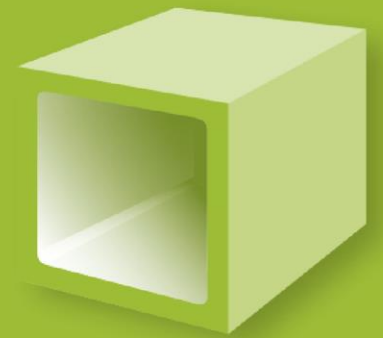


Beattie
P A S S I V E



TM

**A step-change innovation delivering a complete
Passive build system**

At todays build cost

Coventry Eco houses

2x3 Bed 86m² detached Houses

Original design:

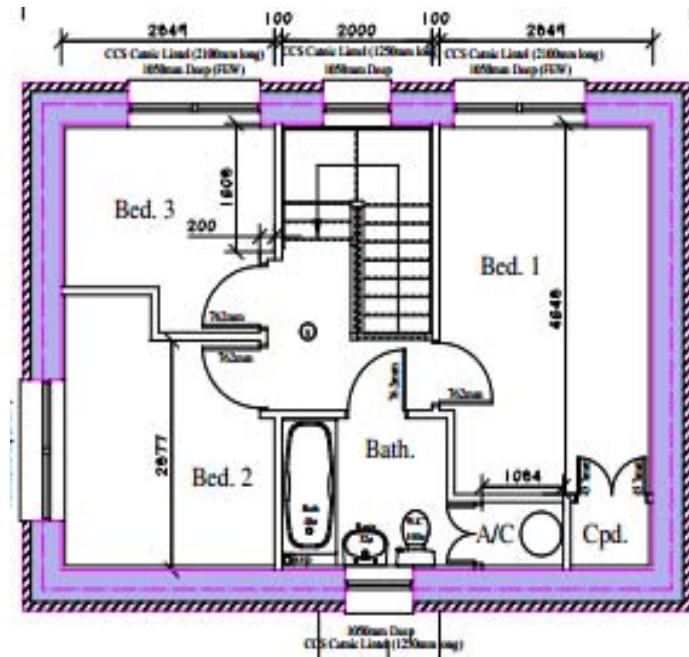
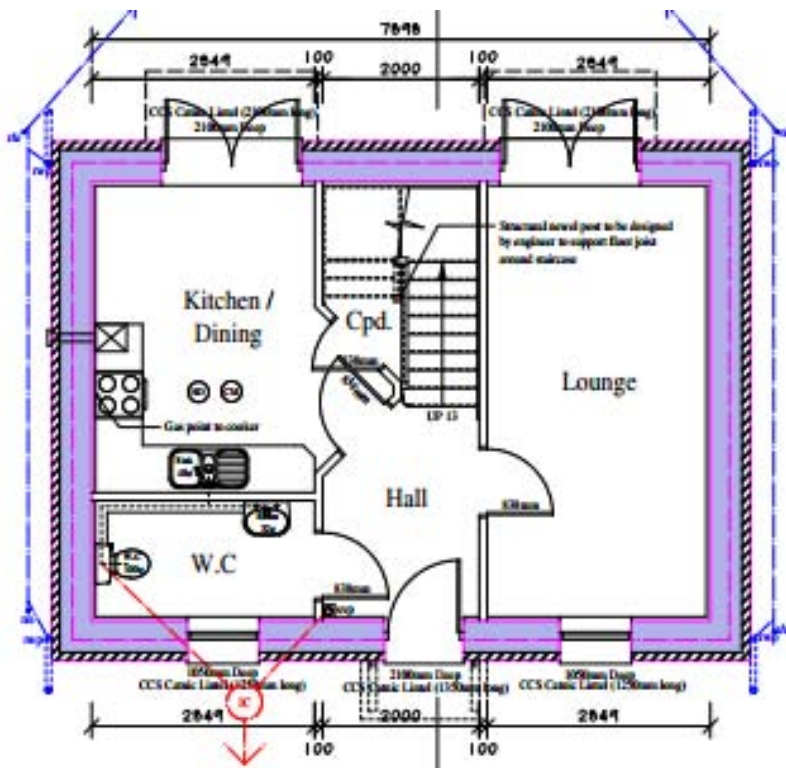
- 1 built to Code 6
- 1 built to Passivhaus certified

Using Beattie Passive:

- Both houses are built to Passivhaus standard



Simple 86m² detached house





U-Values

- Ground floor .08W/m²k
- Walls .08W/m²k
- Ceiling .08W/m²k
- Air tightness .4.23/hm(@50pa)

PHPP

Performance outputs:

Specific building demands with reference to the treated floor area			use: Monthly method	
			Requirements	Fulfilled?*
	Treated floor area	74.9 m ²		
Space heating	Annual heating demand	12 kWh/(m ² a)	15 kWh/(m ² a)	yes
	Heating load	10 W/m ²	10 W/m ²	yes
Space cooling	Overall specific space cooling demand	kWh/(m ² a)	-	-
	Cooling load	W/m ²	-	-
	Frequency of overheating (> 25 °C)	0.2 %	-	-
Primary Energy	Space heating and cooling, dehumidification, household electricity	105 kWh/(m ² a)	120 kWh/(m ² a)	yes
	DHW, space heating and auxiliary electricity	61 kWh/(m ² a)	-	-
	Specific primary energy reduction through solar electricity	122 kWh/(m ² a)	-	-
Airtightness	Pressurization test result n ₅₀	0.6 1/h	0.6 1/h	yes

* empty field: data missing; -: no requirement

Passive House?	yes
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Completed house



Clearing of site



Foundation pads on clay soil





Concrete Foundation





Clear site, dig and concrete fill foundation pads

Digger Hire	£760.00
Muck away	£550.00
Concrete	£1110.00
Labour	£900.00
Total	£3320.00



Service pipes laid





Services, DPM Radon Barrier and concrete beams





Services DPM Foundation beam cost

Services	£400.00
DPM Radon barrier	£550.00
Foundation beams	£2300.00
Digger hire	£370.00
Labour	£350.00
Total	£3970.00



Eco slab





Floor beams fitted





Timber bearer's and OSB fitted





Ground floor costing

Eco slab	£890.00
Floor beams	£500.00
Timber bearers	£200.00
OSB boards	£410.00
Labour	£480.00
Total	£2480.00

Coventry City college students manufacturing frames





Walls, mid floor and ceilings





Mid floor





Mid floor





Ceiling





Cost for Wall, Ceiling and mid floor

Walls Ceiling	£3500.00
Ring Beam and Easy joist	£1560.00
Weather deck chipboard flooring	£512.00
Labour	£1550.00
Total	£7122.00