



HOMES New build

ost people who came to view this cliffside plot of land just laughed and walked away," says Martin Blum. "I fell in love with it completely, though, and was determined to find a way to build here. As a product designer I'm used to solving problems, and devised a zip-wire lift to transport materials down onto the site. It was quite an adventure."

The steep 33-degree hill stands within a Conservation Area in an elevated and prominent position, overlooking Polperro harbour through huge Monterey pine trees, with the South West Coast Path running along the south side of the plot. Approached via a steep, zigzagging path which tumbles down the cliff, there is no vehicular access to the property other than by quad bike.

An existing First World War army hut which stood on the site was previously used as a classroom for the local primary school, and later for residential purposes until 2005. This simple, single-storey structure was constructed from timber under metal sheet roofing, with a bedroom located between the living room and kitchenette, and a lean-to serving as a toilet.

Martin and his wife, Michiko, had not previously built a house and were living in London with their twin boys -Kaito and Cooper, now five. "I ran a company designing a range of products, and when I sold the business in 2014 I knew that I needed another project," explains Martin, who began hunting for a suitable opportunity.

"I didn't know Polperro at all, but had visited St Ives and remember being impressed by how beautiful it was," Martin continues. "When this piece of land came up for sale I saw it online and liked the idea of building a house in Cornwall."

Planning permission already existed for the old army hut to be replaced with a new dwelling, but this was about to expire when Martin went to view the plot. "I had to trust that planning permission would be granted again," he says. "The existing design was very ordinary, and I felt that





Exterior

The luxury beach house has a sheltered cliffside position overlooking Polperro harbour on the south-east coast of Cornwall. Floor-toceiling glass doors lead onto a wooden deck overlooking the ocean.















Kitchen & living area

A relaxed. Scandinavianinspired interior, underfloor heating and a feature wood-burning stove ensure that the property is always warm and inviting. The carcasses for the kitchen units were purchased from Ikea, and the oak-veneered ply panels and island were fabricated by builder Peter Todd to continue the cabin feel.

Gallery

A swing seat has been installed on the first-floor gallery which overlooks the living space below.



- because building there would be so difficult - the house needed to be really exceptional to warrant the effort."

Planning advice was sought, but the planners did not agree with the white-render-and-slate-roof design presented at that time, so it was modified accordingly. The resulting two-storey building was designed by local architectural design consultant Andrew Thomas, using a sedum roof and rustic timber cladding to blend in with the surrounding landscape.

"The challenge was to design something as simple as possible to build, bearing in mind the access difficulties, and Andrew's design was granted planning permission straight away," explains Martin, whose inspiration was Casa Klotz, a rural beach house in Chile designed and built by Mathias Klotz for just \$20,000.

Within the planning application was the design for a timber-clad double garage to be constructed on part of the parking area, which would serve as a store for materials during the build as well as a temporary home for Martin while he worked on site.







Bedroom

The two double and twin bedrooms each have full-height glazing and washed oak floors. Two of the bedrooms have en suite bathrooms, and there is also a family bathroom on the first floor.







Inspiration

Casa Klotz on the seafront in Tongoy, Chile, was the inspiration for Martin's house. Designed in 1991 by Mathias Klotz, the two-storey rural beach house has wood decking, whitetimber cladding and large windows and balconies facing out onto the beach It cost \$20,000.



"I was told from the start that permission would not be granted to transport materials through the narrow streets of the village, because it would be too disruptive," he says. "This had prevented others from developing the plot, but was also what made it affordable enough for me to buy."

The new house was designed using the existing stepped site levels, and very little landscaping needed to be undertaken, leaving vegetation to take its natural course. The winding pathway from the top parking level was retained and manicured, together with a path on the lower section.

The new house has been built with a steel ground floor and a timber-framed upper level. Pad foundations avoided the need for extensive excavation, and these were shuttered and tied to the existing rock, much of which is exposed. "We just had to dig until we hit solid rock, which meant there was no need to pour a concrete slab," explains Martin.

His solution to the access problem was to design a winch and zip-wire system, with a capacity of 500kg. All materials were brought to the top parking area and either transported by hand down the pathway or lifted into place using the electrically operated zip-wire.

No section of steelwork measured over 5.5m long or weighed more than 140kg, making them manageable to manoeuvre, as it was impossible to bring any machinery onto the site.

"I have an English mother and a Swiss father, so my vision for the lift was probably inspired by the Alps, where you often see simple material lifts with electric motors on farms," says Martin. "Ours was built by a local welder and cemented into place, with a huge A-frame at the top made from steel beams and hauled upright using ropes and pulleys.

"I had books full of drawings working out the angles and tensions, and was helped by the builder and my brother, who brought over the pulleys and cables from Belgium. It was daunting to build, because it could have been quite dangerous if anything had gone wrong."

Timber framing for the first floor is supported on the structural steelwork, and was constructed on site using relatively compact timbers to avoid manoeuvring large panels. Walls are highly insulated, and have been clad







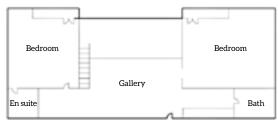
externally with natural timber boarding, and internally with insulation-backed plasterboard and a vapour barrier.

Composite timber and aluminium windows and doors are set in timber sub-frames, and the roof consists of timber joists with marine ply and insulation, covered with a waterproof membrane and sedum.

"I took on the project management and was on site to help with all of the jobs," says Martin, who employed a talented builder accustomed to tackling difficult projects, and worked alongside him on all aspects of the build - only bringing in occasional subcontractors and specialists as needed.

Martin's top tip

"Consult people who know what they're talking about to get expert advice. Before I dug the foundations for the lift, for example, I brought in a geologist for a few hours to test the rock and decide where best to build."



First floor



Ground floor

In detail

Raffia is available for holiday rentals through Unique Home Stays: 01637 881183, uniquehomestays.com

PROJECT

Design A H Thomas - Architectural Design Consultants: ahtdesign.co.uk **Building contractor** Peter C Todd: 07770 603905, pctodd@btinternet.com Structural engineer, including steel frame M and A Foulkes Design Ltd: michaelfoulkesstructengineering.com Geological consultants A Robin Hood & Associates: 01803 329074

STRUCTURE

All timber, including cladding and flooring Bond Timber: bondtimber.co.uk Sedum roof Bauder: bauder.co.uk

FLOORPLAN

The simple rectangular 130sam floorplan accommodates a ground-floor kitchen/diner, double-height sitting area and an en suite bedroom on the ground floor. There are two further bedrooms, an en suite and a bathroom positioned to either side of a gallery on the first floor.

All steelwork Weldspray Engineering: weldspray-engineering.co.uk Windows Katzbeck, Austria: katzbeck at/en

FIXTURES AND FITTINGS

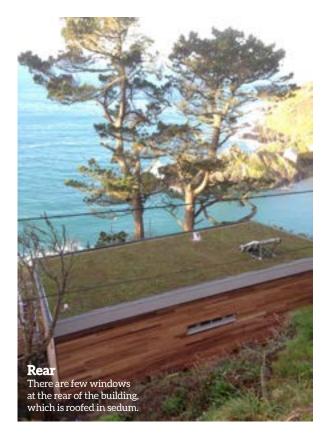
Underfloor heating, solar panel and air source heat pump Nu-Heat: nu-heat.co.uk Electrical work Gascoyne Electrical: gascoyne-electrical.co.uk

Plumbing and heating installation

AC and NC Davis: 01503 272205 Bathrooms Bathroom, Kitchen and Lighting Shop: 01752 312223

Kitchen carcasses Ikea: ikea.com Slate tiles Brazilistone: brazilistone.co.uk Metro tiles Topps Tiles: toppstiles.co.uk

Burley Holliwell wood-burner Fire Power: firepower.co.uk



"We worked from 7am until 5 or 6pm, or whenever it started to get dark in the winter months," he says. "I commuted weekly on a coach from London and installed myself in the garage with a hammock, gas fire and microwave for the whole duration of the build."

Michiko is Japanese, and was able to design the house around the principles of Feng Shui, including the plan for the waste pipe and the location and screening of the entrance door.

"We both looked at modern Japanese interiors that include a lot of light wood in combination with white walls," Martin explains. "To me it was important that the house should have a comfortable, cabin feel: somewhere that you can walk around barefoot and feel relaxed."

Budget was of prime importance throughout the project, and was initially set at £150,000, but later swelled to a more realistic £220,000. This included demolishing the old army hut, building the insulated garage and erecting the electric hoist.

Inexpensive softwood was used to make the bespoke staircase, which was hoisted down onto the site and installed by the joinery company. Rustic limed engineered oak flooring has been laid in the majority of rooms, which Martin first saw in a ski lodge in the alps and managed to eventually track down in the UK.

Underfloor heating is connected to an air source heat pump, and a solar thermal panel heats the hot water, but here the technology ends and the lack of wi-fi or even a television makes the house a real retreat from modern living. Family and friends can while away their time reading, painting or simply sitting in the swing chair listening to the radio and enjoying far-reaching sea views.

"Heat from the wood-burning stove rises up through the gallery and quickly warms bedrooms when doors are left open," Martin explains. "It's a comfortable house all year round, and is everything I'd hoped it would be. People thought I was crazy to buy such an awkward piece of land, but the views alone have been worth all the hard work."













The build

Previously, an old single-storey army hut stood on the site, dating back to WW I, which was demolished to make way for the new two-storey house. All the materials and fixtures, including the air source heat pump (right), had to be winched onto the site using a specially made zip-wire from a deck above the site.



The final word

What was the high point?

I actually enjoyed the physical regime - getting up early in the morning and working until I was exhausted - and would often be in bed by 7pm. Everything was built using hand tools, as it was impossible to bring machinery onto the site.

...and the low point?

Struggling to juggle building the house with family life in London was hard. Michiko is an artist, and her career was taking off at the time, so leaving her and the boys during the week sometimes felt selfish.

The best buy?

I was very conscious about money throughout the build. Our weathered scaffolding boards were cleaned up and used as cladding for a feature wall in the living room. I did all the wire-brushing, fire-proofing and finishing, so they were a bargain and give the room a cosy cabin feel.



...and the biggest extravagance?

The engineered oak floor with its saw marks and lime-washed finish was far cheaper than it should have been, at around £45 per square metre, but it was still double what I'd planned to spend on flooring.