed was one wardrobe," says Philippa. "Everything else went, including door frames and skirting boards." She's particularly proud of the new kitchen designed by Kitchens from Design in Brentwood. The layout was drawn up before the extension was built so that plumbing, electrics and lighting could be positioned. "The kitchen is my big thing, as I cook a lot," says Philippa. "I knew I wanted handleless units with marble worktops inspired by our holidays in India, so we found a lovely striped marble which contrasts with the simple pale grey units. Most UK kitchen designers try and put you off marble as it's supposed to stain and scratch, but I think it feels

more lived in and less sterile. It's not at all uncommon in Europe and further afield."

Another important aspect of the interior was the flooring. "As Tony's company does office fit-outs, I went for a commercial quality wood effect LVT [luxury vinyl tile], which comes with a 25 year guarantee," says Philippa. "It's been used throughout the house for continuity and really pulls everything together."

Outside, much work has gone into creating a level terrace to take into account the raised height of the back door off a new boot room at the side. Keen to recycle materials where possible, the old roof tiles were used as hardcore. Hazel hurdle fencing has also been erected to separate the garden area from the paddock and the boundaries have been planted with native hedging to try and negate the effects of the winds. Philippa's quite proud that they've managed to reintroduce elm trees too, which gives meaning to the house's name 'The Elms', alongside fruit trees and raised vegetable beds.

Looking back, there's very little she would do differently. "The are only two small things I would change – the back door opens the wrong way for me, and there's one socket position in my bedroom that I missed," she says. "That's not bad for a first project though."

Some issues were picked up along the way, such as a boiler cupboard earmarked for the bar area in the outbuilding which was moved to a less obtrusive position in the neighbouring shower room. Other issues were resolved afterwards, such as the acoustic panels added in

ELMS WINE CELLAR

A spiral staircase with remote control glass door leads down to a wine cellar from Spiral Cellars which can hold up to 1,000 bottles

HIGH POINT

"Having the space and equipment to cook and entertain – so using the walk-in pantry, ovens and special flip-up shelf for my Kenwood Chef. I love cooking, so the kitchen is one of the best things about the house for me, and definitely the heart of our home. Of course Tony would say the high point is watching football while drinking a glass of red in the Wine Box."

– Philippa Neilson-Factor



the office when the couple realised the pitched roof excessively amplified their voices.

Having been an avid viewer of TV property shows such as *Grand Designs*, Philippa was pleasantly surprised by how smoothly the build went. "I was thoroughly expecting to sack the builder," she laughs. "However the architect and builder were both amazing – they communicated well and really got on. I was happy to go with the builder's recommendations too, such as the kitchen company, as they'd worked together before."

In September 2018, the couple moved back in, and are glad they pushed on through with the project. "It took longer than we expected and was more stressful and tougher than we expected, but the result is something we love and every bit of the hard stuff was very worthwhile. Living in a home that's designed

"Living in a home that's designed exactly for our habits and needs is just brilliant"

exactly for our habits and needs is just brilliant. It's not just the way it looks, it's the way it feels and the way we still smile when we pull into the drive or come down into the kitchen, even over a year after moving back in." ■



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