

PREDICTED ENERGY ASSESSMENT

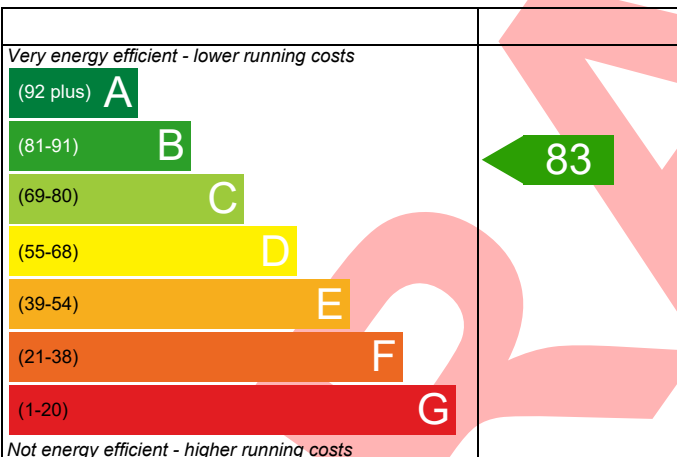
Plot 489, 2 Bed, 1B

Dwelling type: Flat, Detached
 Date of assessment: 07/01/2021
 Produced by: Mitchell Bennellick
 Total floor area: 70.29 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 SAP2012 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.

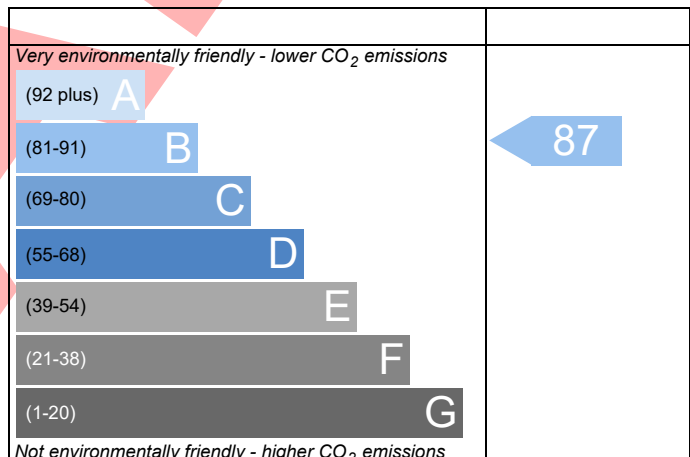
Energy Efficiency Rating



England EU Directive 2002/91/EC

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 (CO₂) Rating



England EU Directive 2002/91/EC

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.

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BUILDING REGULATION COMPLIANCE

Calculation Type: New Build (As Designed)

Property Reference	4907-0012-4686-489		Issued on Date	07/01/2021	
Assessment Reference	489	Prop Type Ref	2BF - Second Floor		
Property	Plot 489, 2 Bed, 1B				
SAP Rating	83 B	DER	18.00	TER	18.28
Environmental	87 B	% DER<TER	1.54		
CO ₂ Emissions (t/year)	1.07	DFEE	47.89	TREE	47.91
General Requirements Compliance	Pass	% DFEE<TFEE	0.03		
Assessor Details	Mr. Mitchell Bennellick, Mitchell Bennellick, Tel: 01884 242050, mitchell.bennellick@aessouthern.co.uk			Assessor ID	P635-0001
Client	Crest Nicholson, CN				

SUMMARY FOR INPUT DATA FOR New Build (As Designed)

Criterion 1 – Achieving the TER and TFE rate

1a TER and DER

Fuel for main heating	Mains gas		
Fuel factor	1.00 (mains gas)		
Target Carbon Dioxide Emission Rate (TER)	18.28	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	18.00	kgCO ₂ /m ²	Pass
	-0.28 (-1.5%)	kgCO ₂ /m ²	

1b TFE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.91	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	47.89	kWh/m ² /yr	
	0.0 (0.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.25 (max. 0.30)	0.28 (max. 0.70)	Pass
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	Pass
Openings	1.39 (max. 2.00)	1.40 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	4.00 (design value)	m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0	m ³ /(h.m ²) @ 50 Pa	Pass

Limiting System Efficiencies

4 Heating efficiency

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Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Potterton Assure 30 Combi Combi boiler Efficiency: 89.0% SEDBUK2009 Minimum: 88.0%	Pass
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	No cylinder	
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6 Controls

Space heating controls	Time and temperature zone control	Pass
Hot water controls	No cylinder	
Boiler interlock	Yes	Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
Minimum	75	%	Pass

8 Mechanical ventilation

Continuous extract system		
Specific fan power	0.16	
Maximum	0.7	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (South East England)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North	2.05 m ² , No overhang	
Windows facing East	1.51 m ² , No overhang	
Windows facing South	8.64 m ² , No overhang	
Air change rate	6.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	4.00 (design value)	m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0	m ³ /(h.m ²) @ 50 Pa	Pass

10 Key features

Roof U-value	0.11	W/m ² K
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RECOMMENDATIONS

	Typical cost	Typical savings per year	Energy efficiency	Environmental impact	Result
Low energy lights			0	0	Already installed
Solar water heating			0	0	Not applicable
Photovoltaic			0	0	Not applicable
Wind turbine			0	0	Not applicable
Totals	£0	£0	B 83	B 87	

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