

Summary for Input Data



Property Reference	5832 Plot 13	Issued on Date	19/04/2023
Assessment Reference	As Designed	Prop Type Ref	
Property			

SAP Rating	82 B	DER	3.42	TER	8.67
Environmental	96 A	% DER < TER			60.55
CO ₂ Emissions (t/year)	0.6	DFEE	40.47	TFEE	40.10
Compliance Check	See BREL	% DFEE < TFEE			-0.91
% DPER < TPER	21.41	DPER	35.64	TPER	45.35

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

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

Orientation	North
Property Tenure	ND
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	House, Detached
Which Floor	0
2.0 Number of Storeys	3
3.0 Date Built	2023
4.0 Sheltered Sides	1
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation
Thermal Mass	N/A
	kJ/m ² K
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:	41.78 m	81.17 m ²	2.42 m
1st Storey:	37.95 m	74.96 m ²	2.68 m
2nd Storey:	25.66 m	29.57 m ²	2.32 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	21.00	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
Plinth	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	16.31	16.31	0.00	None	0.00	Enter Gross Area
Brick	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	91.45	61.88	0.00	None	29.57	Enter Gross Area
Timber	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	106.63	90.03	0.00	None	16.60	Enter Gross Area

9.2 Internal Walls

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
GF	Plasterboard on timber frame	9.00	103.22
FF	Plasterboard on timber frame	9.00	180.44
SF	Plasterboard on timber frame	9.00	168.77

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 Area
Sloped	External Slope Roof	Plasterboard, insulated slope	0.15	9.00	48.40	3.82	None	0.00	Enter Gross Area	3.82
Plane	External Plane Roof	Plasterboard, insulated at ceiling level	0.09	9.00	36.21	0.00	None	0.00	Enter Gross Area	0.00

Summary for Input Data



10.2 Internal Ceilings

Description	Storey	Construction	Area (m ²)
GF	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	74.96
FF	+1	Plasterboard ceiling, carpeted chipboard floor	74.96

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)
Heatloss Floor 1	Ground Floor - Solid	Lowest occupied	Suspended concrete floor, carpeted	0.12	None	0.00	75.00	84.61

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m ² K)	Area (m ²)
Internal Floor 1		Plasterboard ceiling, carpeted chipboard floor	9.00	74.96
Internal Floor 2		Plasterboard ceiling, carpeted chipboard floor	9.00	74.96

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m ² K)
Windows	Manufacturer	Window	Double Low-E Soft 0.05		Air Filled	0.63	Wood	0.70	1.20
Doors	Manufacturer	Solid Door			Air Filled	0.00	Wood	0.70	1.20
Rooflight	Manufacturer	Roof Window	Double Low-E Soft 0.05		Air Filled	0.63	Wood	0.70	1.00
Half Glazed	Manufacturer	Half Glazed Door	Double Low-E Soft 0.05		Air Filled	0.63	Wood	0.70	1.20

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m ²)	Pitch
NE W Brick	Windows	Brick	North East	5.84	0
NE W Timber	Windows	Timber	North East	8.33	0
NE D Brick	Doors	Brick	North East	1.97	0
NE RL Slope	Rooflight	Sloped	North West	0.64	30
NW RL Slope	Rooflight	Sloped	North West	1.91	48
NW W Brick	Windows	Brick	North West	3.55	0
NW DHG Brick	Half Glazed	Brick	North West	1.91	0
SW W Brick	Windows	Brick	South West	8.07	0
SW W Timber	Windows	Timber	North West	5.77	0
SW RL Slope	Rooflight	Sloped	North West	0.64	30
SE W Brick	Windows	Brick	South East	8.24	0
SE W Timber	Windows	Timber	South East	2.51	0
SE RL Slope	Rooflight	Sloped	South East	0.64	48

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	22.66	0.17	0.17 TRADA	Yes
E3 Sill	Independently assessed	20.81	0.03	0.03 TRADA	Yes
E4 Jamb	Independently assessed	51.31	0.04	0.04 TRADA	Yes
E5 Ground floor (normal)	Independently assessed	41.78	0.14	0.14 TRADA	Yes
E6 Intermediate floor within a dwelling	Independently assessed	63.61	0.09	0.09 TFG	Yes
R1 Head of roof window	Table K1 - Default	4.36	0.24	0.24	Yes
R2 Sill of roof window	Table K1 - Default	4.36	0.24	0.24	Yes
R3 Jamb of roof window	Table K1 - Default	10.51	0.24	0.24	Yes
E16 Corner (normal)	Independently assessed	23.99	0.05	0.05 TFG	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	4.20	-0.01	-0.01 TRADA	No
E11 Eaves (insulation at rafter level)	Independently assessed	31.80	0.05	0.05 TRADA	No
E13 Gable (insulation at rafter level)	Independently assessed	18.34	0.06	0.06 TRADA	No

Y-value W/m²K

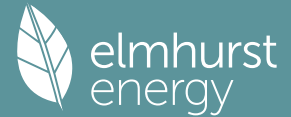
18.0 Pressure Testing

Designed AP₅₀ m³/(h.m²) @ 50 Pa
 Property Tested?
 Test Method
 As Built AP₅₀ m³/(h.m²) @ 50 Pa

19.0 Mechanical Ventilation

Mechanical Ventilation
 Mechanical Ventilation System Present
 Approved Installation
 Mechanical Ventilation data Type
 Type

Summary for Input Data



MV Reference Number	500769
Duct Type	Flexible
MVHR Efficiency	0.00
Wet Rooms	7
SFP from Installer Commissioning Certificate	No

19.1 Mechanical extract ventilation - Decentralised

SFP	Fan/Room Type	Count
0.15	In Room Fan	1
	Kitchen	
0.11	In Room Fan Other	6
	Wet Room	
0.00	In Duct Fan Kitchen	0
0.00	In Duct Fan Other	0
	Wet Room	
0.11	Through Wall Fan	0
	Kitchen	
0.09	Through Wall Fan	0
	Other Wet Room	

20.0 Fans, Open Fireplaces, Flues

21.0 Fixed Cooling System

22.0 Lighting

No Fixed Lighting	<input type="text" value="No"/>				
	Name	Efficacy	Power	Capacity	Count
	Lighting 1	95.71	7	670	45

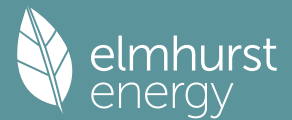
24.0 Main Heating 1

Database	<input type="text" value="Database"/>
Percentage of Heat	<input type="text" value="100.00"/> %
Database Ref. No.	<input type="text" value="105744"/>
Fuel Type	<input type="text" value="Electricity"/>
SAP Code	<input type="text" value="0"/>
In Winter	<input type="text" value="0.00"/>
In Summer	<input type="text" value="0.00"/>
Model Name	<input type="text" value="WH-MDC09J3E5"/>
Manufacturer	<input type="text" value="Panasonic HVAC UK Ltd"/>
System Type	<input type="text" value="Heat Pump"/>
Controls SAP Code	<input type="text" value="2207"/>
Delayed Start Stat	<input type="text" value="No"/>
Burner Control	<input type="text" value="Modulating"/>
HETAS approved System	<input type="text" value="No"/>
Oil Pump Inside	<input type="text" value="No"/>
FI Case	<input type="text" value="0.00"/>
Flue Type	<input type="text" value="None or Unknown"/>
Fan Assisted Flue	<input type="text" value="No"/>
Is MHS Pumped	<input type="text" value="Pump in heated space"/>
Heating Pump Age	<input type="text" value="2013 or later"/>
Heat Emitter	<input type="text" value="Radiators and Underfloor"/>
Underfloor Heating	<input type="text" value="Yes - Pipes in thin screed"/>
Flow Temperature	<input type="text" value="Enter value"/>
Flow Temperature Value	<input type="text" value="55.00"/>
Boiler Interlock	<input type="text" value="No"/>
Combi boiler type	<input type="text" value="No Combi"/>
Combi keep hot type	<input type="text" value="None"/>

25.0 Main Heating 2

26.0 Heat Networks

Summary for Input Data



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
Bath Count	1
Supplementary Immersion	No
Immersion Only Heating Hot Water	Yes

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
Bath	Vented hot water system	7.00		No	
Ensuite 1	Vented hot water system	7.00		No	
Ens 2	Vented hot water system	7.00		No	
Shower	Vented hot water system	7.00		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	Measured Loss
Cylinder Volume	240.00 L
Loss	1.58 kWh/day
Pipes insulation	Fully insulated primary pipework
In Airing Cupboard	No

31.0 Thermal Store

None

Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

None