

Predicted Energy Assessment



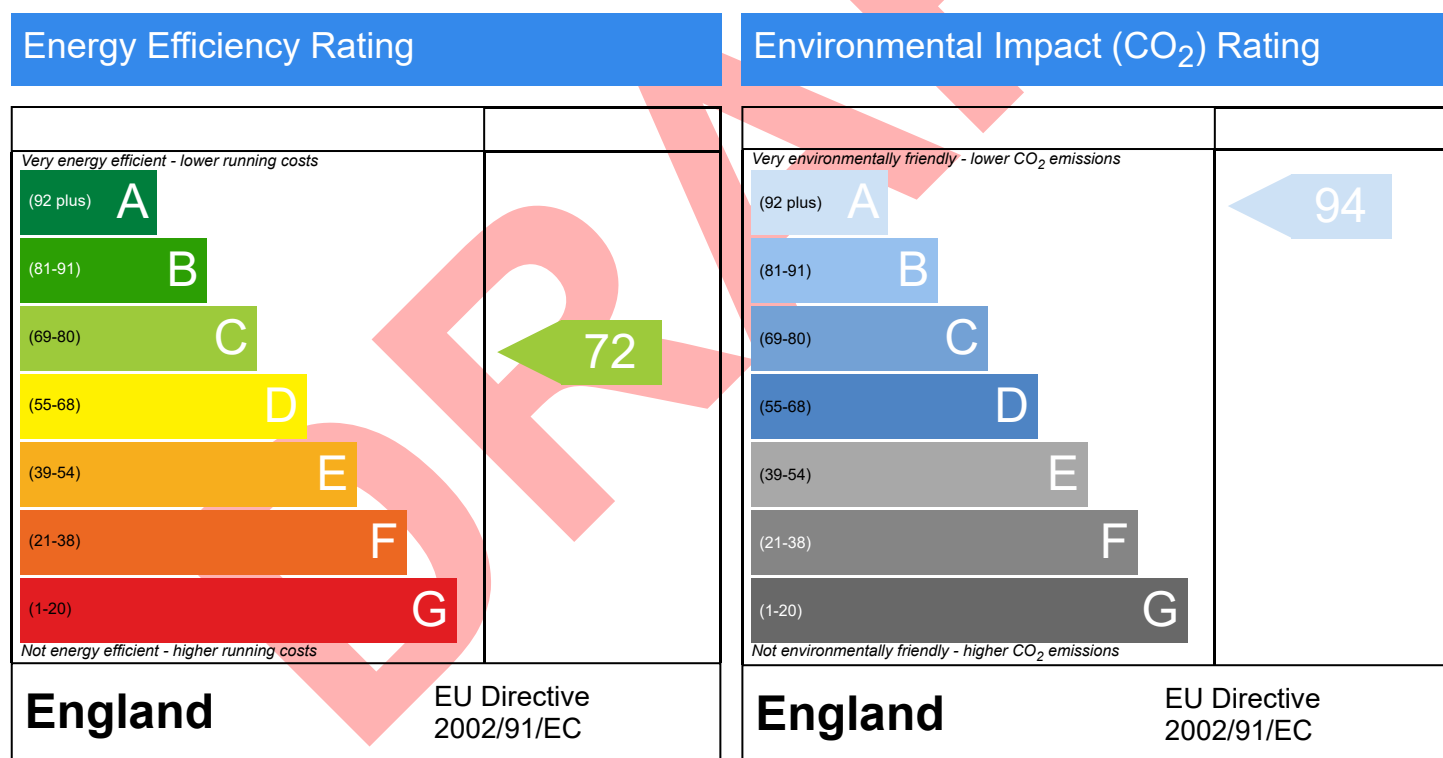
23a Hitchin Street, Baldock, Hertfordshire, SG7 6AQ

Dwelling type:
Date of assessment:
Produced by:
Total floor area:
DRRN:

Flat, Semi-Detached
10/06/2025
Oliver Summerfield
39.8 m²

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.



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.

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating the less impact it has on the environment.

Summary for Input Data

Property Reference	Flat 2	Issued on Date	10/06/2025
Assessment Reference	Conversion V1 Adj	Prop Type Ref	
Property	23a Hitchin Street, Baldock, Hertfordshire, SG7 6AQ		

SAP Rating	72 C	DER	9.25	TER	
Environmental	94 A	% DER < TER			N/A
CO ₂ Emissions (t/year)	0.35	DFEE	82.45	TFEE	
Compliance Check	N/A	% DFEE < TFEE			
% DPER < TPER		DPER	96.90	TPER	

Assessor Details	Mr. Oliver Summerfield	Assessor ID	BD24-0001
Client	Pickle Planning, Stuart Judd		

SUMMARY FOR INPUT DATA FOR: Conversion (As Designed)

Orientation	Northwest	
Property Tenture	ND	
Transaction Type	6	
Terrain Type	Suburban	
1.0 Property Type	Flat, Semi-Detached	
Position of Flat	Top-floor flat	
Which Floor	2	
2.0 Number of Storeys	2	
3.0 Date Built	2025	
4.0 Sheltered Sides	2	
5.0 Sunlight/Shade	Average or unknown	
6.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	91.49	kJ/m²K
7.0 Electricity Tariff	Standard	
Smart electricity meter fitted	No	
Smart gas meter fitted	No	

7.0 Measurements		Heat Loss Perimeter	Internal Floor Area	Average Storey Height
	Ground floor:	7.60 m	3.12 m ²	2.92 m
	1st Storey:	27.00 m	36.68 m ²	2.98 m

8.0 Living Area	18.23	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
Upgraded Existing Wall	Timber Frame	Timber framed wall (one layer of plasterboard)	0.30	9.00	55.21	50.54	0.00	None	4.67	Enter Gross Area

Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Area (m ²)	Shelter Res	Shelter
Party Wall	Solid Wall	Single plasterboard on dabs on both sides, dense blocks, cavity or cavity fill	0.00	70.00	17.07		None

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
Stud Wall	Plasterboard on timber frame	9.00	53.76

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
Existing Sloped Roof	External Slope Roof	Plasterboard, insulated slope	0.14	9.00	42.79	40.53	None	0.00	Enter Gross Area	2.26
New Sloped Roof	External Slope Roof	Plasterboard, insulated slope	0.15	9.00	4.72	4.72	None	0.00	Enter Gross Area	0.00

11.1 Party Floors

Summary for Input Data



Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Party Floor	+1	Timber I-joists, carpeted	20.00	36.68

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 0.1			0.63		0.70	1.40
Solid Door	Manufacturer	Solid Door				0.00			1.40
Rooflight	Manufacturer	Roof Light	Double Low-E Soft 0.1			0.63		0.70	1.70

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
LSW	Glazing	Upgraded Existing Wall	North East	2.99	
FGD	Glazing	Upgraded Existing Wall	North West	1.68	
LSR	Rooflight	Existing Sloped Roof	North East	2.26	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

2

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	80.00	5.00	400.00	20

24.0 Main Heating 1

Database

Percentage of Heat

100.00

 %

Database Ref. No.

104569

Fuel Type

Electricity

In Winter

254.79

In Summer

175.90

Model Name

Ecodan 5.0 kW

Manufacturer

Mitsubishi Electric Europe B.V.

System Type

Heat Pump

Controls SAP Code

2210

Is MHS Pumped

Pump in heated space

Heating Pump Age

2013 or later

Heat Emitter

Radiators

Summary for Input Data

Flow Temperature

Flow Temperature Value

25.0 Main Heating 2

26.0 Heat Networks

27.0 Secondary Heating

28.0 Water Heating

Water Heating

SAP Code

Flue Gas Heat Recovery System

Waste Water Heat Recovery Instantaneous System 1

Waste Water Heat Recovery Instantaneous System 2

Waste Water Heat Recovery Storage System

Solar Panel

Water use <= 125 litres/person/day

Cold Water Source

Bath Count

Immersion Only Heating Hot Water

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
Bathroom	Combi boiler or unvented hot water system	8.00		No	

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder

Cylinder Stat

Cylinder In Heated Space

Independent Time Control

Insulation Type

Cylinder Volume L

Loss kWh/day

Pipes insulation

In Airing Cupboard

31.0 Thermal Store

34.0 Small-scale Hydro

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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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
		0	0
		0	0
		0	0