

Summary for Input Data



Property Reference	5893-SAP-BPA-Fovant	Issued on Date	22/08/2024
Assessment Reference	5893-SAP-BPA-Fovant Dwelling 2	Prop Type Ref	
Property	SN3 5JH		

SAP Rating	80 C	DER	4.48	TER	10.32
Environmental	96 A	% DER < TER			56.59
CO ₂ Emissions (t/year)	0.45	DFEE	32.48	TFEE	32.93
Compliance Check	See BREL	% DFEE < TFEE			1.36
% DPER < TPER	13.07	DPER	46.93	TPER	53.98

Assessor Details	Mr. Lyle Andrews	Assessor ID	AM30-0001
Client	5893-SAP-BPA-Fovant, Caroline Everett		

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

Orientation	Northwest
Property Tenure	ND
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	House, Semi-Detached
2.0 Number of Storeys	3
3.0 Date Built	2024
4.0 Sheltered Sides	1
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation
Thermal Mass	216.61 kJ/m ² K
7.0 Electricity Tariff	Standard
Smart electricity meter fitted	Yes
Smart gas meter fitted	No

7.0 Measurements	Ground floor:	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
	1st Storey:	18.00 m	35.95 m ²	2.40 m
	2nd Storey:	18.00 m	35.95 m ²	2.55 m
			35.95 m ²	2.24 m

8.0 Living Area	11.40 m ²
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9.0 External Walls	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	Cavity Wall	Cavity wall : plasterboard on dabs, AAC block, filled cavity, any outside structure	0.15	60.00	113.90	98.37	0.00	None	15.53	Enter Gross Area

9.1 Party Walls	Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Area (m ²)	Shelter Res	Shelter
	Party Wall	Filled Cavity with Edge Sealing	Single plasterboard on dabs both sides, lightweight aggregate blocks, cavity or cavity fill	0.00	110.00	55.50		None

9.2 Internal Walls	Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
	Stud Walls	Plasterboard on timber frame	9.00	138.64
	Block Walls	Dense block, plasterboard on dabs	75.00	67.87

10.0 External Roofs	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
	Ins at Rafter	External Slope Roof	Plasterboard, insulated slope	0.15	9.00	43.80	42.10	None	0.00	Enter Gross Area	1.70

10.2 Internal Ceilings	Description	Storey	Construction	Area (m ²)
	GF Internal Ceilings	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	35.95
	FF Internal Ceiling	+1	Plasterboard ceiling, carpeted chipboard floor	35.95

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)
Heatloss Floor	Ground Floor - Solid	Lowest occupied	Suspended concrete floor, carpeted	0.13	None	0.00	75.00	35.95

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
FF Internal Floor		Plasterboard ceiling, carpeted chipboard floor	9.00	35.95
SF Internal Floor		Plasterboard ceiling, carpeted chipboard floor	9.00	35.95

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Half-Glazed Doors	Manufacturer	Half Glazed Door	Double Low-E Soft 0.05			0.63		0.70	1.20
Windows	Manufacturer	Window	Double Low-E Soft 0.05			0.63		0.70	1.20
Roof Windows	Manufacturer	Roof Window	Double Low-E Soft 0.05			0.63		0.70	1.20
Glazed Door	Manufacturer	Window	Double Low-E Soft 0.05			0.63		0.70	1.20

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Front Door	Half-Glazed Doors	External Walls	North West	1.76	
NW Windows	Windows	External Walls	North West	3.95	
NE Windows	Windows	External Walls	North East	2.10	
SE Windows	Windows	External Walls	South East	4.58	
Front Roof Light	Roof Windows	Ins at Rafter	North West	0.78	43
Rear Roof Light	Roof Windows	Ins at Rafter	South East	0.92	43
Patio Doors	Glazed Door	External Walls	South East	3.15	

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
E6 Intermediate floor within a dwelling	Independently assessed	36.00	0.00	0.00 Kingspan	No
E11 Eaves (insulation at rafter level)	Independently assessed	9.45	0.03	0.03 Kingspan	No
E13 Gable (insulation at rafter level)	Independently assessed	11.95	0.06	0.06 Kingspan	No
E16 Corner (normal)	Independently assessed	17.19	0.03	0.03 Kingspan	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	5.73	-0.06	-0.06 Kingspan	No
E18 Party wall between dwellings	Independently assessed	13.68	0.04	0.04 Kingspan	No
P1 Party wall - Ground floor	Independently assessed	7.30	0.21	0.21 Heatflux	No
P2 Party wall - Intermediate floor within a dwelling	Independently assessed	14.60	-0.02	-0.02 Heatflux	No
P5 Party wall - Roof (insulation at rafter level)	Independently assessed	5.05	0.27	0.27 Heatflux	No
R4 Ridge (vaulted ceiling)	Independently assessed	8.85	0.02	0.02 Heatflux	No
E1 Steel lintel with perforated steel base plate	Independently assessed	13.29	0.35	0.35 Kingspan	No
E3 Sill	Independently assessed	10.95	0.02	0.02 Kingspan	No
E4 Jamb	Independently assessed	27.60	0.02	0.02 Kingspan	No
E5 Ground floor (normal)	Independently assessed	18.00	0.06	0.06 Kingspan	Yes
R5 Ridge (inverted)	Independently assessed	4.88	-0.03	-0.03 Heatflux	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

Summary for Input Data

Designed AP₅₀ m²/(h.m²) @ 50 Pa
 Test Method

22.0 Lighting

No Fixed Lighting

Name	Efficacy	Power	Capacity	Count
LED Downlighters	75.00	4.00	300.00	16
LED Pendant	75.00	5.00	375.00	6
Ext LED Wall Light	75.00	5.00	375.00	2

24.0 Main Heating 1

Percentage of Heat %

Database Ref. No.

Fuel Type

In Winter

In Summer

Model Name

Manufacturer

System Type

Controls SAP Code

Is MHS Pumped

Heating Pump Age

Heat Emitter

Underfloor Heating

Flow Temperature

Flow Temperature Value

25.0 Main Heating 2

26.0 Heat Networks

	Heat Source	Fuel Type	Heating Use	Efficiency	Percentage Of Heat	Heat	Heat Power Ratio	Electrical	Fuel Factor	Efficiency type
Heat source 1	None									
Heat source 2	None									
Heat source 3	None									
Heat source 4	None									
Heat source 5	None									

27.0 Secondary Heating

28.0 Water Heating

Water Heating

SAP Code

Flue Gas Heat Recovery System

Waste Water Heat Recovery Instantaneous System 1

Waste Water Heat Recovery Instantaneous System 2

Waste Water Heat Recovery Storage System

Solar Panel

Water use <= 125 litres/person/day

Cold Water Source

Bath Count

Immersion Only Heating Hot Water

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
Triton Thermostatic Bar Mixer	Unknown	5.00		No	

28.3 Waste Water Heat Recovery System

Summary for Input Data

29.0 Hot Water Cylinder

Hot Water Cylinder	Hot Water Cylinder	
Cylinder Stat	No	
Cylinder In Heated Space	No	
Independent Time Control	No	
Insulation Type	Measured Loss	
Cylinder Volume	210.00	L
Loss	1.00	kWh/day
Pipes insulation	Fully insulated primary pipework	
In Airing Cupboard	No	

31.0 Thermal Store

None

34.0 Small-scale Hydro

None

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
£4,000 - £6,000	£84	B 82	A 96
£3,500 - £5,500	£246	B 87	A 97
		0	0