



People Exploring Low Energy Homes

Woodlark Close, CB3 0HT

Palvinder Gill & Anne Henderson:

Palvinder and Anne bought the house in July 2004 after the previous owner had been there for 30 years. Given the age of the house total refurbishment was required and as graduates of the Grand Designs School of Building and Architecture, trying to incorporate as many eco features as possible made complete sense to them. The house was cold in winter and hot in summer and it became apparent that total refurbishment was required and we also wanted to extend to create more space, better flow and to bring the outside in.

- Underfloor heating, groundfloor
- New radiators
- New boiler and hot water system.
- Wood burning stove
- Heat recovery system



Overview

Age, Type: 1930's , **Detached House**
 Wall type, Floor area: Solid brick walls; 145sqm and 225 sqm after extension.
 Project timescale: **9 months**
 Cost of build: **Approx. £280,000**

	Energy		Carbon		3 people
	kWh/m ² /yr		kgCO ₂ /yr		
	Elec	Gas	/m ²	/person	Notes
Before	NA	NA	NA	NA	
After	NA	NA	NA	NA	

Key features

- Solid wall insulation, interior
- Loft insulation
- Underfloor insulation
- Double glazing
- A-rated wooden windows
- LED lighting
- A+ or higher rated appliances.

The Building Process

The main aim of the renovations was to make the house a modern, comfortable home for the family. They'd been thinking about what they wanted to do for a while and it became apparent that the scale of what needed to be done would mean that they would have to move out while the work was done. Palvinder says: We saw a friend's home that had a similar layout to ours and they put us in touch with their architects. We instructed them and they came up with the overall scheme for the house; oversaw the building tender process; and did the project management for us. They were very thorough, gave us practical advice and came up with a design that we were happy with.

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Low Energy Measures

Insulation and heating: Reduction of heat loss was a main focus and so interior solid wall insulation was added around the house as well installing double glazing. A heat recovery system was also put in place to help reuse that heat which would otherwise have been lost. Although we now have underfloor heating and a new boiler, a wood burning stove has also been added in order to help heat the main living space as and when needed.

Lighting and appliances: LED lighting has been installed all over the property and we now have A+ rated or higher appliances in their home to assist in the reduction of wasted energy.



Future Plans

The house is a very comfortable place to be compared to what it was and we're very happy with it.

Thinking toward the future, we are looking into adding solar thermal and solar PV at some point to help with the heating and energy even more.

Professional Contacts

AC Architects Ltd. 33 - 35 Victoria Road, Cambridge CB4 3BW;

Zak Construction Ltd. (builder) Old Australia Farm, Twenty Pence Road, Wilburton, Ely, Cambs. CB6 3RN

Products and Costs

Westgate Joinery - supplied the windows and doors;

Junction2Interiors – supplied the bathroom furniture;

Bulthaup –designed, supplied and fitted the kitchen;

John Lewis – supplied and fitted the utility room;

