

Predicted Energy Assessment



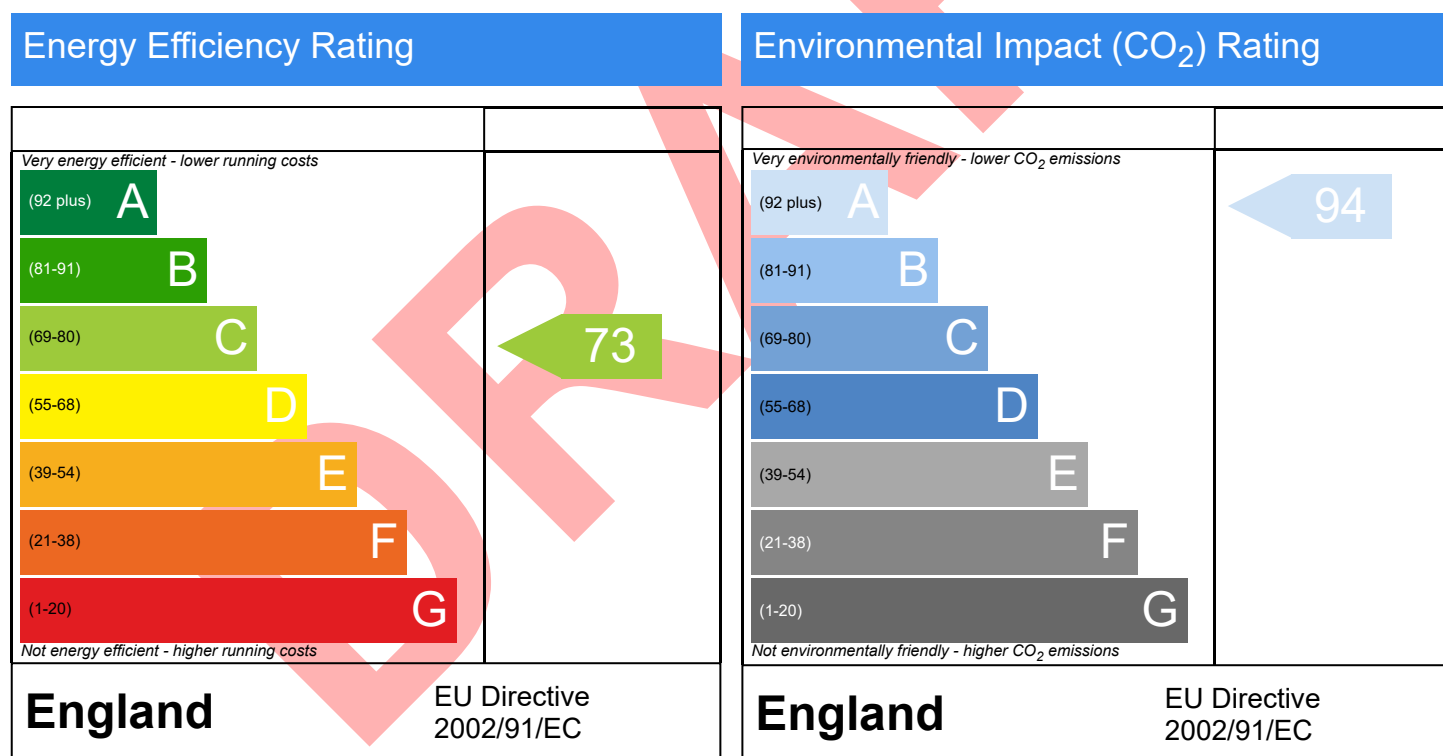
23a Hitchin Street, Baldock, Hertfordshire, SG7 6AQ

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

Flat, Semi-Detached
10/06/2025
Oliver Summerfield
36.68 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 1	Issued on Date	10/06/2025
Assessment Reference	Conversion V1 Adj	Prop Type Ref	
Property	23a Hitchin Street, Baldock, Hertfordshire, SG7 6AQ		

SAP Rating	73 C	DER	9.49	TER	
Environmental	94 A	% DER < TER			N/A
CO ₂ Emissions (t/year)	0.33	DFEE	87.60	TFEE	
Compliance Check	N/A	% DFEE < TFEE			
% DPER < TPER		DPER	99.50	TPER	

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

SUMMARY FOR INPUT DATA FOR: Conversion (As Designed)

Orientation	Northeast
Property Tenure	ND
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	Flat, Semi-Detached
Position of Flat	Ground-floor flat
Which Floor	1
2.0 Number of Storeys	1
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	224.26 kJ/m ² K
7.0 Electricity Tariff	Standard
Smart electricity meter fitted	No
Smart gas meter fitted	No

7.0 Measurements	Ground floor:	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
		27.00 m	36.68 m ²	2.25 m

8.0 Living Area	18.46 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
	Existing Render Wall	Timber Frame	Timber framed wall (one layer of plasterboard)	0.30	9.00	24.52	19.03	0.00	None	5.49	Enter Gross Area

9.1 Party Walls	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	36.22		None

9.2 Internal Walls	Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
	Stud Wall	Plasterboard on timber frame	9.00	42.68

10.1 Party Ceilings	Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
	Party Ceiling	Timber I-joists, carpeted	20.00	36.68

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)
	Existing GF	Ground Floor - Solid	Lowest occupied	Slab on ground, screed over insulation	0.64	None	0.00	110.00	36.68

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)
Glazing Solid Door	Manufacturer Manufacturer	Window Solid Door	Double Low-E Soft 0.1			0.63 0.00		0.70	1.40 1.40
13.0 Openings									
Name	Opening Type	Location	Orientation			Area (m²)	Pitch		
FW	Glazing	Existing Render Wall	North East			1.23			
FGD	Glazing	Existing Render Wall	North East			4.26			
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			257.80						
In Summer			176.70						
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						
Flow Temperature			Enter value						
Flow Temperature Value			45.00						
25.0 Main Heating 2			None						

Summary for Input Data

26.0 Heat Networks

27.0 Secondary Heating

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	0
Immersion Only Heating Hot Water	No

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	Yes	
Cylinder In Heated Space	Yes	
Independent Time Control	Yes	
Insulation Type	Measured Loss	
Cylinder Volume	150.00	L
Loss	1.88	kWh/day
Pipes insulation	Fully insulated primary pipework	
In Airing Cupboard	No	

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