

Eco homes Sustainable and affordable

From the side, they're shaped like cheese wedges. From the front, they appear the most minimal of structures. The Clay Fields eco-homes development, in Elmwell, Suffolk, is branded by its designers as "eco-minimalist" because it lacks the gaudy appliances so ubiquitous in green housing schemes, such as conspicuous solar panels and wind turbines.

Launched last year, the £4.67m scheme was designed by architects Rickie Huxley Mitchell for Orwell Housing Association in partnership with Elmwell parish council, Mid-Suffolk district council and the Suffolk Preservation Society, with funding including £600,000 of social housing grant. The project was commissioned in 2006 following a RIBA design competition led by Orwell and its partners.

Cathy Hawley, architect and partner at Orwell, says: "We built the scheme around getting as much natural solar gain as possible." Heat and daylight energy replace gas and electricity with giant windows facing south to optimise sunlight.

Of the 26 homes, 16 are for affordable rent and 10 for shared ownership, all aimed at locals. There are 12 two-bedroom houses, three three-bedroom houses and four one-bed flats.

The main energy-saving investment is a shared biomass boiler built with a £100,000 grant from the Low Carbon Building Trust. It is fuelled by woodchips sourced locally.

The scheme is rated excellent under the Eco-Homes scheme, the domestic environmental rating system run by the research and consultancy organisation the Building Research Establishment. Its line and hemp mix insulation is "carbon-positive", locking in CO₂. Rainwater is used to flush



toilets and irrigate the garden. In winter, a system recycles 80% of heat from outgoing air to heat incoming air.

Surrounded by a meadow and an orchard, the timber-clad houses, with their eye-coloured brickwork, were designed in consultation with the Suffolk Preservation Society to blend into their setting.

Their design, says Hawley, can lead to good relations between neighbours when

Eco-minimalist: the Clay Fields development in Elmwell, Suffolk
Nick Kane

people meet in their surroundings.

"If people are proud of, or like, their homes they tend to take care of them," she says. This has manifested itself already on the estate, where a fledgling tenants' association is looking after the allotments, and where one resident, who also happens to be a plumber, has been employed to keep an eye on the biomass boiler. *Anita Patel*