Camden Passivhaus

Camden Passivhaus, Camden, London (due to be completed March 2010)

The primary objective of this project is to achieve a comfortable home for a young family, whilst minimising energy consumption. This house has been designed to use less than 13kWh/m²/a for heating (a typical new home in the UK is likely to consume nearer 100kWh/m²/a)

The project is a 120m² single family house split over two floors, with two wild flower meadow roofs and a south facing garden

Healthy air and water quality is prioritised by using non-toxic materials; heat recovery ventilation and water filtration for drinking and bathing. Mains water use is supplemented by an underground water harvesting tank providing water for irrigation

CO² emissions are minimised with excellent insulation, draught free construction, triple glazed windows and a solar thermal panel

All junction details are designed to prevent thermal bridges and the results form part of the Passivhaus Planning Package (PHPP) energy calculations

Ground floor slab	380mm wood fibre insulation
Walls	280mm mineral wool +100mm
	wood fibre insulation
Flat roof	280mm PUR + 120mm mineral
	wool insulation
Sloping roof	380mm mineral wool insulation
Terrace	130mm PUR insulation
Heat Recovery Ventilation	PAUL Thermos 200DC
Annual Heat Demand	just below 13 kWh/m²/a
Primary Energy Demand	97kWh/m²/a
Total CO ² emissions	11.3kg/m²/a (excl. appliances)
Air test result	0.36h ⁻¹ (air test 02/02/10)



Air tightness Intello membrane and tapes exposed



The Kaufmann Zimmerei team from Austria on site



View of the front of the house under construction

Camden Passivhaus contact and company details

Architects	bere:architects
Postal address	73 Poets Road, London, N5 2SH
Tel	+44(0)20 7359 4503
Email	jbere@bere.co.uk
Web	www.bere.co.uk
Services Consultant	Alan Clarke
Postal address	The Woodlands, Woodland Close, Whitecroft,
	Lydney, GL15 4PL
Tel	+44 (0)159 456 3356
Email	alan@arclarke.co.uk
Heat Recovery Ventilation Design	The Green Building Store
Postal address	Heath House Mills, Bolster Moor, Huddersfield, HD7
	4JW
Tel	+44(0)148 446 1705
Email	andrew@greenbuildingstore.co.uk
Web	www.greenbuildingstore.co.uk
Substructure Engineer	Rodrigues Associates
Postal address	1 Amwell Street, London, EC1R 1UL
Tel	+44(0)20 7837 1133
Email	mervyn@rodriguesassociates.com
Timber Superstructure and Engineering	Kaufmann Zimmerei
Postal address	Baien 116, 6870 Reuthe, Austria
Tel	+43 (0)5514 2209
Email	info@kaufmannzimmerei.at
Web	www.kaufmannzimmerei.at
Main Contractor	Visco
Postal address	Boundary Farm, Ilketshall St Margaret, Bungay,
	Suffolk , NR35 1LY
Tel	+44 (0)1986 781355
Email	info@viscoltd.co.uk
Passivhaus Windows from Germany	Double Good Windows (import agent)
Tel	+44 (0)8448003016
Email	info@doublegood-windows.com
Web	www.doublegood-windows.com