Eco-architect Sara Wigglesworth is a fortress defending the green cause, says Ruth Bloomfield

Within sight of Arsenal’s Emirates Stadium stands another north London icon. From its former war-time storage tower to its “puffa” cladding, this is the home of architect Sara Wigglesworth and her husband Jeremy Till, also an architect, in both a landmark building and a well-tuned battleship defending the environmental cause.

The building also makes a statement about environmentally friendly architecture: it does not have to be dull and worthy to be green. “Our agenda was not just a green agenda, about people who knit and eat seaweed,” says Wigglesworth. “We wanted to make green more interesting and mainstream, to make it something people would want rather than something that had to be forced on them.”

The couple, both 52, bought the 20m by 40m site at auction in 2004. Its position, pressed against the East Coast railway line out of King’s Cross, so deterred other buyers, they paid only £78,000 for the plot.

It took them three years to draw up the plans for the house (“We talked and talked and talked!”) and they finally submitted their radical proposals to Haringey council in 2007.

The building is L-shaped, with the offices for Wigglesworth’s practice (www.search.co.uk) alongside the railway. The main house has an undercroft and one main above-ground floor, out of which is just the five-storey tower.

To their astonishment, with no opposition from neighbours, the application sailed through in a matter of weeks.

The “two-year build”, which started in 2000, was another story. It took twice as long as planned and ran significantly over budget, coming in at £600,000.

“We had to move into a caravan on the site for nine months. The build was, like so many builders’ coaches, a nightmare. Builders never tell the truth, or they tell half-truths. We made the terrible mistake of being honest about our budget and then, of course, it went over and we ran out of money. It was very good for me as an architect to be a client and see how hard it can get.”

THE GREEN MACHINE

All the materials were carefully researched for their green virtues. The facade facing the street is clad in a waterproof quilted fabric attached with velcro to the frame of the house, making the building look as though it is wearing a puffa jacket. At the back, walls are paneled with blades of straw to provide insulation.

The decision to build an undercroft came because, though the plot itself is flat, the buildings behind it are on a higher level, with a dominant brick retaining wall between. So the couple built their house on stilts with enough space for a spare room, office and utility areas below. There is also an open area that leads to a small garden where they grow vegetables and keep chickens.

The main living floor is mostly open plan but the “beehive” – a curved rendered pod – sits in the middle and acts as a cool larder. A neat trapdoor in its floor opens on to the undercroft, creating a draft that can keep ice frozen, so there is no need for a fridge. The kitchen is tucked away behind the beehive, with a glittering table made of recycled splinters of glass bonded with resin.

Photographs: Graham Jepson

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