Summary for Input Data

elmhurst energy

Property Reference	Mirador, 23 Reservoir Road	**Issued on Date**	09/06/2025
Assessment Reference	001	**Prop Type Ref**	Detached House
Property	MIRADOR, 23, Reservior Road,, Spalding,, Lincolnshire,, PE11 4DH		

SAP Rating	141 A	**DER**	-24.16	**TER**	16.44
Environmental	116 A	**% DER < TER**			246.96
CO_2 Emissions (t/year)	-1.24	**DFEE**	40.34	**TFEE**	59.30
Compliance Check	See BREL	**% DFEE < TFEE**			31.97
% DPER < TPER	225.51	**DPER**	-110.33	**TPER**	87.91

Assessor Details	Mr. Ruari Mulvenna	**Assessor ID**	AW51-0001
Client			

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

Orientation	North	
Property Tenture	ND	
Transaction Type	5	
Terrain Type	Rural	
1.0 Property Type	House, Detached	
2.0 Number of Storeys	1	
3.0 Date Built	2025	
4.0 Sheltered Sides	1	
5.0 Sunlight/Shade	Average or unknown	
6.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	157.26	kJ/m²K
7.0 Electricity Tariff	Standard	
Smart electricity meter fitted	Yes	
Smart gas meter fitted	No	

7.0 Measurements

	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Ground floor:	32.00 m	44.85 m²	2.70 m

8.0 Living Area 25.00 m²

9.0 External Walls

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Res	Shelter	Openings	Area Calculation Type
External Walls	Timber Frame	Other	0.12	18.00	96.80	64.35	0.00	None	32.45	Enter Gross Area

9.2 Internal Walls

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Walls	Plasterboard on timber frame	9.00	28.00

10.0 External Roofs

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Code	Shelter Factor	Calculation Type	Openings
Pitched Roof	External Slope Roof	Plasterboard, insulated slope	0.10	9.00	66.80	66.80	None	0.00	Enter Gross Area	0.00

10.2 Internal Ceilings

Description	Storey	Construction	Area (m²)
Internal Ceiling - Mezz	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	4.00

11.0 Heat Loss Floors

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Heat Loss Floor	Ground Floor - Solid	Lowest occupied	Other	0.06	None	0.00	110.00	44.85

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Floor - Mezz		Plasterboard ceiling, carpeted chipboard floor	9.00	4.00

12.0 Opening Types

Summary for Input Data

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Doors	Manufacturer	Solid Door				0.68			1.00
Glazing	Manufacturer	Window	Triple glazed			0.68		0.70	0.78
Roof Lights	Manufacturer	Roof Window	Triple glazed			0.68		0.70	0.78

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Rear Glazing S	Glazing	External Walls	South	21.50	
Side Glazing E	Glazing	External Walls	East	3.00	
Side Glazing W	Glazing	External Walls	South East	5.50	
Front Door	Doors	External Walls	East	2.45	

14.0 Conservatory	None	
15.0 Draught Proofing	100	%
16.0 Draught Lobby	No	

17.0 Thermal Bridging	User Input	

17.1 List of Bridges

Bridge Type	Source Type	Length	Psi	Adjusted Reference:	Imported
E1 Steel lintel with perforated steel base plate		9.20			Yes
E3 Sill		8.30			Yes
E4 Jamb		22.80			Yes
E5 Ground floor (normal)		30.00			Yes
E6 Intermediate floor within a dwelling		30.00			Yes
E11 Eaves (insulation at rafter level)		32.00			No
E12 Gable (insulation at ceiling level)		2.00			No
E13 Gable (insulation at rafter level)		6.00			No
E16 Corner (normal)		12.20			No

Y-value	0.03	W/m²K
Description	tb	

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present	No	

20.0 Fans, Open Fireplaces, Flues

Number of open chimneys	0	
Number of open flues	0	
Number of chimneys/flues attached to closed fire	0	
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	2	
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}	1.00	m³/(h.m²) @ 50 Pa
Test Method	Blower Door	

22.0 Lighting

No Fixed Lighting	No	

Name	Efficacy	Power	Capacity	Count
Low energy Lighting	70.00	10.00	700.00	12

24.0 Main Heating 1	SAP table	
Percentage of Heat	100.00	%
Fuel Type	Electricity	
SAP Code	192	
In Winter	100.00	
In Summer	100.00	
Controls SAP Code	2105	

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PCDF Controls	0
Delayed Start Stat	Yes
Is MHS Pumped	Pump in heated space
Heating Pump Age	2013 or later
Heat Emitter	Underfloor
Underfloor Heating	Yes - Pipes in thin screed
Boiler Interlock	Yes

25.0 Main Heating 2 — None

26.0 Heat Networks — None

27.0 Secondary Heating — 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
Cold Water Source	From mains
Bath Count	1

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder	Internal Store	
Insulation Type	Measured Loss	
Cylinder Volume	300.00	L
Loss	1.46	kWh/day
In Airing Cupboard	No	

32.0 Photovoltaic Unit	One Dwelling	
Export Capable Meter?	Yes	
Connected To Dwelling	Yes	
Diverter	Yes	
Battery Capacity [kWh]	15.00	

PV Cells kWp	Orientation	Elevation	Overshading	FGHRS	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
14.00	South	30°	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 - £6,000	£28	A 142	A 117
			0	0
	£15,000 - £25,000	£694	A 172	A 125