

Summary for Input Data



Plot Reference	STA-08-26-02		Issued on Date	05/08/2026
Assessment Reference	Venmore, Dilwyn - Plot 2	Plot Type Ref	Venmore, Dilwyn	
Plot Address	L/A Venmore Cottage, Plot 2, Dilwyn, Herefordshire, HR4 8JW		SAP Version	10.2

SAP Rating	79 C	DER	4.08	TER	8.50
Environmental	96 A	% DER < TER			52.00
CO ₂ Emissions (t/year)	0.78	DFEE	39.27	TFEE	42.24
Compliance Check	See BREL	% DFEE < TFEE			7.04
% DPER < TPER	7.54	DPER	41.52	TPER	44.91

Assessor Details	Mr. Peter Loveday	Assessor ID	L623-0001
Client			

SUMMARY FOR INPUT DATA FOR: New Build (As Designed)

Orientation	Northwest
Property Tenture	ND
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	House, Detached
2.0 Number of Storeys	2
3.0 Date Built	2026
4.0 Sheltered Sides	2
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation
Thermal Mass	124.99 kJ/m ² K

7.0 Electricity Tariff	Standard
Smart electricity meter fitted	No
Smart gas meter fitted	No

7.0 Measurements				
	Ground floor:	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
	1st Storey:	51.40 m	110.83 m ²	2.42 m
		51.40 m	103.93 m ²	3.03 m

8.0 Living Area	44.97 m ²
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Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Gross Area(m ²)	Nett Area (m ²)	Shelter Res	Shelter	Openings	Area Calculation Type
External Walls	Timber Frame	Timber framed wall (one layer of plasterboard)	0.16	9.00	251.04	207.61	0.00	None	43.43	Enter Gross Area

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
Stud Internal Walls	Plasterboard on timber frame	9.00	279.57
Masonry Internal Walls	Dense block, plasterboard on dabs	75.00	83.30

Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Gross Area(m ²)	Nett Area (m ²)	Shelter Code	Shelter Factor	Calculation Type	Openings
Horizontal ceilings	External Plane	Plasterboard, insulated at ceiling level	0.10	9.00	63.54	63.54	None	0.00	Enter Gross Area	0.00
Sloping ceilings	External Slope	Plasterboard, insulated slope	0.13	9.00	54.11	52.58	None	0.00	Enter Gross Area	1.53
Sloping roofs	External Slope	Plasterboard, insulated slope	0.11	9.00	18.69	18.69	None	0.00	Enter Gross Area	0.00

Description	Storey	Construction	Kappa	Area (m ²)
Internal Ceilings	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	9.00	103.93

Description	Type	Storey Index	Construction	U-Value (W/m ² K)	Shelter Code	Shelter Factor	Kappa (kJ/m ² K)	Area (m ²)
Ground floor	Ground Floor - Solid	Lowest occupied	Slab on ground, screed over insulation	0.12	None	0.00	110.00	110.83

Summary for Input Data

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Floors	+1	Plasterboard ceiling, carpeted chipboard floor	18.00	103.93

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Windows	Manufacturer	Window	Double Low-E Hard 0.2			0.72		0.70	1.20
Glazed Doors	Manufacturer	Half Glazed Door	Double Low-E Hard 0.2			0.72		0.70	1.00
Solid doors	Manufacturer	Solid Door				0.00			1.00
Velux	Manufacturer	Roof Window	Double Low-E Hard 0.2			0.72		0.70	1.40

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
NW Windows	Windows	External Walls	North West	9.68	
NW Doors	Solid doors	External Walls	North West	2.00	
NW Velux	Velux	Sloping ceilings	North West	0.76	40
SW Windows	Windows	External Walls	South West	9.92	
SE Windows	Windows	External Walls	South East	18.47	
SE Doors	Glazed Doors	External Walls	South East	2.06	
SE Velux	Velux	Sloping ceilings	South East	0.76	40
NE Windows	Windows	External Walls	North East	1.31	

14.0 Conservatory

15.0 Draught Proofing

 %

16.0 Draught Lobby

17.0 Thermal Bridging

17.1 List of Bridges

Bridge Type	Source Type	Length	Psi	Adjusted Reference:	Imported
E2 Other lintels (including other steel lintels)	Independently assessed	27.28	0.08	0.08 ROI	Yes
E3 Sill	Independently assessed	25.35	0.03	0.03 ROI	Yes
E4 Jamb	Independently assessed	67.06	0.04	0.04 ROI	Yes
E5 Ground floor (normal)	Independently assessed	51.40	0.02	0.02 ROI	Yes
E6 Intermediate floor within a dwelling	Independently assessed	51.40	0.08	0.08 ROI	Yes
E16 Corner (normal)	Independently assessed	36.95	0.03	0.03 ROI	No
R1 Head of roof window	Table K1 - Default	1.56	0.24	0.24 DF	Yes
R2 Sill of roof window	Table K1 - Default	1.56	0.24	0.24 DF	Yes
R3 Jamb of roof window	Table K1 - Default	3.92	0.24	0.24 DF	Yes
E10 Eaves (insulation at ceiling level)	Independently assessed	15.00	0.04	0.04 ROI	No
E11 Eaves (insulation at rafter level)	Independently assessed	18.54	0.04	0.04 ROI	No
E12 Gable (insulation at ceiling level)	Independently assessed	13.06	0.05	0.05 ROI	No
E13 Gable (insulation at rafter level)	Independently assessed	11.15	0.02	0.02 ROI	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	16.55	-0.01	-0.01 ROI	No
R4 Ridge (vaulted ceiling)	Table K1 - Default	9.27	0.12	0.12 DF	No

Y-value W/m²K

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present

20.0 Fans, Open Fireplaces, Flues

Number of open chimneys

Number of open flues

Number of chimneys/flues attached to closed fire

Number of flues attached to solid fuel boiler

Number of flues attached to other heater

Number of blocked chimneys

Number of intermittent extract fans

Number of passive vents

Number of flueless gas fires

21.0 Fixed Cooling System

22.0 Pressure Testing

Designed AP₅₀ m³/(h.m²) @ 50 Pa

Test Method

22.0 Lighting

Summary for Input Data

No Fixed Lighting	No				
	Name Lighting	Efficacy 80.00	Power 5.00	Capacity 400.00	Count 36

24.0 Main Heating 1

	SAP table	
Description	ASHP	
Percentage of Heat	100.00	%
Fuel Type	Electricity	
SAP Code	224	
In Winter	170.00	
In Summer	170.00	
Model Name	TBA	
Manufacturer	TBA	
Controls SAP Code	2207	
Controls description	Time and temperature zone control by arrangement	
Is MHS Pumped	Pump in heated space	
Heating Pump Age	2013 or later	
Heat Emitter	Radiators and Underfloor	
Underfloor Heating	Yes - Pipes in thin screed	
Flow Temperature	Unknown	

25.0 Main Heating 2

	None
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26.0 Heat Networks

	None
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27.0 Secondary Heating

	SAP table	
SAP Code	633	
Heating System Description	Solid fuel Closed room heater	
Fuel Type	Wood Logs	
SHS efficiency	60.00	%
HETAS Approved System	Yes	

28.0 Water Heating

Water Heating	Main Heating 1
SAP Code	901
Flue Gas Heat Recovery System	No
Waste Water Heat Recovery Instantaneous System 1	No
Waste Water Heat Recovery Instantaneous System 2	No
Waste Water Heat Recovery Storage System	No
Solar Panel	No
Water use <= 125 litres/person/day	Yes
Cold Water Source	From mains
Bath Count	1
Supplementary Immersion	No
Immersion Only Heating Hot Water	No

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
GF Shower	Unknown			Yes	Storage System
Bathroom Shower	Unknown			Yes	Storage System
ES 1 Shower	Unknown			Yes	Storage System
ES 2 Shower	Unknown			Yes	Storage System

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder

	Hot Water Cylinder
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Summary for Input Data

Cylinder Stat	Yes
Cylinder In Heated Space	Yes
Independent Time Control	Yes
Insulation Type	Foam
Insulation Thickness Type	80 mm
Cylinder Volume	300.00 L
Pipes insulation	Fully insulated primary pipework

31.0 Thermal Store

32.0 Photovoltaic Unit

Export Capable Meter?

Connected To Dwelling

Diverter

Battery Capacity [kWh]

PV Cells kWp	Orientation	Elevation	Overshading	FGHRS	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
3.00	South West	30°	Modest		No	0.80		TBA

34.0 Small-scale Hydro

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

	Typical Cost	Typical savings per year	Ratings after improvement	
			SAP rating	Environmental Impact
Solar water heating	£4,000 - £7,000	£93	B 81	A 96
Photovoltaic			0	0
Wind turbine			0	0