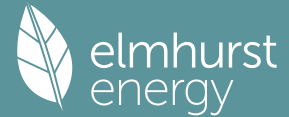


Summary for Input Data



Property Reference	5832 Plot 12	Issued on Date	19/04/2023
Assessment Reference	As Designed	Prop Type Ref	
Property			

SAP Rating	81 B	DER	3.67	TER	9.53
Environmental	96 A	% DER < TER			61.49
CO ₂ Emissions (t/year)	0.62	DFEE	42.48	TFEE	42.80
Compliance Check	See BREL	% DFEE < TFEE			0.74
% DPER < TPER	23.54	DPER	38.25	TPER	50.03

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	2	
3.0 Date Built	2023	
4.0 Sheltered Sides	0	
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	

	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Basement:	0.00 m	0.00 m ²	0.00 m
Ground floor:	44.51 m	85.70 m ²	2.35 m
1st Storey:	53.32 m	94.76 m ²	2.64 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	85.70	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
Brickwork	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	140.05	110.64	0.00	None	29.41	Enter Gross Area
Boarded	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	33.56	27.72	0.00	None	5.84	Enter Gross Area
Plinth	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	18.54	18.54	0.00	None	0.00	Enter Gross Area
Dormer	Timber Frame	Timber framed wall (one layer of plasterboard)	0.18	9.00	7.35	5.70	0.00	None	1.65	Enter Gross Area

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
GF	Plasterboard on timber frame	9.00	101.07
FF	Plasterboard on timber frame	9.00	160.78

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
Sloped	External Slope Roof	Plasterboard, insulated slope	0.15	9.00	30.42	0.00	None	0.00	Enter Gross Area	0.00
Ceiling	External Plane Roof	Plasterboard, insulated at ceiling level	0.11	9.00	60.12	0.00	None	0.00	Enter Gross Area	0.00

Summary for Input Data



Flat External Flat Roof Plasterboard, insulated flat roof 0.15 9.00 4.22 0.00 None 0.00 Enter Gross Area 0.00

10.2 Internal Ceilings

Description	Storey	Construction	Area (m ²)
Internal Ceiling 1	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	85.70

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)
Beam & Block Garage	Ground Floor - Solid Exposed Floor - Timber	Lowest occupied +1	Suspended concrete floor, carpeted Timber exposed floor, insulation between joists	0.12 0.17	None None	0.00 0.00	75.00 20.00	85.70 29.07

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m ² K)	Area (m ²)
FF		Plasterboard ceiling, carpeted chipboard floor	9.00	85.70

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)
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
Half Glazed Door	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
E Win Brick	Window	Brickwork	North	6.88	0
E Door Brick	Door	Brickwork	North	1.89	0
E Win Boarded	Window	Boarded	North	4.18	0
E Win Dormer	Window	Dormer	North	1.65	0
S Win Brick	Window	Brickwork	East	1.44	0
S HD Brick	Half Glazed Door	Brickwork	East	1.91	0
W Win Brick	Window	Brickwork	South	14.86	0
N Win Brick	Window	Brickwork	West	2.43	0
N Win Boarded	Window	Boarded	West	1.66	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	25.26	0.17	0.17 TRADA	Yes
E3 Sill	Independently assessed	23.45	0.03	0.03 TRADA	Yes
E4 Jamb	Independently assessed	56.83	0.04	0.04 TRADA	Yes
E5 Ground floor (normal)	Independently assessed	44.51	0.14	0.14 TRADA	Yes
E6 Intermediate floor within a dwelling	Independently assessed	53.32	0.12	0.12 TRADA	Yes
E20 Exposed floor (normal)	Independently assessed	21.57	0.12	0.12 TRADA	No
E10 Eaves (insulation at ceiling level)	Independently assessed	23.16	0.07	0.07 TRADA	No
E11 Eaves (insulation at rafter level)	Independently assessed	18.24	0.05	0.05 TRADA	No
E12 Gable (insulation at ceiling level)	Independently assessed	12.90	0.07	0.07 TRADA	No
E13 Gable (insulation at rafter level)	Independently assessed	15.72	0.06	0.06 TRADA	No
E14 Flat roof	Table K1 - Default	8.40	0.16	0.16 TRADA	No
E16 Corner (normal)	Independently assessed	38.69	0.06	0.06 TRADA	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	19.71	-0.01	-0.01 TRADA	No

Y-value 0.07 W/m²K

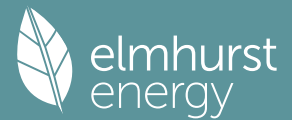
18.0 Pressure Testing

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

Summary for Input Data



Duct Type	Flexible
MVHR Efficiency	0.00
Wet Rooms	6
SFP from Installer Commissioning Certificate	No

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	7

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	92.86	7	650	50

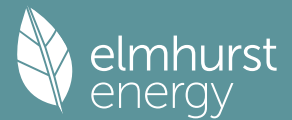
24.0 Main Heating 1

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="2210"/>
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



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
Bath Count	2
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
Bath	Vented hot water system	7.00		No	
Ens 1	Vented hot water system	7.00		No	
Ens 2	Vented hot water system	7.00		No	

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder

Hot Water Cylinder	
Cylinder Stat	Yes
Cylinder In Heated Space	Yes
Independent Time Control	Yes
Insulation Type	Measured Loss
Cylinder Volume	270.00 L
Loss	1.58 kWh/day
Pipes insulation	Fully insulated primary pipework
In Airing Cupboard	No

31.0 Thermal Store

None

34.0 Small-scale Hydro

None	
Electricity Generated	0.00 kWh/Year
Apportioned	0.00 kWh/Year
Connected to dwelling's electricity meter	Yes
Electricity Generation	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