

A STEEP LEARNING CURVE

Ian Trotter and Gill Hall dedicated almost six years to creating a striking, sustainable family home for life

Details Contemporary self-build, Oxfordshire, Aug 2005 – Present
Project Cost £298,000 (£1,490/m²)
Designer Kirkland Fraser Moor

Words: Clive Fewins Photography: Jeremy Phillips



The new low-energy home of Ian Trotter and his wife Gill Hall stands in the former kitchen garden of a large period property in a picturesque south-west Oxfordshire village. The first thought that comes to mind when you spot the almost hidden one storey property, with its curvaceous outline and flat green roof peeping out over the tall brick walls, is that the house is constructed in this way because that is what the planners demanded — a low-impact home with a decidedly green flavour.

Nothing of the sort. The house is the product of Hertfordshire-based architect David Kirkland – who specialises in sustainable design and whose previous credits include the Eden Project – and his clients, who were convinced that this was the sort of house that would best suit the site and their lifestyle.

When Ian and Gill bought the land for £285,000 in August 2005 – with the proceeds of their house sale – the plot came with plans for a four-bed modern brick house. The couple then spent two years on site living in a caravan with their son Hamish, then two, finding a suitable architect and builder. “Quite simply we wanted the house of our choice — something that was very low energy, that was specifically designed to make the best use of the plot and its location, that we would love and want to stay in... something that was really ours,” Gill explains.

The couple have achieved exactly that. Their friends and neighbours celebrate and admire their achievement, but also wonder if taking the hard route they chose – at great personal and financial cost – was slightly mad.

As well as its planted roof, the house, which with a little licence could be called crescent-shaped, has its outermost sections of wall constructed from straw bale. The entire inner curve is timber frame, with around 70 per cent of the area glazed with large sliding doors. This sinuous inner form was designed to allow the sun to shine into the bedrooms in the morning, warm up the south-facing heart of the building in the middle of the day, and then bring brightness to the family room and kitchen in the evening. Overheating is prevented by the 600mm zinc overhang, which has been designed as part of the roofing system, and the heavily insulated planted roof helps maintain a constant internal temperature.

The resulting house has created a double courtyard on the plot, with the walled garden being courtyard number one. Courtyard two is largely enclosed by the building and forms the focus of the design. It will eventually be paved and landscaped. ►

Natural addition to the landscape

The timber-clad single storey building with sedum roof cuts an organic form on its established plot. The undulating design is orientated to allow the rooms to enjoy the sunlight at different times of the day



GILL & IAN'S BUILD COSTS

Services	£4,000
Architect/engineer fees	£32,000
Timber frame (cut timber)	£6,000
Roof	£60,000
Zinc (incl fitting)	£14,000
Cedar cladding	£4,000
Stone flooring	£6,500
Wood flooring	£2,500
Windows	£21,000
Underfloor heating and cylinder	£5,000
Electrics	£4,000
Plumbing	£2,000
Sanitaryware	£1,000
Kitchen	£600
Labour	£55,000
Other materials and fittings	£40,000
Straw bales and lime mortar	£500
Car port	£2,000
Front door	£1,900
Miscellaneous	£36,000

Carving out unique interiors Gill and Ian's project represents the pioneering spirit of self-build in creating a home which is truly unique inside and out. The curving floorplan enables the open plan spaces to feel connected, but also provides definition between the living and dining/kitchen areas; a woodburning stove has been carefully located in the corner in order to be enjoyed from both spaces. In the £600 kitchen, a thick oak worktop was crafted from a tree which arborist Ian felled, and sits upon an IKEA island unit. A laboratory dresser, painted to match the walls, provides a home for jars and recipe books



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“When you enter the house via the deliberately understated front door on the rather hidden north side, you feel as if you are shutting the door and leaving the world behind you,” says Ian. “After nearly two years in the house we can say it works really well.”

A near-perfect, low-impact house – that is much loved by all three members of the family – set within a tranquil, desirable downland village: could there be any drawbacks? “Well, basically, if it hadn’t been for a wonderful architect who was at all stages very generous with his advice; our builder, Andy Winterbourne, who lived just round the corner and who was similarly generous with his guidance to our self-build team; and friend Wendy Aynsley, who donated a whole year of free labour to the project, I don’t know how we could have completed the house,” says Gill.

The self-build team was an interesting bunch. Gill worked on site full-time throughout, with Wendy also full-time for 12 months. They were aided part-time by Marcin Szmyt, a young Pole living in the village at the time, and Wendy’s friend Phil Knight. Ian worked six days a week as an arborist to pay the bills, and so was unavailable to help with much of the labour.

A large proportion of the build work – the groundworks, the foundations (with the exception of the floor screed), the blockwork where needed, erection of the timber frame, installing all the roof supports and the windows – was undertaken by builder Andy and his team. The intention had always been that Andy would do far more, but when Skipton Building Society was unwilling to offer any more than £30,000 in addition to the couple’s original £120,000 loan, Gill and Ian were unable to raise further finance.

Natural finishes

Timber and stone feature heavily, particularly in the flooring, which alternates between Upton Original Wood Company timber boards in the living room and bedroom, and rustic flagstones in the kitchen and hall from IBS Reclaim

IAN AND GILL’S SELF-BUILD

Construction Timber frame, straw bale and masonry
Size 200m²
Build Time Four years
Build Route Self-managed
Plot Cost £285,000
Build Cost £298,000
Value on Completion £700,000

Subsequently, far more pressure was put on the self-build team to complete the project through DIY.

Gill, Wendy and Phil worked for a month on the screed. “It was a huge job. We mixed 36 tonnes of sand and cement,” explains Gill. The other major jobs they undertook included all the insulation, flooring, installing the underfloor heating, some of the plastering, and the decorating.

The family moved in for Christmas 2009, but only just now regard the house as complete. Counting the two initial years in the caravan, the project has taken over six years — rather longer than the 18 months they originally envisaged.

Has it all been worth it? “Definitely,” says Gill. “We wouldn’t have changed the design, and we have put a vast amount of love into it. But we wouldn’t do it again. We’re staying put!”



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The 'Bespoke' Kitchen

Ian and Gill still get a thrill out of their kitchen, which serves as the family room, the nerve centre of the house. It has a commanding view of their beautiful enclosed garden, while the mass of glazing attracts warmth from the evening sun. The woodburning stove – the wood comes free through Ian's work as an arborist – burns away cheerily in the curve between this room and the equally lovely living room.

A combination of a dislike of fitted kitchens and a shortage of funds resulted in a kitchen that cost just shy of £600. One of the best buys on Gill and Ian's shopping list (RIGHT) includes a stainless steel commercial gas cooker bought for a tiny sum of £75. The kitchen also features unique additions such as a 1950s British Rail stainless steel luggage rack, picked up for £50, now used to store pots and pans, while an oak worktop has been carved from a felled tree. This sits majestically upon the central IKEA island unit. ►

Single storey living

The bedrooms, including the spacious master (6), radiate off a long internal corridor (7) lined with built-in storage and lit from above by sunpipes. All bedrooms open out to the private garden

IAN AND GILL'S KITCHEN

Central IKEA island	£200
Oak worktop from a tree Ian felled	free
Laboratory dresser	£60
Stainless steel counter with wooden legs	£50
Gas cooker	£75
Stainless steel worktop ..	£10
Luggage rack	£50
Other shelving	£20
Paint	£10
Labour (mainly constructing worktop)	£120
TOTAL	£595

USEFUL CONTACTS: Design David Kirkland of Kirkland Fraser Moor: 01442 851933 k-f-m.com Structural engineer David Dexter Associates: 020 7247 7172 Timber frame Joseph Griggs and Co: 01452 520346 Groundworks, installation of windows and advice AJW Building Services: 07767 472560 Windows Rationel: rationel.co.uk Green roof Alumasc: 01744 648400 Zinc eaves Andy Sterrick: 07976 417245 Timber flooring Upton Original Wood Company: 01235 851866 Underfloor heating Wundafloor: 01291 634145 Electrics Chris Savva: 07956 581312 Plumber Graham Bellis: 01235 751565 Energy survey Sustainable Lifestyles: 01235 550540 Plumbing supplies RJC Plumbing & Heating: 01235 763547 Kitchen Haynes of Challow: 01235 763839 Other building supplies and interior doors Buildbase 01235 771128 Front door Urban Front: 01494 778787 Flagstones IBS Reclaim: 01844 239400



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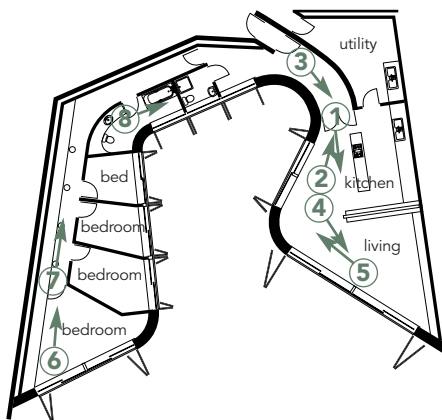
Simplicity is the theme in the family bathroom
The simple, streamlined sanitaryware allows the natural materials to take centre stage. The timber wall is a particular feature, and a nod to the cedar-clad exterior

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A Sweeping Plan

A long hallway connects the master and three further bedrooms at one end of this unusual floorplan to the living area at the other. Most rooms have windows and/or doors which provide views of the private garden, as well as being orientated to facilitate passive solar gain. The colder northern elevation features no openings, to minimise heat loss.

Photographs were taken at numbered positions



The Cost of Being Different

If there is one lesson Gill and Ian have learnt after completing their very beautiful home, it is that building a single storey house with curving walls is far more complicated – and expensive – than building something of a more conventional nature. “Standard parts just don’t fit a house that is dominated by curved walls,” says Gill.

Similarly with the floor screeding: “The curved walls and all the different angles proved immensely difficult,” Gill continues. “It would be almost impossible to find a house more difficult to start on as a self-builder — madness really. I believe a lot of TV programmes make it all appear far too easy. Quite simply, it isn’t — particularly when a Herculean amount of the labour is being done by two women!

“For as long as we live here, Ian and I will always ask ourselves two questions. The first is about the straw bale walls: ‘Could we have achieved the same results and U-values in a simpler and less labour-intensive way?’ Our architect, David, admitted that the way we used them was very experimental. The second is about money: ‘How much more did it cost us doing what we did, rather than just hiring a main contractor to build the two storey brick house previously granted permission on the site?’ It would have certainly been a lot quicker.

“When we think of the slog, the heartache and the financial worries, we call all this ‘the cost of being different,’” concludes Gill. 🏠

