

# On the edge

ANTHONY GREENWOOD PHOTOGRAPHY



Boasting magnificent views and a unique clifftop plot, this energy efficient holiday home is a masterclass in modern design

**S**ea Edge house is balanced high on a cliff in Cornwall overlooking the sea, with Rame Head to the east and Looe and St George's Island to the west. It's a stunningly modern replacement house by Kast Architects designed initially for use as a holiday home and later as a retirement abode for couple Adrian and Amie Cooper.

The Coopers bought the property as they loved the south-facing position and stunning sea views. But it soon became apparent to them that the old and small dwelling couldn't be modernised to the

standard they desired. The couple got in touch with Kast Architects to design a self build to replace the run-down two-storey house that wasn't taking advantage of the vista. "The firm immediately had the vision to sketch an outline plan, which captured both the view and our desire for a modern open-plan layout," says Adrian. "We also wanted a low-maintenance home incorporating low-energy features. Our final dwelling is almost identical to the initial concept."

Nicholas James of Kast Architects, along with his architectural team Adam Collier, David Jones and Jakob Benjamin, thoughtfully

## PROJECT PROFILE

**LOCATION** Cornwall

**SIZE** 227m<sup>2</sup>

**BUILD COST** £550,000

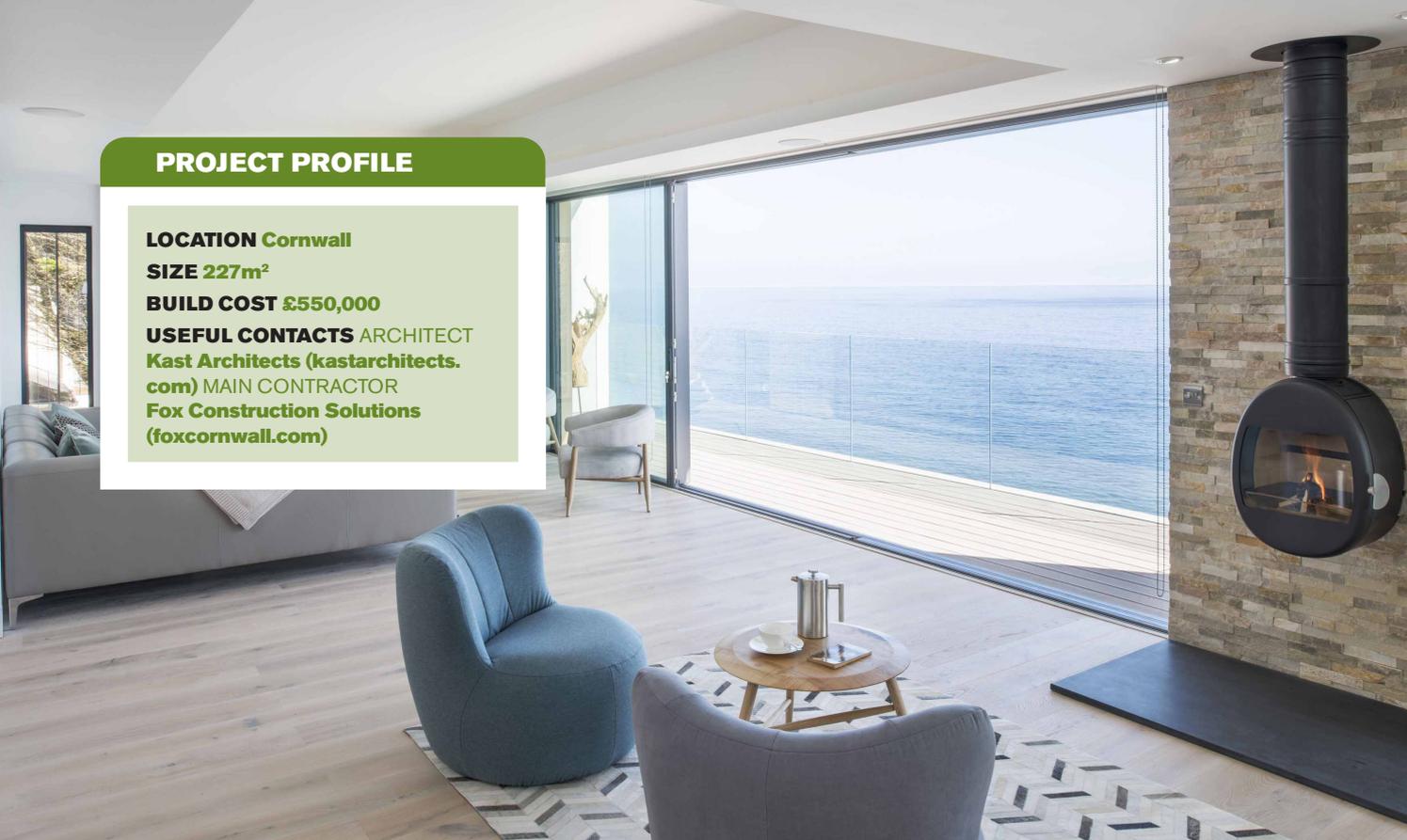
**USEFUL CONTACTS** ARCHITECT

**Kast Architects (kastarchitects.com)**

**MAIN CONTRACTOR**

**Fox Construction Solutions**

**(foxcornwall.com)**



interpreted the couple's brief, designing a 227m<sup>2</sup> house that maintains a similar footprint to the original property and, while taking advantage of the plot's stunning outlook, has a low roof profile to ensure properties further inland maintain their view, too. The clever design placed the main living accommodation on the upper floor, where the spectacular views can be enjoyed from the lounge, dining room and kitchen.

The dining area has a framed view to the south and west, while the lounge benefits from sliding doors opening onto a 10m-wide south-facing balcony, where a suspended external staircase provides an easy link to the garden spaces and alfresco dining area below. "The external staircase was an integral part of the original design concept to allow easy access to and from the garden," explains Nicholas of Kast Architects. "It also helps to finish the composition of the seaward elevation and adds drama to the overall scheme. The frame of the staircase is cantilevered and suspended steel, giving the appearance of a light-weight structure that avoids touching the ground."

In order to meet the Cooper's brief for an eco-friendly house, the architects designed the property using a highly-insulated timber frame, with some additional steelwork to help achieve some of the more dramatic cantilevers. "The simple plan-form of the building, coupled with careful overhangs for solar shading, and the balance of glazing between north and south facades, meant that the house was originally designed to achieve the Passivhaus standard," says Nicholas. "However, during the detailed design and costing of the scheme the thermal performance of the building was reduced slightly. The scheme still exceeds building regulations requirements and performs to a very high standard."

The efficient thermal envelope, coupled with good levels of air tightness has resulted in a house that is low cost to run, with an air-source heat pump feeding the underfloor heating and photovoltaic panels helping to offset any electrical demands. A sedum roof slows down water run-off, while ensuring a microclimate for insects and bird life, as well as providing a more pleasant elevation to the properties that sit behind Sea Edge. Externally the house is clad in western red cedar and a silicone-based render.

