

CAMPION HOMES LTD / SCOTFRAME

Scotframe Val-U-Therm Block 2 4 x 2 Bedroom Cottage Flats



Scotframe are delighted to be the chosen supplier to Campion Homes for the timber frame systems at the prestigious demonstration of the latest energy efficient homes at the Fife Housing Innovation Showcase. Block 2 is a 4 unit development of cottage flats.

Working in a collaborative manner, Campion opted for the unique Scotframe Val-U-Therm wall system for the units as it is a cost-effective choice which provides a straightforward way of achieving a low-carbon, highly energy-efficient solution. This minimises the need for renewables and allows the potential of any property or site to be maximised.

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Because it provides such exceptional thermal performance, Val-U-Therm allows the construction of thinner walls, floors and roofs. Val-U-Therm can therefore help maximise the amount of living space on a plot and the number of dwellings in a development.

Val-U-Therm delivers environmentally-friendly homes with insulation based on recycled vegetable oil giving excellent sustainability credentials. The homes take only a few kW's to heat – removing the need for expensive, high-maintenance heating systems. This 'fabric-first' approach can provide significant capital savings and helps developers to achieve A-rated energy performance cost-effectively.

Because of its exceptional thermal performance, air-tightness and sustainability, Val-U-Therm makes it easy and cost effective for developers like Campion to hit energy efficiency, air permeability and other environmental targets – and so meet or exceed current and future building regulations.

Val-U-Therm offers a cost-effective way to deliver a load-bearing structural envelope with thermal insulation U-values in the range 0.09 W/m²K to 0.23 W/m²K. This means that it offers a straightforward 'fit and forget' solution that can help developers achieve whatever environmental specifications are required. Because it is factory-manufactured to the highest standard it also helps improve quality and reduces problems caused by on-site issues such as inclement weather.

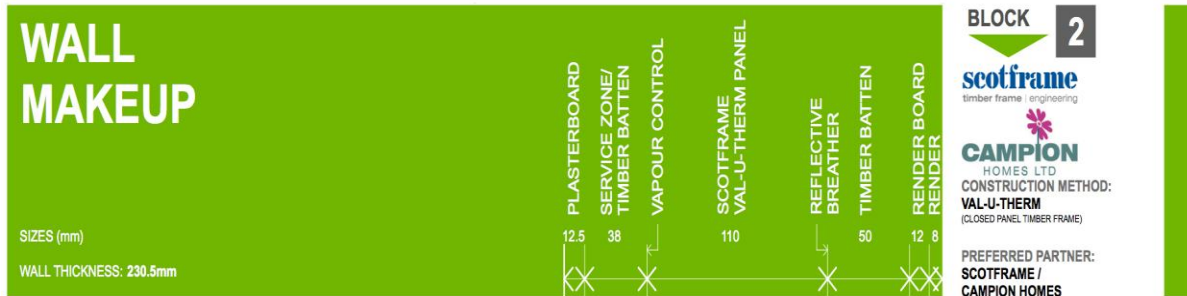
Val-U-Therm delivers warm, draught-proof, healthy homes with a high comfort factor. It is a 'fit and forget' high-quality system that delivers significant reductions in heating costs and maintenance and also allows real flexibility when it comes to a home's layout.

Without doubt, the most significant end-user benefits Val-U-Therm brings are massively reduced heating bills (in comparison with comparable homes built using other systems).

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DESIGN OUTPUTS	PLOT 5	PLOT 6	PLOT 7	PLOT 8
	GF FLAT	FF FLAT	FF FLAT	GF FLAT
CONSTRUCTION	Val-U-Therm Closed Panel Timber Frame			
GROSS INDICATIVE FLOOR AREA M ²	78.14	87.31	87.31	78.14
AVERAGE SUPERSTRUCTURE COSTS PER UNIT (INCLUDING RENEWABLES / EXCLUDING PRELIMS)	£66,433	£66,329	£64,106	£57,372
AVERAGE M ² SUPERSTRUCTURE COSTS PER UNIT	£850	£760	£734	£734
<u>CONSTRUCTION PERIOD</u>	NUMBER OF WORKING DAYS OFF/PRE SITE :			2.5
<u>(SUPERSTRUCTURE)</u>	NUMBER OF WORKING DAYS ON SITE :			103



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DESIGN OUTPUTS	PLOT 5	PLOT 6	PLOT 7	PLOT 8
	GF FLAT	FF FLAT	FF FLAT	GF FLAT
SAP RATING (BASED ON 09 SAP)	86 B	86 B	85 B	85 B
C02 RATING (BASED ON 09 SAP)	87B	90B	88B	89B
U VALUES				
WINDOWS	0.8	0.8	0.8	0.8
DOORS	1.4	1.4	1.4	1.4
EXTERNAL WALLS	0.19	0.19	0.19	0.19
FLOORS	0.15	-	-	0.15
ROOF	-	0.1	0.1	-
RENEWABLES	Air Source Heat Pump	Solar Water Heating	Not Applicable	
ELECTRICITY GENERATED	Not Applicable			
AIR PERMEABILITY (Design Stage)	2.5	2.5	2.5	2.0
AIR PERMEABILITY (Actual)	2.5	2.45	2.45	2.36
VENTILATION SYSTEM	Mechanical Ventilation Heat Recovery (91%)			
BOILER EFFICIENCY	-	88.8%	88.8%	88.8%
ENERGY USE				
SPACE HEATING (KWH/YEAR)	575.21	1391.37	1286.08	978.16
WATER HEATING (KWH/YEAR)	1156.10	1377.70	2539.68	2478.40
LIGHTING (KWH/YEAR)	393.85	418.45	418.45	393.85
ANCILLARY (KWH/YEAR)	239.63	397.50	322.50	284.63
TOTAL (KWH/YEAR)	2364.79	3585.02	4566.71	4135.04
ENERGY COST				
SPACE HEATING (£/YEAR)	£65.92	£43.13	£39.87	£30.32
WATER HEATING (£/YEAR)	£132.49	£42.71	£78.73	£76.83
LIGHTING (£/YEAR)	£45.14	£47.95	£44.77	£42.13
ANCILLARY (£/YEAR)	£27.46	£151.55	£138.66	£135.08
TOTAL ENERGY COST (£/YEAR) EXCLUDING SAVING FROM ENERGY GENERATED	£271.01	£285.34	£302.03	£284.36

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