

Award Category: Outstanding Commitment to Adapt to a Climate Change

Project: Eco house, 10 Broad Green, Bayford

Client: Mr & Mrs Neilson

Architect: Dennis Sharp Architects



An extension and renovation of a 1940's semi-detached house, this scheme goes further than building regulation standards to conserve energy and fuel and reduce CO2 emissions. An integrated design approach makes spaces dramatic, maximising on the potential of the site in terms of views, orientation and context. The eco house has been recognised for its design excellence by the Hertfordshire Association of Architects.

The project showcases many different design features including an external cork insulation on the ground and first floor extension, cavity 'warmcell' insulation in the timber frame on the upper floor, underfloor heating on the ground floor, a super-insulated roof construction and triple glazing throughout the building.

Other design features include glazing with calculated overhangs for passive solar gain. This was tested last year during a power cut for over 24hrs with sub-zero temperatures - the house reached 20 degrees at mid-day and did not get below 16 degrees at night.

Solar hot water, the use of recycled timber and the collection of water in water butts for reuse, all also feature in the building.

Judges comments:

“It’s always good to see existing buildings “recycled” in this way. The project shows that with modern, innovative techniques a building can be equally sustainable and aesthetically pleasing.”