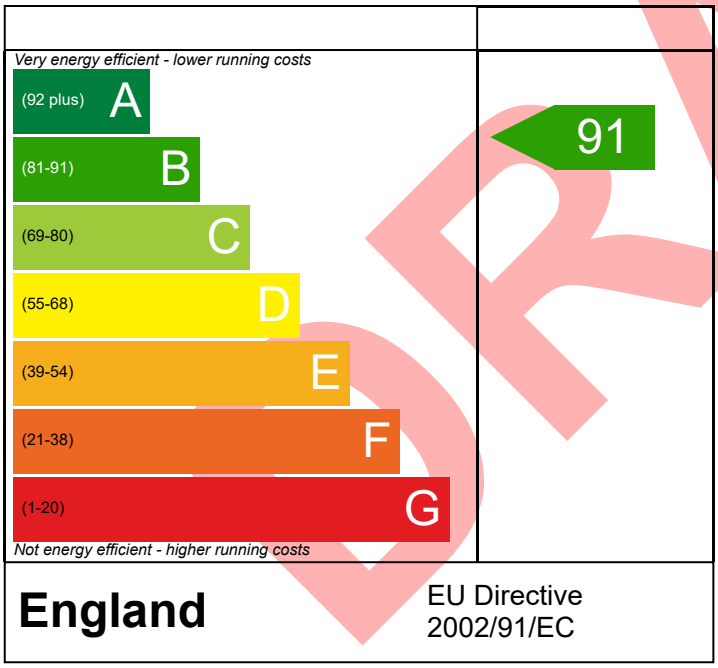
Predicted Energy Assessment

Dwelling type:	House, Mid-Terrace
Date of assessment:	22/10/2024
Produced by:	Tracey Walsh
Total floor area:	111.4 m²
DRRN:	

This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance Certificate will be created for the property. This will include more detailed information about the energy performance of the completed property.

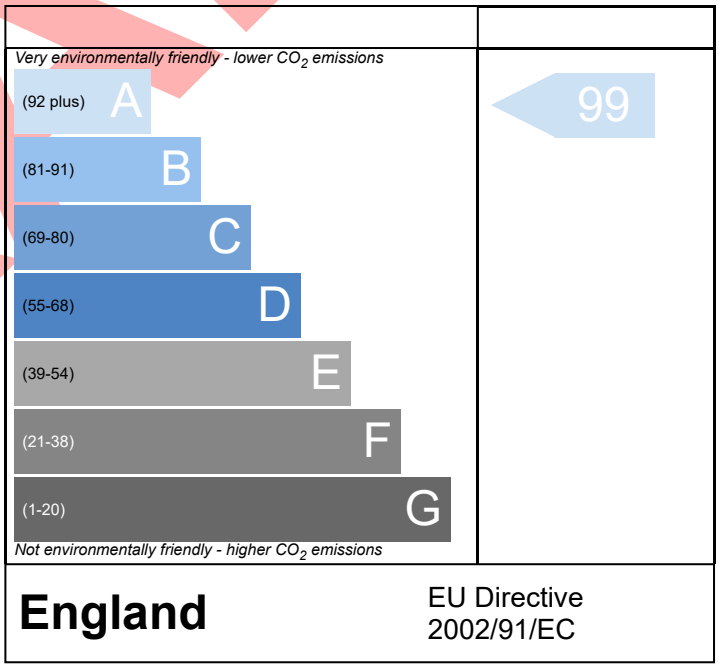
The energy performance has been assessed using the Government approved SAP 10 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO2) emissions.

Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

Environmental Impact (CO_2) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO_2) emissions. The higher the rating the less impact it has on the environment.

Summary for Input Data

Property Reference	Boningale Manor	**Issued on Date**	22/10/2024
Assessment Reference	Mid Barn	**Prop Type Ref**	Boningale Manor
Property			

SAP Rating	91 B	**DER**	0.84	**TER**	
Environmental	99 A	**% DER < TER**			N/A
CO_2 Emissions (t/year)	0.02	**DFEE**	55.39	**TFEE**	
Compliance Check	See BREL	**% DFEE < TFEE**			
% DPER < TPER		**DPER**	22.40	**TPER**	

Assessor Details	Miss Tracey Walsh	**Assessor ID**	E169-0001
Client			

SUMMARY FOR INPUT DATA FOR: Conversion (As Designed)

Orientation	South	
Property Tenture	ND	
Transaction Type	6	
Terrain Type	Suburban	
1.0 Property Type	House, Mid-Terrace	
2.0 Number of Storeys	2	
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	69.48	kJ/m²K
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
Ground floor:	16.60 m	55.70 m²	2.50 m
1st Storey:	16.60 m	55.70 m²	2.60 m

8.0 Living Area 18.90 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 Solid	Solid Wall	Solid wall : dense plaster, insulation, any outside structure	0.18	17.00	77.90	67.50	0.00	None	10.40	Enter Gross Area

9.1 Party Walls

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Area (m²)	Shelter Res	Shelter
Party Wall 1	Solid Wall	Other	0.00	0.00	71.80		None

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	External Slope Roof	Plasterboard, insulated slope	0.15	9.00	52.10	51.70	None	0.00	Enter Gross Area	0.40

11.0 Heat Loss Floors

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
GF Existing	Ground Floor - Solid	Lowest occupied	Slab on ground, screed over insulation	0.18	None	0.00	110.00	55.70

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Glazing	Manufacturer	Window	Double Low-E Soft 0.05			0.63		0.70	1.40
RL	Manufacturer	Roof Window	Double Low-E Soft 0.05			0.63		0.70	2.20
HG Door	Manufacturer	Half Glazed Door	Double Low-E Soft 0.05			0.63		0.70	1.40

13.0 Openings

Summary for Input Data

elmhurst energy

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
South Glazing	Glazing	External Solid	South	8.60	
North	Glazing	External Solid	North	1.80	
North RL	RL	Pitched	North	0.40	45

14.0 Conservatory	None	
15.0 Draught Proofing	100	%
16.0 Draught Lobby	No	
17.0 Thermal Bridging	Default	
Y-value	0.20	W/m²K
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	4	
Number of passive vents	0	
Number of flueless gas fires	0	
21.0 Fixed Cooling System	No	
22.0 Pressure Testing	No	
Test Method	Blower Door	
22.0 Lighting		
No Fixed Lighting	No	

Name	Efficacy	Power	Capacity	Count
Lighting 1	85.00	5.00	425.00	11

24.0 Main Heating 1	SAP table	
Percentage of Heat	100.00	%
Fuel Type	Electricity	
SAP Code	211	
In Winter	319.70	
In Summer	224.40	
Controls SAP Code	2204	
Is MHS Pumped	Pump in heated space	
Heating Pump Age	2013 or later	
Heat Emitter	Radiators	
Flow Temperature	Enter value	
Flow Temperature Value	35.00	
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	

Summary for Input Data

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
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
Shower	Combi boiler or unvented hot water system	11.00		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	150.00	L
Loss	1.05	kWh/day
Pipes insulation	Fully insulated primary pipework	
In Airing Cupboard	No	
31.0 Thermal Store	None	
32.0 Photovoltaic Unit	One Dwelling	
Export Capable Meter?	Yes	
Connected To Dwelling	Yes	
Diverter	No	
Battery Capacity [kWh]	0.00	

PV Cells kWp	Orientation	Elevation	Overshading	FGHRS	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
4.00	South	45°	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	£59	A 92	A 99
			0	0
			0	0