

Long distance design

After being presented with a building plot in Scotland, Kieran and Makiko designed their dream home with Eastern influences all the way from Japan
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 PHOTOS: DOUGLAS GIBB



The decision to build is a bold one, and people should be similarly bold with design choices

Growing up in the 1980s, unhindered by health and safety regulations, Kieran Gaffney spent hours on an abandoned building site, constructing a dream house. "Long before I became an architect, I was building a house," he says. He and his partner, Makiko Kusabi, realised this long-held dream in 2007 with a unique house, in the seaside town of Portobello, where their Scottish and Japanese backgrounds intertwine.

The couple were living in Japan in 2006 when they took a three-week break to check out potential sites in Scotland. Kieran's cousin had just bought a house in Portobello, Edinburgh, and they decided to visit. "I had always loved the quirky mix of building styles in the neighbourhood between the main street and seafront, and thought the plot was ideal. So, they bought it outright, using savings from the sale of their last flat. A self-build mortgage, brokered by BuildStore, was taken for 75% of the construction costs, and the remaining 25% financed in cash.

From the outset the couple, with two children and a young dog, had to be pragmatic. "We were not particularly narrowly minded about building styles, and saving on design fees, we wouldn't go over £1,200,000," says Kieran. "I'd advise any self-builder to add 25% to the figure they initially come up with."

Cross cultural designs

Having secured the plot, the couple returned to Japan and found that the Japanese building style was a little more challenging. "Imagination really came in to play," says Kieran. "This was the first self-build we had worked on, and even from over 5,000 miles away there was no escaping the physical constraints of the site. The tight 192m² plot, fringed by two narrow lanes, demanded efficient use of space and affected design details. "The building's corners aren't quite square, making everything more complicated," says Kieran. "We had to be very careful not to overspend money. Access, for example, proved tricky for terraces."

Planning permission was secured within two months, the process helped by a previous, approved application for two flats. Unfamiliar with the local council, the couple were cautious, adhering to the previously approved footprint and ridge height (as well as the pitched roof). "We'd initially moved back to Scotland eight months before we were to start building, so we had to find local suppliers at short notice," says Kieran. "Having been away for years we didn't have contacts," says Kieran, who found trades, such as a Polish tiler, via the internet. Materials were sourced locally: the Scottish oak cladding came from a sawmill 12 miles away, as did poplar for the flooring upstairs. ©



"Popular is quite a 'soft' hardwood that works here as we remove shoes indoors," says Keran.

The neighbour's garage was laid without difficulty (although the foundations were laid without being underpinned) and the utility was set up within two weeks. "This part happened quickly as it was a straightforward job," says Keran.

The building should have been wind and watertight by the following month, but the windows were delayed by six weeks. Several windows just into the roof, so the slates couldn't be put in place until they arrived. "It was the

wettest August, and it was so depressing to see puddles gathering upstairs," says Keran.

Plumbing also proved challenging, as a series of existing pipes under the road had to be carefully negotiated to fit new drainage. "In the end it was sheer doggedness that got it done," says Keran. The project managed individual trades such as the plasterer, electrician, plumber and roofer. With help from his brother Neil, he completed all the plaster boarding and laid the concrete floor, too.

Japanese influences

Keran and Makiko were unafraid to individualise their home, embracing the influence of rural Japan, where farmhouses enjoy a wonderful sense of space. "The decision to build a bold one, and people should be simply to work with the grain of the wood," says Keran. "We didn't do a lot of separation as in the UK, a quality reflected in this home's open plan kitchen/living space. The ground level stays in tune with the upper floor via a double-height void. The

children often sit at the top of the stairs, beneath a south facing glazed corner originally conceived as a 'solar space' for moon gazing (tsukimi), which is floored with traditional Japanese straw mats. "We thought well contemporary life here," says Keran. "But in reality it's where the children read" the house (including the front of the house) faces into the garden, protected by a six-foot high stone wall, while the back overlooks the lane. Many Japanese houses don't have windows to the rear, but

Favourite feature

"We really enjoy the light in this house and, related to this, the heating system," says Keran, "along with lots of glazing to the south and east to make the most of solar gain.

The heavy concrete floor helps to absorb and moderate temperature,

keeping the house cool on hot days and warm on colder days. The heating system was installed in November to early March (when our home is overhauled by our landlord).

We have underfloor heating downstairs, radiators in the bedrooms and a wood-burning stove for the occasional sunny day, and we feel pleased if the sun is shining at the summer."





The neutral palette and full height windows give this home a relaxed, open feeling

Kieran & Makiko's learning points

- 1 **The sequencing of work is the most difficult part of the process to plan for.** In reality there is more than one first and second fix. It was here we learned to plan and sequence the project and cost money
- 2 **Build your own dream house, not anyone else's.** And don't listen to builders, neighbours or passers-by, who suck in air and say 'I wouldn't do that' or 'I wouldn't do that'. They will try to make you go to 60 ft and stick to your guns
- 3 **People say 'It's costly to make changes on site' but the reality is that until you see and stand in the space you don't always have everything worked out. We only made changes when we were in the staircase hallway - where we decided to expose joints in the**

timber - as we went along. Be flexible and prepared to make changes, even if it costs a little more

Self-building feels like an act of defiance. The whole system - from planning to building control and onwards - is set up to frustrate and limit your chances of success. Everyone who finances a self-build deserves a pat on the back

If you build with a timber frame - and we did - you need to be aware of the insulation (it took us five weeks with help from a lot of friends). To put it another way, investing in a frame is worth it. We used a high quality, sound insulation that this gives better

Makiko was dismayed when they reached the end of the project, only to be relieved financially. "We spent more than anticipated on the things you don't see such as foundations," she says. Structural features such as the sliding doors and south-facing corner window also ate into the budget, so the functional white Ikea kitchen was a decision based on cost.

"The things we use everyday are not necessarily the best. We had to spend a lot of money before the house was complete. We moved in, and worked to create more funds to complete the build," he says.

Space, storage and symbols

The couple's architectural practice was initially based in a ground-floor office. "We had to make the office more usable without entering the living space. It's now a home office with potential to become a guest suite in conjunction with a w/room opening from the entrance corridor. Fitted with a shower and with space to hang wetsuits, the latter is a perfect inclusion for a family who spend lots of time at the beach. Behind the w/room, a built-in area stores the washing machine and recycling. ☺

How they did it The concrete floor

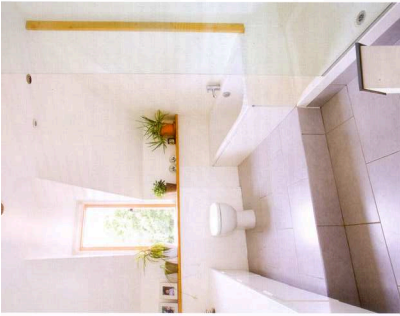
"Houses built with timber frames, which are very light, can overhead to supply and by and large the concrete floor is the only one for £10,000, which was 15% of our budget. I suggested to our firm, Lasebury Contracts, that they offer technical advice and send a labourer to help us in the kitchen. We agreed to pay for the concrete. A week or so later, the majority of the work is in preparation, digging the shuttering right and using daylight bulbs, as it was vital that we could see what we were doing. It was a bit of a pain, but the concrete took a long time to 'cure' in the cold weather; we started at 7.20am and finished polishing at 2.30am that night.

"The building was lit up like a UFO and it was a bit of a pain, but the concrete did last took one night. It is built-up area like this we had to consider our neighbours; we didn't work on Sundays, or before 9am on Saturdays."

"We love the colour and tone of polished concrete, which looks dirt but is hard to maintain. The concrete is smooth as butter, feel soft despite the fact it is diamond hard. It's almost impossible to scratch. As a Japanese person, we are very particular on the floor, so we appreciate this one. Concrete is not the most environmentally friendly material to produce but that's balanced by the fact this floor has on



The pillar is a cherished 100-year old pillar and decorative, and the family use it to mark the children's 'height against



Upstairs, two bedrooms share a large bathroom. "In Japan the whole family often sleep in one room, so we thought we would have a guest room," says Kieran. But in this respect the family have conformed to Scottish cultural mores, the three children sharing a bedroom that stretches through the building's depth, and can easily be subdivided when they are older.

A first-floor window created within the double-height void allows light to filter into this bedroom, which could be floored to create an additional rest bedroom. Function is at the heart of the couple's bedroom, which receives light from two aspects. But while it has built-in storage, Kieran admits the house doesn't have enough, and that the bathroom was perhaps too generously scaled. "We previously had a tiny bathroom and wanted to fit the whole family in here, with a step for the children to sit on," he says. He hopes the large walk-in wardrobe will be a bath – a place for the large walk-in wardrobe from which it's possible to step in to the adjacent bath.

Kieran relishes the opportunity self-build affords to incorporate unique features, such as the sunken table (kotatsu) in the living space, where families gather in traditional Japanese homes. "Here, we have underfloor heating, but my grandparents would burn coal under the table, so we have a gas burner. So the whole family would be able to sleep at the table." So, too, are the table, the family have included is the large pillar that dominates. ©



the living space. It is a charred, 100-year-old fallen oak tree. It serves a structural and symbolic function, emblematic of good fortune, and is also a representation of growth on which the children's heights are tracked.

Because a garage used to occupy the site, 'contaminated' soil had to be replaced. The new soil is of superb quality, and everything from sunflowers to pumpkins planted in newly jarred seeds grow to a grand scale. Not least, built on a sloped site, either on strong cut timber (to feed the wood burner).

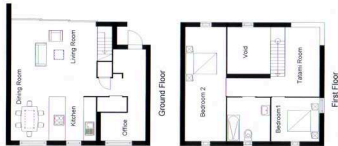
During the project, Kieran considered setting up a practice combining architecture with building services. "In the end I decided the building part was too exhausting," he says, describing his first self-build as the most educational thing he has ever done (including seven years at university and fifteen years work experience). "I was a bit of a doer, and fifteen years of it was a bit of a slog. Now, I would build a nice square building in the middle of a field!" ©

Above: The children use the space under the roof windows to relax and read, and the area is intended for a stargazing spot.

Useful contacts

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Floor plans



Plans re-created in 3D Architect Home Design Software – the perfect tool for all self-build and home improvement projects.

0190 889 8108 • www.3darchitect.com • info@3darchitect.com

Build timetable

The course marked the plot on August 2006 and applied for planning permission the following January. Permission was granted in March 2007. Work started on site in April 2008 and completed in February 2009.



The Konishi & Gaffney file

Owners Kieran Gaffney and Makiko Konishi
Plot size 192m² (45,000 sq ft)
Plot cost £100,000
Build cost £153,000
Total cost £253,000
Contractor £12,644 (0.5% per m²)
Location Portobello, Edinburgh
Date work commenced April 2008
Completion date February 2009
Construction time 38 weeks
Method of construction Timber-frame
Current value £300,000

Total build cost breakdown

Elements of the build	Cost%	Cost/2	Total cost
Preliminaries	4.5%	£57	£70,000
Foundations	4%	£52	£65,000
External Walls & Windows	29%	£366	£45,000
Road Structure & Covering	15%	£187	£20,500
Internal walls	4.5%	£57	£7,000
Floor wall & ceiling finishes	6%	£75	£9,000
Joinery & fittings	10%	£120	£16,000
Plumbing & Heating	7%	£89	£11,000
Electrics	4%	£48	£6,000
Decorating	3%	£41	£5,000
External works	3%	£36	£4,500
Feas	3.5%	£45	£5,500
Misc	6.5%	£81	£10,000
Grand total			£153,000

BUILD IT SAYS...

Kieran and Makiko have together built a stunning and very personal family home. It is a self-build project and the result shows self-build can be done in a very professional way. They wanted to build, geared it round the family, and filled it with meaningful features. Key to its success was that they designed and realised their home in an area full of eclectic designs.