

Self-Build Eco-House, Lumsdaine, Coldingham, TD14 5UA

Project Manager and owner, Richard Bond.

Architect; Andrew Yeats, Ecoarc.

Starting work in Spring 2010, and located on $\frac{2}{3}$ acre of land at plot 2, Lumsdaine, Coldingham, this project will be a state of the art zero-energy construction. With an internal floor area of some 220m² and built as a traditional 1 $\frac{1}{2}$ storey Scottish house, it will feature passive solar heating (including hot water), high internal thermal capacity, massive insulation and airtight construction. It will generate the electricity it needs from photovoltaic panels and a small wind generator. Although the house should require no heating system, it will use a heat exchange ventilation system and have a backup ceramic wood-burning stove.

The superstructure of the main house may use a 425mm single leaf thin-joint fired clay block, honeycombed and filled with perlite. These are machined to within 1mm and provide a rapid, almost dry construction. Alternatively, conventional build with a 300mm insulated cavity may be used. Internal and external surfaces will be wet plastered with lime. Roofing will be of slate nailed to boards in the traditional way with galvanised steel rainwater goods. Windows will be triple-glazed with very low U-values in wooden frames.

Internal flooring will include parquet woodblock, hardwood boards, limestone tiles, slate tiles and ceramic tiles. There will be two kitchens, three bathrooms and a wc. The house will be fitted with a central vacuum system. The house will incorporate a garage / workshop, a lean-to conservatory and the rear decking will have an oak veranda with living green roof.

The land will be drained to a new pond, will have a willow coppice and mixed native hedging and will be further developed according to permaculture principles as a productive unit. Free-draining hard-standing for cars and additional dry stone walling will be provided.

The project manager will be interested to talk to any qualified and experienced local tradesmen who would like to become involved in this project. This is a unique opportunity to gain early experience with the post-2016 building requirements (all new homes will have to be 'zero-energy' after 2016).

In particular the following trades will be needed;

- Groundworks contractors
- Bricklayers / Blocklayers
- Plasterers
- Roofers
- Carpenters
- Plumbers
- Electricians
- Tilers
- Dykers
- Gardeners / Paviers

Detailed drawings and quantities will be sent to registered contractors for quotation at the appropriate time.

If you wish to be registered as a contractor, please contact Richard on 07752 496 253 or on 01457 763392

or email richardbond@phonecoop.coop

New Eco House at Lumsdaine For Mr & Mrs Bond



Richard Bond can be contacted by post at;
23 Stalybridge Road, Mottram in Longendale, Hyde, Cheshire, SK14 6NF.