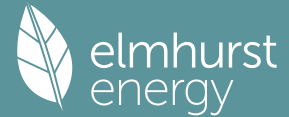


Summary for Input Data



Property Reference	5832 Plot 01	Issued on Date	19/04/2023
Assessment Reference	As Designed (Timber Frame)	Prop Type Ref	
Property	IP9 1DW		

SAP Rating	83 B	DER	3.98	TER	8.74
Environmental	96 A	% DER < TER			54.46
CO ₂ Emissions (t/year)	0.35	DFEE	42.82	TFEE	43.35
Compliance Check	See BREL	% DFEE < TFEE			1.22
% DPER < TPER	11.14	DPER	41.84	TPER	47.09

Assessor Details	Mr. Mark Roberts	Assessor ID	P471-0001
Client			

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

Orientation	South
Property Tenure	ND
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	Bungalow, Detached
Which Floor	0
2.0 Number of Storeys	1
3.0 Date Built	2023
4.0 Sheltered Sides	2
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation
Thermal Mass	N/A
7.0 Electricity Tariff	Standard
Smart electricity meter fitted	Yes
Smart gas meter fitted	Yes

7.0 Measurements	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Basement:	0.00 m	0.00 m ²	0.00 m
Ground floor:	44.48 m	92.98 m ²	2.35 m
1st Storey:	0.00 m	0.00 m ²	0.00 m
2nd Storey:	0.00 m	0.00 m ²	0.00 m
3rd Storey:	0.00 m	0.00 m ²	0.00 m
4th Storey:	0.00 m	0.00 m ²	0.00 m
5th Storey:	0.00 m	0.00 m ²	0.00 m
6th Storey:	0.00 m	0.00 m ²	0.00 m
7th Storey:	0.00 m	0.00 m ²	0.00 m

8.0 Living Area	18.99	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
	Timber Frame Brickwork	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	60.70	35.84	0.00	None	24.86	Enter Gross Area
	Timber Frame Boarded	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	11.14	9.05	0.00	None	2.09	Enter Gross Area
	Timber Frame Plinth	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	16.39	16.39	0.00	None	0.00	Enter Gross Area
	Garage Wall Sheltered	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	10.09	10.09	0.00	None	0.00	Enter Gross Area

9.2 Internal Walls	Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
	GF Timber Frame	Plasterboard on timber frame	9.00	158.23

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
	Flat Ceiling	External Plane Roof	Plasterboard, insulated at ceiling level	0.11	9.00	92.98	0.00	None	0.00	Enter Gross Area	0.00

11.0 Heat Loss Floors	Description	Type	Storey Index	Construction	U-Value (W/m ² K)	Shelter Code	Shelter Factor	Kappa (kJ/m ² K)	Area (m ²)
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Summary for Input Data



Beam & Block Ground Floor - Solid Lowest occupied Suspended concrete floor, carpeted 0.12 None 0.00 75.00 92.98

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Window	Manufacturer	Window	Double Low-E Soft 0.05		Air Filled	0.63	Wood	0.70	1.20
Door	Manufacturer	Solid Door			Air Filled	0.00	Wood	0.70	1.20

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
S Window Boarded	Window	Timber Frame Boarded	South	2.09	0
S Window Brickwork	Window	Timber Frame Brickwork	South	2.92	0
S Door Brickwork	Door	Timber Frame Brickwork	South	1.91	0
W Window Brickwork	Window	Timber Frame Brickwork	West	2.75	0
N Window Brickwork	Window	Timber Frame Brickwork	North	12.46	0
E Window Brickwork	Window	Timber Frame Brickwork	East	4.83	0

14.0 Conservatory

None

15.0 Draught Proofing

100 %

16.0 Draught Lobby

No

17.0 Thermal Bridging

Calculate Bridges

17.1 List of Bridges

Bridge Type	Source Type	Length	Psi	Adjusted Reference:	Imported
E2 Other lintels (including other steel lintels)	Independently assessed	15.59	0.17	0.17 TRADA Timber Frame Details	Yes
E3 Sill	Independently assessed	14.69	0.03	0.03 TRADA Timber Frame Details	Yes
E4 Jamb	Independently assessed	35.12	0.04	0.04 TRADA Timber Frame Details	Yes
E5 Ground floor (normal)	Independently assessed	44.48	0.14	0.14 TRADA Timber Frame Details	Yes
E10 Eaves (insulation at ceiling level)	Independently assessed	12.92	0.07	0.07 TRADA Timber Frame Details	No
E12 Gable (insulation at ceiling level)	Independently assessed	22.51	0.07	0.07 TRADA Timber Frame Details	No
E13 Gable (insulation at rafter level)	Independently assessed	5.42	0.06	0.06 TRADA Timber Frame Details	No
E16 Corner (normal)	Independently assessed	12.76	0.05	0.05 NHBC Timber Frame Guide	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	10.84	-0.01	-0.01 TRADA Timber Frame Details	No
E11 Eaves (insulation at rafter level)	Independently assessed	4.05	0.05	0.05 TRADA Timber Frame Details	No

Y-value 0.05 W/m²K

18.0 Pressure Testing

Yes

Designed AP₅₀ 4.00 m³/(h.m²) @ 50 Pa

Property Tested? Yes

Test Method Blower Door

As Built AP₅₀ 0.10 m³/(h.m²) @ 50 Pa

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present Yes

Approved Installation Yes

Mechanical Ventilation data Type Database

Type Mechanical extract ventilation - decentralised

MV Reference Number 500769

Duct Type Rigid

MVHR Efficiency 0.00

Wet Rooms 3

SFP from Installer Commissioning Certificate No

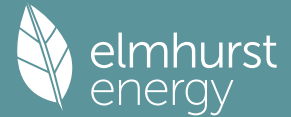
Installation Engineer TBC

Commissioning Certificate TBC

19.1 Mechanical extract ventilation - Decentralised

SFP	Fan/Room Type	Count
0.15	In Room Fan Kitchen	0
0.11	In Room Fan Other Wet Room	0
0.00	In Duct Fan Kitchen	0
0.00	In Duct Fan Other Wet Room	0
0.11	Through Wall Fan Kitchen	0
0.09	Through Wall Fan Other Wet Room	4

Summary for Input Data



20.0 Fans, Open Fireplaces, Flues

21.0 Fixed Cooling System

No

22.0 Lighting

No Fixed Lighting

No

Name	Efficacy	Power	Capacity	Count
Lighting 1	90.00	7	630	25

24.0 Main Heating 1

Database

Percentage of Heat

100.00

%

Database Ref. No.

104368

Fuel Type

Electricity

SAP Code

0

In Winter

0.00

In Summer

0.00

Model Name

AE080RXYDEG

Manufacturer

Samsung Electronics Air Conditioner Europe B.V.

System Type

Heat Pump

Controls SAP Code

2210

Delayed Start Stat

No

HETAS approved System

No

Oil Pump Inside

No

FI Case

0.00

Flue Type

None or Unknown

Fan Assisted Flue

No

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

45.00

Boiler Interlock

No

25.0 Main Heating 2

None

26.0 Heat Networks

None

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								

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

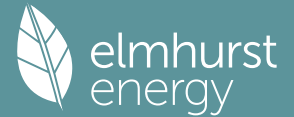
Summer Immersion

No

Cold Water Source

From mains

Summary for Input Data



Bath Count	<input type="text" value="1"/>
Supplementary Immersion	<input type="text" value="No"/>
Immersion Only Heating Hot Water	<input type="text" value="No"/>

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
Ensuite	Instantaneous electric shower		9.30	No	

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder

Hot Water Cylinder	<input type="text" value="Hot Water Cylinder"/>
Cylinder Stat	<input type="text" value="Yes"/>
Cylinder In Heated Space	<input type="text" value="Yes"/>
Independent Time Control	<input type="text" value="Yes"/>
Insulation Type	<input type="text" value="Measured Loss"/>
Cylinder Volume	<input type="text" value="150.00"/> L
Loss	<input type="text" value="1.50"/> kWh/day
Pipes insulation	<input type="text" value="Fully insulated primary pipework"/>
In Airing Cupboard	<input type="text" value="No"/>

31.0 Thermal Store

Thermal Store	<input type="text" value="None"/>
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34.0 Small-scale Hydro

Small-scale Hydro	<input type="text" value="None"/>
Electricity Generated	<input type="text" value="0.00"/>
Apportioned	<input type="text" value="0.00"/> kWh/Year
Connected to dwelling's electricity meter	<input type="text" value="Yes"/>
Electricity Generation	<input type="text" value="Annual"/>

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

Recommendations

- Lower cost measures
 - None
- Further measures to achieve even higher standards
 - None