



# Project Notes

**Homeowners** Caroline and Julian Owen, children Georgina, Matthew and James

Project Oak frame self-build **Location** Cambridgeshire

**Size** 380m<sup>2</sup>

**Build time** Jul 2013-Jul 2014 **Build cost** £941 000 **Current value £1.6**m

## SELECTED COSTS

Border Oak	£582,000
Plumbing	£43,000
Kitchen	£38,000
Electrical	£26,000
Decorator	£9,000
Oak frame cleaning	£6,500
Wood-burning stove	£5,000
Tree surgery	£5,000
Archaeology	£2,500

## **SUPPLIERS**

Oak frame and encapsulation system Border Oak: borderoak.com Kitchen Wychwood Kitchens: wychwoodcabinetmakers.co.uk Oak Flooring Cambridge Timber Tech

cambridgetimbertech.co.uk **Limestone flooring** 'Ca Pietra' limestone from Mandarin Stone mandarinstone.com

Windows Conservation Rooflight Company:

#### XXXXXXXX

Howarth Timber: Howarth-timber.co.uk Folding Sliding Door Company: foldingslidingdoors.com

**Wood-burning stove** Morso: morose.com/en

**Sanitaryware** 'Merlin' by Duravit: duravit.com, from Cambridge Bathrooms:

cambridgeshirebathrooms.co.uk **Lighting design** Lighting

Sensations: lightingsensations. co.uk



# **Light and Shade**

The orientation of the house makes good use of the mature trees, with the leaves shading and cooling the family home in the summer and the bare branches allowing the sun's warmth and light to reach the interiors during the winter. The couple have already planted 40 trees in the 1.5-acre garden, as well as a tennis court. However, not all of the site's characteristics were so beneficial. The free-draining sandy soil meant that pad and beam foundations were required -a more costly option than the concrete slab foundation originally specified. "Also, during the pre-construction phase, archaeologists from Cambridge University found Neolithic flints," says Caroline. Luckily the find didn't hold up works.











#### **South-facing Snug**

Structural oak beams provide zoned areas in the large living space, including a table tennis area (not shown) and a snug (OPPOSITE), which overlooks the garden. The snug is south-facing, while the media room faces the home's darker, north-facing side. Caroline bought the shades for the snug's ceiling lights on the high street ('Hedgehog' from Homebase) and these, along with online lighting purchases, helped to reduce the interior lighting bill from the £25,000 originally quoted.

To doubt there are as many reasons for wanting to build your own home as there are self-builders. For Caroline and Julian Owen, the starting point was having their 2.5-acre garden to build in (the preferred spot was already used by their children as a play den). A visit to a friend's own self-build in the New Forest spurred them on.

However, initial excitement turned to a seven-vear planning marathon — the garden is in a Conservation Area, in the curtilage of their previous Grade II-listed oak framed home and a designated 'amenity green space' for their south Cambridgeshire village. But the couple were determined to see the project through, not least as a life lesson for their three children. "We wanted the children to go through it with us — to see that if you want something you need to try really hard," says Caroline, a respiratory nurse (her husband Julian is an orthopaedic surgeon). "By the end the kids were sick of the word 'planning' but in the end they enjoyed the whole process."

With approvals in place, the couple could focus on their requirements: informal family living in a traditional vet energy efficient oak frame home. "I didn't want anything formal - I wanted something comfortable with a relaxed living space," says Caroline, who was guided by hygge principles (think cosy and relaxing, rather than lofty and baronial). "Also, I didn't want the oak frame to overtake the house, for it to be 'over-oaked'." Merry Albright of Border Oak (the company that supplied the encapsulated oak frame) agrees. "Oak frames shouldn't dictate the whole design - if the house has too much oak, it can take away from the visual impact," she comments.

Externally, the house follows the threshing barn vernacular typical of East Anglia, with a sweeping roofline and low eaves. "Planning restrictions required that you can't see the house from the street, so there was a height restriction," says Merry Albright. "The low roof also makes the property look modest - although it's large, the building absorbs the space."

Internally, the generous ground floor space follows a 'broken plan' design (see page 51), while the much smaller first floor houses four bedrooms (the fifth bedroom is downstairs and functions as a guest room). While large, this is a light-filled house, even in the very

centre of the floor plan: as well as the 'broken plan' layout, there are 20 rooflights, a fully glazed front door and extensive glazing. Unusually, the only vaulted spaces in the house are the hall and the master bedroom. "One of the bedrooms originally had a very high vaulted ceiling, and we had it lowered, as I could imagine my son sitting in bed looking up at this huge space," says Caroline.

After living in a 500-year-old period home, energy efficiency was important for the couple, who opted for a 'fabric first' approach. The walls, for example, are encased in SIPS, but there are no ground-source heat pumps (the option remains to switch to these in the future if required) or solar PV panels, which were prohibited because of the home's location in a Conservation Area. "The technology keeps evolving — I'm very into passive energy efficiency, rather than mechanical approaches that could go wrong," says Julian.

The build ran for 12 months, with both Caroline and Julian taking on a hands-on approach to project management. The couple downloaded an app (xxx xxxxx) to help them track the diurnal movement of the sun through the property, and invested £2,000 in a 3D model of their future home for virtual walk-throughs. Even then, the kitchen layout was a challenge, as large amounts of glazing and lack of walls meant space for appliances and cabinetry was limited. "I redesigned that space again and again," says Caroline, who rehearsed the various journeys the family would take with bags of shopping and plates of food.

The most stressful part of the build was, ironically, on moving in day when a removals van arrived just as a digger accidentally struck a drain, and the couple had to quickly track down someone to connect the house drains to the foul drain — not easy, as there only a few people with the right licence to do that work.

Now that they have settled into their new home, what are their favourite elements? For Julian, it's the wood-burning stove in the living area; for Caroline it's the overall atmosphere. "Our home is large and open plan but has a very cosy feel — it's genuinely a haven from a hectic world," she concludes. "It's not only a great place for us as a family but is also the perfect environment for when we have the opportunity to work from home."









## **Vaulted Master Bedroom**

Unlike the other bedrooms, the master bedroom (RIGHT) is fully vaulted – a design feature that showcases the oak frame construction and brings drama and visual interest to the space. Two rooflights and extensive glazing mean that the sun can flood into the room each morning.

## **Above and Below Ground**

Allowing for a vaulted space in the hallway and landing (BELOW) means that the house has no attic space. Instead a roomlength storage area, complete with raked shelving, has been carved from one of the children's bedrooms. Meanwhile, plans for a large wine cellar were abandoned when quotations for £100,000 were submitted (cellar space is generally more expensive than above-ground building works). Instead, part of one of the garages forms the wine cellar.





# **Simple Tiling**

The same limestone tiles, Ca Pietra, (ABOVE) are used throughout the bathrooms. "Mandarin Stone, who supplied the tiles, suggested that we keep the tiles fairly simple and plain," says Caroline.