

Summary for Input Data

Property Reference	CLARFELT	Issued on Date	05/09/2025
Assessment Reference	As-Designed	Prop Type Ref	
Property	Rear of Haynes, Partridge Green, Horsham, West Sussex, RH13 8JF		

SAP Rating	84 B	DER	2.89	TER	8.16
Environmental	97 A	% DER < TER			64.58
CO ₂ Emissions (t/year)	0.52	DFEE	43.10	TFEE	45.30
Compliance Check	See BREL	% DFEE < TFEE			4.85
% DPER < TPER	24.24	DPER	32.94	TPER	43.48

Assessor Details	Mr. Alexander Pelling	Assessor ID	T297-0001
Client	SCANDIA-HUS, Project Manager		

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

Orientation	West	
Property Tenture	1	
Transaction Type	6	
Terrain Type	Suburban	
1.0 Property Type	House, Detached	
2.0 Number of Storeys	2	
3.0 Date Built	2025	
4.0 Sheltered Sides	0	
5.0 Sunlight/Shade	Average or unknown	
6.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	1.00	kJ/m²K
<hr/>		
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:	55.04 m	130.67 m ²	2.88 m
		46.14 m	90.46 m ²	2.68 m

8.0 Living Area	29.17	m ²
-----------------	-------	----------------

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
Plinth	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	23.76	23.76	0.00	None	0.00	Enter Gross Area
Cladding	Timber Frame	Timber framed wall (one layer of plasterboard)	0.17	9.00	154.04	107.00	0.00	None	47.04	Enter Gross Area
Stone	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	17.22	13.44	0.00	None	3.78	Enter Gross Area
Ashlar	Timber Frame	Timber framed wall (one layer of plasterboard)	0.14	9.00	32.57	32.57	0.72	None	0.00	Enter Gross Area
Dormer	Timber Frame	Timber framed wall (one layer of plasterboard)	0.18	9.00	1.67	1.67	0.00	None	0.00	Enter Gross Area

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
GF	Plasterboard on timber frame	9.00	195.32
FF	Plasterboard on timber frame	9.00	178.30

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
GF Flat C	External Slope Roof	Plasterboard, insulated slope	0.14	9.00	23.87	23.87	None	0.72	Enter Gross Area	0.00
GF Rafters	External Slope Roof	Plasterboard, insulated slope	0.14	9.00	8.47	8.47	None	0.00	Enter Gross Area	0.00
Rafters	External Slope Roof	Plasterboard, insulated slope	0.14	9.00	85.05	75.16	None	0.00	Enter Gross Area	9.89
FF Flat Ceiling	External Plane Roof	Plasterboard, insulated at ceiling level	0.11	9.00	34.59	34.59	None	0.00	Enter Gross Area	0.00

Description	Storey	Construction	Area (m ²)
Internal Ceiling 1	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	90.46

Summary for Input Data



11.0 Heat Loss Floors

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Ground Floor	Ground Floor - Solid	Lowest occupied	Suspended concrete floor, carpeted	0.11	None	0.00	75.00	130.67

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Floor 1		Plasterboard ceiling, carpeted chipboard floor	18.00	90.46

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	Triple Low-E Soft 0.1			0.57		0.70	1.00
Solid Doors	Manufacturer	Solid Door				0.00			1.00
Rooflights	Manufacturer	Roof Window	Triple Low-E Soft 0.1			0.57		0.70	1.00
HG Doors	Manufacturer	Half Glazed Door	Triple Low-E Soft 0.1			0.57		0.70	1.00

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Opening 1	Windows	Cladding	West	0.84	
Opening 2	Windows	Cladding	West	2.40	
Opening 3	Windows	Stone	West	0.84	
Opening 4	Solid Doors	Stone	West	2.10	
Opening 5	Windows	Stone	West	0.84	
Opening 6	Windows	Cladding	West	3.15	
Opening 7	Windows	Cladding	East	7.56	
Opening 8	Windows	Cladding	East	7.56	
Opening 9	Windows	Cladding	South	0.72	
Opening 10	Windows	Cladding	South	0.72	
Opening 11	Windows	Cladding	East	7.56	
Opening 12	Windows	Cladding	North	5.25	
Opening 13	Windows	Cladding	North	2.40	
Opening 14	Windows	Cladding	North	0.72	
Opening 15	HG Doors	Cladding	North	1.89	
Opening 16	Rooflights	Rafters	West	1.09	42
Opening 17	Rooflights	Rafters	West	1.09	42
Opening 18	Rooflights	Rafters	West	0.92	42
Opening 19	Rooflights	Rafters	West	0.92	42
Opening 20	Rooflights	Rafters	West	1.09	42
Opening 21	Rooflights	Rafters	West	1.09	42
Opening 22	Rooflights	Rafters	South	0.92	42
Opening 23	Windows	Cladding	East	1.56	
Opening 24	Windows	Cladding	East	1.56	
Opening 25	Rooflights	Rafters	South	0.92	42
Opening 26	Rooflights	Rafters	South	0.92	42
Opening 27	Windows	Cladding	East	3.15	
Opening 28	Rooflights	Rafters	North	0.92	42

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
E11 Eaves (insulation at rafter level)	Independently assessed	42.59	0.00	0.00	No
E13 Gable (insulation at rafter level)	Independently assessed	15.53	-0.02	-0.02	No
R6 Flat ceiling	Table K1 - Default	28.16	0.12	0.12	No
R4 Ridge (vaulted ceiling)	Table K1 - Default	35.75	0.12	0.12	No
R5 Ridge (inverted)	Table K1 - Default	21.20	0.12	0.12	No
E2 Other lintels (including other steel lintels)	Independently assessed	28.70	0.05	0.05	Yes
E3 Sill	Independently assessed	26.80	0.07	0.07	Yes
E4 Jamb	Independently assessed	57.60	0.05	0.05	Yes
E5 Ground floor (normal)	Independently assessed	55.04	0.02	0.02	Yes
E6 Intermediate floor within a dwelling	Independently assessed	46.14	-0.00	-0.00	Yes
R1 Head of roof window	Table K1 - Default	7.80	0.24	0.24	Yes
R2 Sill of roof window	Table K1 - Default	7.80	0.24	0.24	Yes
R3 Jamb of roof window	Table K1 - Default	25.36	0.24	0.24	Yes
E16 Corner (normal)	Independently assessed	40.58	0.04	0.04	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	24.38	-0.08	-0.08	No

Y-value W/m²K

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present

Approved Installation

Mechanical Ventilation data Type

Summary for Input Data

Type	Mechanical extract ventilation - centralised				
MV Reference Number	500241				
Configuration	5				
Manufacturer SFP	0.43				
Duct Type	Rigid				
Wet Rooms	5				

20.0 Fans, Open Fireplaces, Flues

Number of open chimneys	0				
Number of open flues	0				
Number of chimneys/flues attached to closed fire	1				
Number of flues attached to solid fuel boiler	0				
Number of flues attached to other heater	0				
Number of blocked chimneys	0				
Number of intermittent extract fans	0				
Number of passive vents	0				
Number of flueless gas fires	0				

21.0 Fixed Cooling System

	No				
--	----	--	--	--	--

22.0 Pressure Testing

	Yes				
Designed AP ₅₀	5.00	m ² /(h.m ²) @ 50 Pa			
Test Method	Blower Door				

22.0 Lighting

No Fixed Lighting	No				
	Name Lighting 1	Efficacy 75.00	Power 5.00	Capacity 375.00	Count 65

24.0 Main Heating 1

	SAP table				
Percentage of Heat	100.00 %				
Fuel Type	Electricity				
SAP Code	214				
In Winter	0.00				
In Summer	0.00				
Controls SAP Code	2207				
Is MHS Pumped	Pump in heated space				
Heating Pump Age	2013 or later				
Heat Emitter	Underfloor				
Underfloor Heating	Yes - Pipes in thin screed				
Flow Temperature	Enter value				
Flow Temperature Value	35.00				

25.0 Main Heating 2

	None				
--	------	--	--	--	--

26.0 Heat Networks

	None				
--	------	--	--	--	--

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

Summary for Input Data

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
Showers	Combi boiler or unvented hot water system	10.00		No	

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder

Hot Water Cylinder	Hot Water Cylinder
Cylinder Stat	Yes
Cylinder In Heated Space	Yes
Independent Time Control	Yes
Insulation Type	Foam
Insulation Thickness Type	100 mm
Cylinder Volume	250.00
Pipes insulation	Fully insulated primary pipework
In Airing Cupboard	No

31.0 Thermal Store

None

32.0 Photovoltaic Unit

Export Capable Meter?	Yes
Connected To Dwelling	Yes
Diverter	No
Battery Capacity [kWh]	0.00

PV Cells kWp	Orientation	Elevation	Overshading	FGHRS	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
4.40	North	45°	None Or Little		No	1.00		

34.0 Small-scale Hydro

None											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

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
£4,000 - £7,000	£97	B 85	A 97
		0	0
		0	0