

FACT FILE

NAMES John & Maxine Fack
OCCUPATIONS Owners of Instant Marquees
LOCATION Cornwall
TYPE OF PROJECT Self build
STYLE Contemporary
CONSTRUCTION METHOD Concrete, steel frame & timber frame
PROJECT ROUTE
Architect and main contractor
PLOT SIZE 0.4 acres
LAND COST £250,000
BOUGHT 2014
HOUSE SIZE 236m²
PROJECT COST £826,120
PROJECT COST PER M² £3,501
TOTAL COST £1,076,120
BUILDING WORK COMMENCED
November 2015
BUILDING WORK TOOK
16 months
CURRENT VALUE
£1,800,000

Hillside sanctuary

John and Maxine Fack turned a forgotten, scrub-covered sloping plot in Cornwall into an award-winning dream home

WORDS **ALEXANDRA PRATT** PHOTOS **LATITUDE 50**



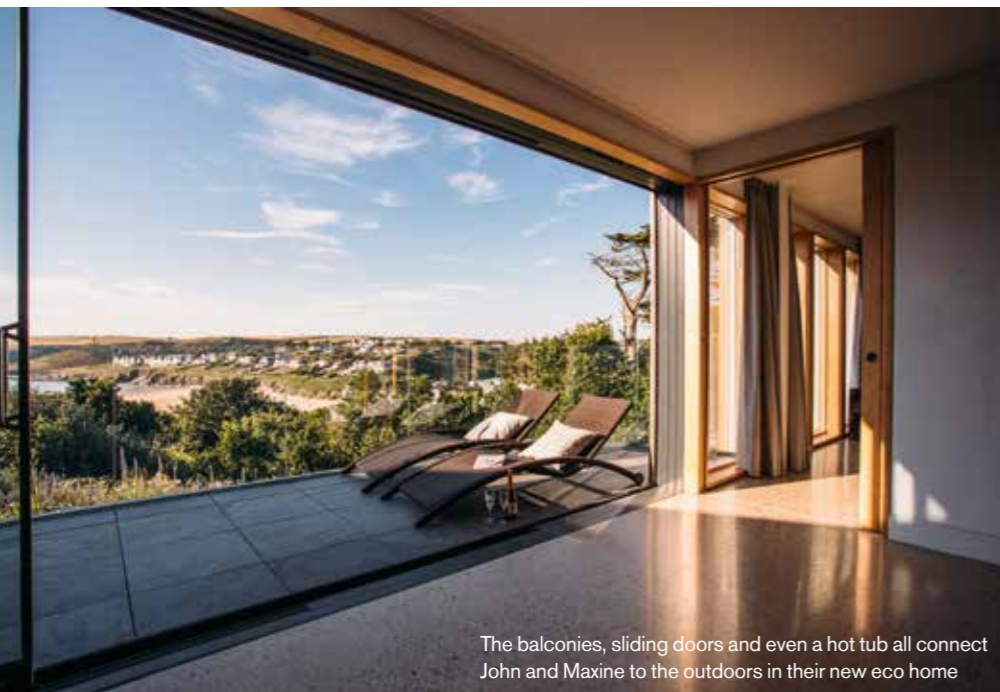
When John and Maxine first saw this patch of land for sale, they dismissed it as too expensive. Even in a coastal Cornish village where old bungalows ripe for demolition and replacement sell for a cool £1,000,000, this awkward plot didn't seem good value at less than half that price. "It was so overgrown that we couldn't see three quarters of the site," says John. "And there was a shack on it that was a bit like a time capsule from the 1940s."

However, when it came back on the market with a price tag reduced by £150,000, and with just six weeks left on the planning permission, they took a closer look. That was when the couple realised this half acre with evergreen trees and spectacular sea

views could, with a bit of imagination, offer the opportunity to create something amazing. "No-one else saw the potential," says John.

Letting the plans expire

John and Maxine wanted an ultra-modern, low maintenance, energy efficient home of architectural merit. "It was our first big building project, but we wanted to do it because previously we'd just been pouring money into old farmhouses," says John about his desire for a more energy-efficient property. The existing plans for the plot did not match with their ideas, so before signing on the dotted line, John and Maxine spoke to the local planning office about their ambitions. They came away confident the planners would be supportive of a

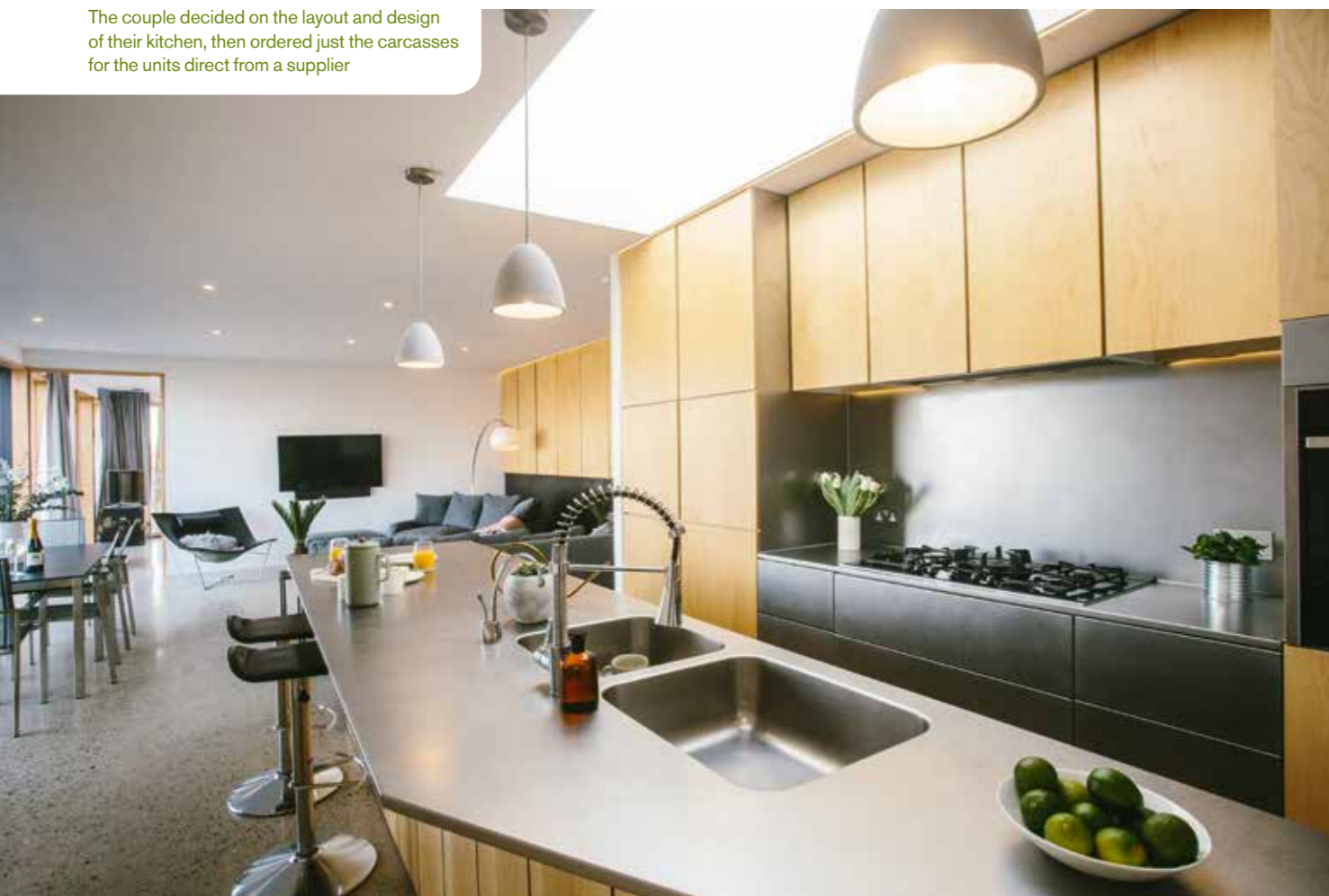


The balconies, sliding doors and even a hot tub all connect John and Maxine to the outdoors in their new eco home

new, environmentally sensitive design and they were comfortable allowing the existing planning permission to expire in the meantime.

Once in possession of the land, John and Maxine began the careful process of finding the right architect to articulate their ideas and a suitable local contractor to make that vision real. Family connections led them to architecture's rising star Matt Williams, who had, most recently, worked on high-profile commercial projects in the county.

The couple decided on the layout and design of their kitchen, then ordered just the carcasses for the units direct from a supplier



"We were inspired by houses around the world we adored but could never afford," says Maxine. "Yet Matt has delivered on all those elements and given us something that we thought we couldn't have."

Strong yet sympathetic

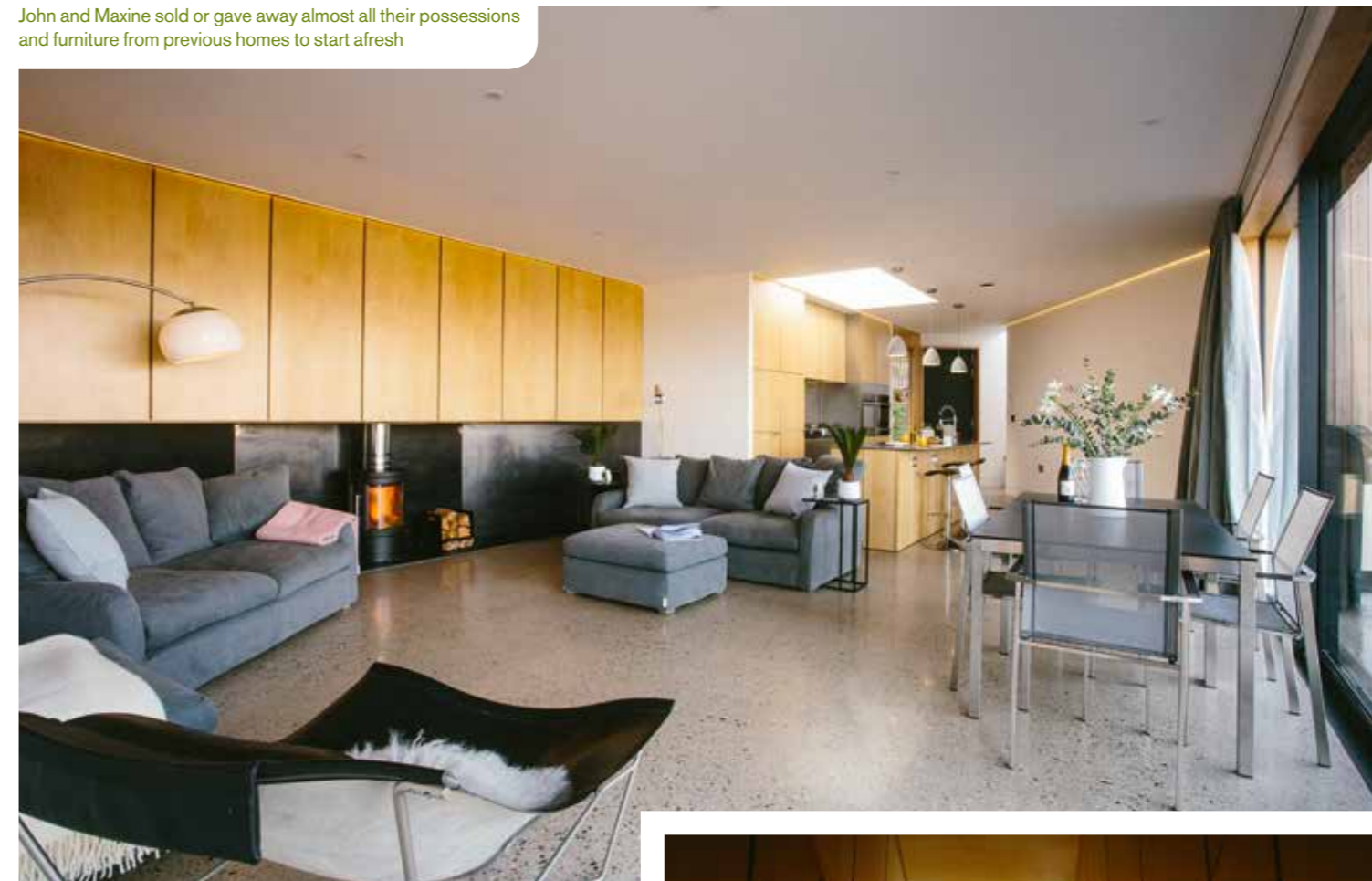
The design that Matt came up with has created a striking two-storey, four-bedroom home consisting of two angled wings, one of which is cantilevered out over the adjoining valley. An upside-down layout features balconies overlooking the beach and large areas of glazing, which together emphasise the inside/outside feeling and a connection with nature. Clad in local stone and timber, the house sits quietly in the landscape despite its strong design credentials.

It is not surprising, therefore, that there were no objections from neighbours and the new scheme passed easily through the planning process. Having put the project out to tender, however, several contractors

rejected it due to the slope and the difficulty of the build. Of those who did quote, John and Maxine chose Dudden Construction, as they liked builder Ben's attitude. "He assured us he could deal with the complexity of the site, as well as any issues that might come up," says Maxine. "Given the quality, I think we made the right decision."

While the build went ahead without a hitch, it was the ground conditions that caused the biggest headache. John and Maxine hired

John and Maxine sold or gave away almost all their possessions and furniture from previous homes to start afresh



a structural engineer to do the calculations for the home. However, once it became apparent that the ground was partially man-made loose soil and slate, the engineer made serious revisions to ensure stability, which required a change in the foundation design.

The key alteration was the construction of a "ground anchor" on the lower level – essentially a room full of rubble. This also led to the addition of another bedroom on the floor above to counterbalance the design. "Our daughter-in-law is an architect and says she's seen nuclear bunkers with less structural integrity," says Maxine.

But the problems with the building's structural design didn't end there. While the ground level of the house is poured concrete, clad in local stone, the upper level mainly consists of a steel frame, finished in timber. The steel was crucial, given the loading on the cantilever and the expansive areas of glazing. When the revised order was placed following the adjusted calculations, however, the requirement for galvanising was omitted. It was a costly mistake, but "we just had to write the money off in the end," says John. "It was our worst moment; we doubted the whole project."

Energy-efficient features

For John and Maxine, a central element of the project and key motivation driving them to self build was the desire for a sustainable house. "It was partly to save the planet and partly to provide us with a home for retirement with low running costs," says John. "We've always lived in older properties, which are not ideal. A super-efficient home is a much nicer place to be."

Typically thorough in their approach, the couple set about learning everything they could about green technology by visiting shows and reading books and magazines. They eventually chose a suite of products that included high levels of insulation and extensive triple glazing. The latter helps offset the fact they weren't



Joiner Marcus Bawden made the maple staircase, which the couple describe as "fabulous"



The bathrooms are luxurious but minimal in style, with all sanitaryware sourced from Roca

allowed to include south-facing windows, thus missing out on free solar gain due to siting issues. The finished result still achieved an excellent SAP rating of 97 out of 100.

Other eco features include a sedum roof, rainwater harvesting, solar electric panels with Tesla batteries, a mechanical ventilation and heat recovery system and an air source heat pump (ASHP). "We chose this as we thought a ground source version would be too difficult here, but I wish we had chosen the latter now," says John. "The ASHP is expensive to run and we're thinking of adding more PV panels and batteries to reduce our reliance on the national grid."

Despite these reservations, John and Maxine's experience of living in this super-insulated, energy efficient home has been overwhelmingly positive. "We don't even need to turn on the heating

until mid-November as the house stays warm just with us living in it," says Maxine. John adds: "We don't feel those Cornish gales at all. Our home is a lovely, comfortable place to live in."

Uncovering the landscape

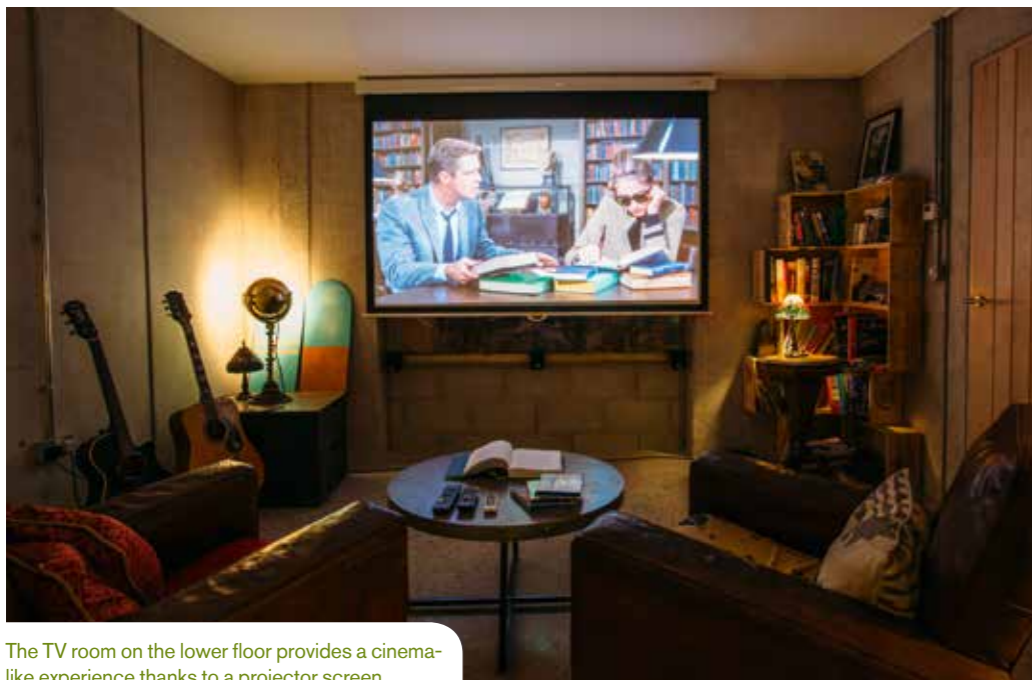
The couple's eco-friendly approach to their self build project didn't stop at the house, as the landscaping has also become an integral part of the project. Their 0.4-acre site slopes steeply into a small valley, which John and Maxine treat as a tiny nature reserve. It is home to a variety of animals, including owls.

Elsewhere, they were lucky and pleased to discover that beneath the undergrowth lay some of the remains of terracing and paths, once part of a hotel's grounds. "It became a very different plot once

we'd done some landscaping and gardening," says Maxine. On the side of the house seen from the road, the couple graded the land and sowed a wildflower meadow. The results were even better than they had hoped: "People came just to take photos, it was so spectacular," says John.

Winning results

It's hardly surprising, given the quality of the design and build and the attention to detail by owners John and Maxine, that their home won the coveted 2018 Cornish Buildings Group Award. The judges were particularly impressed with the way in which such a striking contemporary new property



The TV room on the lower floor provides a cinema-like experience thanks to a projector screen

WE LEARNED...

SPEND SOME TIME considering which builders to use, and always visit some of their previous projects to get an idea of their standard of workmanship.

TRY TO BE INVOLVED in as much as possible to make sure your new home is tailored exactly to your needs, but don't get lost in the to-do lists!

TAKE A CLOSE LOOK at products in person to be really sure they are the best option for your new property.

does not impose on the landscape and surroundings, something that's often an issue in sensitive coastal environments.

The high quality of the work did come at a cost though, and it was a significant one, as the project ended up around £300,000 over budget. Re-specifying the structural engineering due to ground conditions account for a third of that. A further £100,000 consists of elements not included in the original tender and finally, John and Maxine readily admit they increased the quality of specification on quite a few things along the way. For example, the decision to use Siberian larch cladding added £9,000 and the garage door from Rundum cost a further £5,000.

Despite the over-spend, the couple have achieved a fabulous, one-of-a-kind property that meets their needs exactly, in a location where inferior homes cost considerably more on the open market. They could sell up and make a profit, but for John and Maxine, Dry



The upper storey cantilevers over the valley, which is part of John and Maxine's land

Creek House is their home and it has transformed their lives. "We now live an indoor/outdoor life," says Maxine. "The balcony doors are open for three-quarters of the year and it's just a joy to live here."

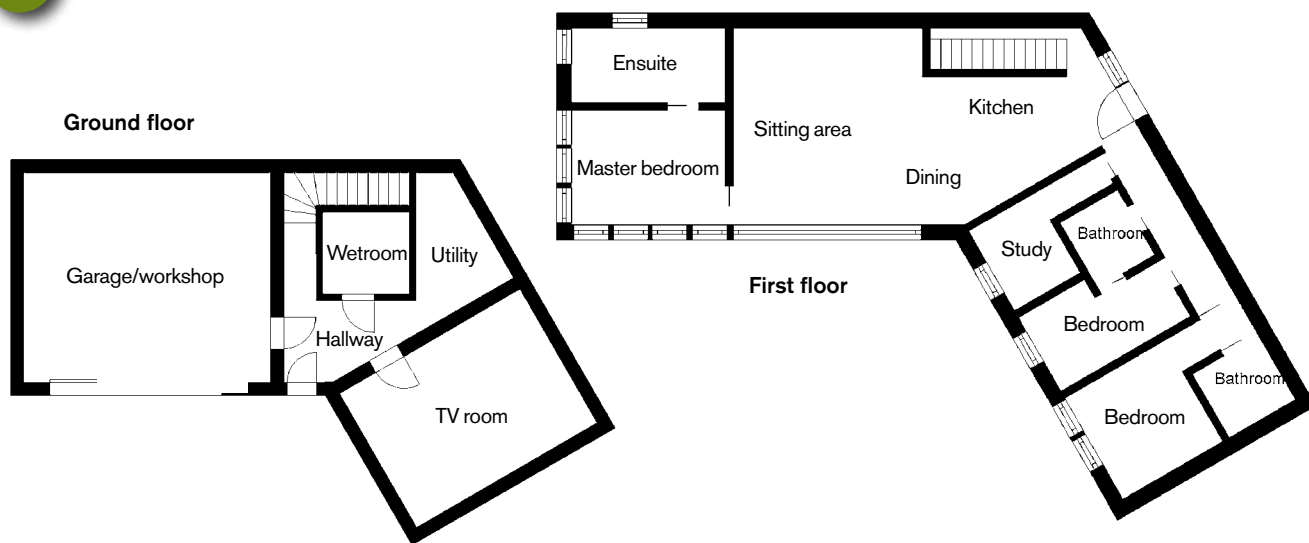
Dry Creek House is available as a holiday let for eight weeks every summer through Latitude 50 (www.latitude50.co.uk).



Striking views across the Cornish coast can be seen throughout the new property



Floor plans



House plans re-created using Build It 3D Home Designer software. www.buildit.co.uk/3dsoftware

closer look

Battery storage...

A common sticking point with solar photovoltaic panels is what happens to the excess electricity generated during the day. If it can't be used or stored, it is exported back to the grid, with a price discrepancy between what you sell and buy back, even taking into account government incentives. A solution is to install a battery (either lead-gel or lithium ion – the latter of which gives better long-term performance). John and Maxine have a Powerwall home battery by Tesla, which has a useable capacity of 13.5kWh and a maximum continuous output of 3.68kW. It integrates with their PV panels and makes the energy they generate in peak conditions available in the evenings or on less sunny days.



Roof solar panels



TOTAL BUILD COST BREAKDOWN

Elements	Cost m ²	Cost %	Total cost
Groundworks	£231	7%	£54,560
Main structure	£1,690	48%	£398,800
Windows	£176	5%	£41,500
Interior fit out	£542	15%	£127,890
Electrics	£105	3%	£24,680
Plumbing	£112	3%	£26,450
Kitchen	£76	2%	£17,980
Renewables & MVHR system	£126	4%	£29,620
Landscaping (incl. path & driveway access)	£87	2%	£20,620
Miscellaneous	£84	2%	£19,770
Fees	£272	8%	£64,250
Grand total			£826,120

Note: The costs shown here reflect the original prices for materials, labour and services at the time this project was undertaken. As a general guide, inflation in the construction market runs at about 3%-4% per annum.

Useful contacts



ARCHITECT **Matt Williams** 07742 046575 MAIN CONTRACTOR **Dudden Construction** 01726 860973 www.duddenconstruction.co.uk ELECTRICS **Nicholson Electrical** 01726 63102 www.nicholsonelectrical.com WINDOWS **Fineline Aluminium** 01934 429922 www.finelinealuminium.co.uk Velfac 01536 313552 www.velfac.co.uk SOLAR ELECTRIC PANELS **Naked Solar** 01637 697009 www.naked solar.co.uk SANITARYWARE **Roca** www.uk.roca.com MAPLE KITCHEN CUPBOARDS **DJ Newman Joinery** 01726 890464 www.djnewmanjoinery.co.uk STAINLESS STEEL WORKTOPS/SINKS/DOOR FRONTS **Cavendish Equipment** 01992 767105 www.cavendishequipment.co.uk GARAGE DOOR **Rundum Meir** 0151 280 6626 www.rundumgaragedoors.co.uk