

Briefing paper for C E and LG committee meeting, 6 November 2013

Ed Green, Pentan architects (winner of 'Self Build on a Shoestring' competition, October 2013)

The following paper describes the competition brief, the nature of the winning design, and the subsequent interest shown in the design, on the basis that this is the likely topic of conversation.

Competition brief:

The competition was run by the National Self Build Association (NaSBA) in conjunction with Grand Designs, and the judges included Kevin McCloud and Charlie Luxton, the Mayor of Bristol George Ferguson (a former president of the Royal Institute of British Architects) and the chair of NaSBA, Ted Stevens. The competition was open to anyone, and the brief was for entrants to come up with innovative, sustainable ways of self building a typical home for a family of four. All the entrants had to provide a detailed cost report that demonstrated that the house could be constructed for less than £50,000.

The winning design:

The winning design – called BARNHAUS – is an innovative housing concept that utilises low cost off-the-shelf agricultural barn frames (costing about £2,500) to form the basic 'structure' of the house. This frame is lined externally with a thick skin of insulation (straw bales are a very cost effective option), and doors and windows are inserted at either end. The result is a very generous two bedroom home (100m², making it much bigger than most starter homes built by the volume housebuilders), and costing as little as £41,000.

The house can be extended very easily at either end, and can be super-insulated to achieve the highest levels of environmental performance without recourse to extensive, and often expensive, renewable technologies.

This approach taps into the two key findings of the Ipsos Mori survey carried out by the RIBA last year, which found that lack of space and lack of flexibility were the two biggest criticisms of contemporary volume housebuilding.

Post award:

The organisers are now exploring if it is possible to build a full mock-up of the Barnhaus at the Grand Designs Live exhibition in London next year (May 2014). Pentan have been approached by a wide variety of individuals and organisations interested in the Barnhaus concept, and are currently developing it in more detail with a view to piloting the first Barnhaus schemes asap.

Self build as a movement is on the incline in the UK as a whole, although definitions of Self Build vary considerably. Last year, the English Government made £30M available via short-term loans for self-build schemes of five or more units (2012-2015). The money can cover 75 per cent of early costs such as land acquisition, site preparation, section 106 obligations, and construction. Seven sites of public land have also been made available in England – in Cornwall, Bristol, Hemel Hempstead, Bolsover, Surrey, Stoke-on-Trent; and Milton Keynes.