IT’S THE ENERGY REVOLUTION
OUR HOUSE

URBAN INNOVATOR

Twice a year architects Sarah Wigglesworth (right) and her partner Jeremy Till let the public visit their inspiring home-work buildings (imagine a merger of unwanted cement blocks, sand bags and straw bales with the most modern of materials). Nicola Baird joins the tour.

The huge galvanised steel and willow hurdle gates at the end of Stock Orchard Street provide the first hint of playful reinvention. Suddenly the ground shakes and decibels soar as the Edinburgh train rushes past on the East Coast main line. After buying the site at auction Sarah, then based at Kingston University, reckoned she could experiment to create a building with a feminine side. While most people panic about neighbours and extensions, she was dreaming up ways to create a sustainable building for a London plot where old cars used to come to die.

Sarah also wanted to reuse some of the materials found on site in a bid to answer the problem that architects generate. Constructing buildings accounts for half the developed world’s consumption of raw materials.

The result is an L-shaped house that provides a stylish low-carbon home and a creative office. The side facing the rail tracks (the office) is supported by pillars of recycled cement chunks caged by wire gabions, normally used in civil engineering projects. Sitting on the pillars are springs that reduce the vibration from the passing trains. Above, irregularly placed windows made from railway sleepers found on site, sit in a wall created from sand bags filled with a mix of sand, cement and lime that has hardened over time. This reduces train noise and is designed to age creatively - it also provides an intriguing view for passengers as their train speeds past. On the opposite side, looking towards the garden, the wall is clad in an insulated quilted sailcloth made from woven glass fibre and silicone.

The bedroom wing is built using a unique straw bale technique; the library is housed around a five-storey tower; while the main floor space is on stilts enabling light to flood the rooms. The raised floor also provides covered space for four hens, a sauna, garden shed and bike parking.

Sarah is well known for her ecological, and feminist, designs – her most recent RIBA award was secured for the conversion of the Siobhan Davies Dance studio near Elephant and Castle in London. But the core of her home is a domestic thrill, an artfully air-cooled walk-in larder, perhaps an obvious choice for a couple who love to cook their homegrown produce. Jeremy insists that cooking and architecture meet two basic human needs – food and shelter. Other internal surprises include a swanky compost loo – the contents are collected in a thick plastic tank in a utility room where washing is hung up to dry or waits for the iron. There is also a large grass roof, solar thermal panels to heat their water and a solid wood burner for days when you need to cosy up.

Though they moved in on Christmas day 2000, Stock Orchard Street remains a constantly monitored work in progress. There are still handrails to add, stairways to build, and solar electric (PV) panels to install. And there are the daily chores in the impressive vegetable garden. “Despite all that we’ve done, I think the most sustainable thing we do is follow the seasons by growing our own vegetables,” reckons Jeremy. And with that the little band of admirers leave, pondering the many ways they could make their own homes and building projects stand up to an architect like Wigglesworth’s scrutiny.

Find out more at www.swarz.co.uk. Listen to Sarah, and others, on http://youtube.com/watch?v=wFDk8b-yrSk.