#### PREDICTED ENERGY ASSESSMENT



Plot 159, 2 Bed, 1B, 0ES, Honiton, Devon Dwelling type: Flat, End-Terrace

Date of assessment: 05/03/2021

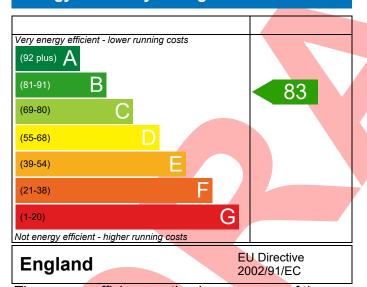
Produced by: Mitchell Bennellick

Total floor area: 57.41 m<sup>2</sup>

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.

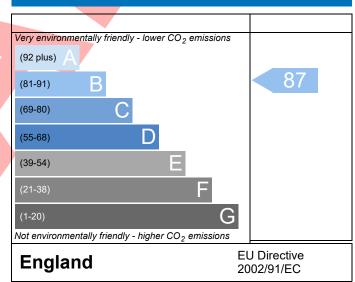
The energy performance has been assessed using the Government approved SAP2012 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO<sub>2</sub>) emissions.

### **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<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) 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 4907-0023-3730-	159			Issued on Date	05/03/2021	
Assessment Plot 159			Prop Type Ref	Block F - 2F Apartme	ent	
Reference						
Property Plot 159, 2 Bed, 1	LB, OES, Honiton	, Devon				
SAP Rating	83	B DER	18.70	TER	19.95	
Environmental	87	B % DER <ter< td=""><td></td><td>6.26</td><td></td></ter<>		6.26		
CO₂ Emissions (t/year)		O DFEE	45.97	TFEE	50.88	
General Requirements Compliance	Pas	% DFEE <tf< td=""><td>EE</td><td>9.65</td><td></td></tf<>	EE	9.65		
Assessor Details Miss Lindsey Dean, Li		l: 01884 242050,		Assessor ID	P635-0001	
Lindsey.dean@aessc	.co.uk					
Client Baker Estates						
SUMARY FOR INPUT DATA FOR New Build	d (As Designed)					
Criterion $f 1$ – Achieving the TER and TFEE $f r$	rate					
1a TER and DER						
Fuel for main heating	M	ains gas				
Fuel factor	1.0	00 (mains gas)				
Target Carbon Dioxide Emission Rate (7	ΓER) 19	.95		kgCO <sub>2</sub> /m <sup>2</sup>		
Dwelling Carbon Dioxide Emission Rate	e (DER) 18	3.70		kgCO <sub>2</sub> /m <sup>2</sup>	Pass	
	-1	.25 (-6.3%)		kgCO <sub>2</sub> /m <sup>2</sup>		
1b TFEE and DFEE						
Target Fabric Energy Efficiency (TFEE)		0.88	kWh/m²/yr			
Dwelling Fabric Energy Efficiency (DFEE		9 (-9.6%)		kWh/m²/yr kWh/m²/yr		
Criterion 2 – Limits on design flexibility	-4.	.9 (-9.6%)		KVVII/III-/yr	Pass	
Limiting Fabric Standards						
2 Fabric U-values						
Z FADRIC O-VAIUES  Element	Average		Highoot			
External wall	Average 0.22 (max. 0.	20)	<b>Highest</b> 0.32 (max. 0.7	0)	Pass	
Party wall	0.22 (max. 0.		0.52 (IIIax. 0.7	0)	Pass	
Roof	0.13 (max. 0.		0.24 (max. 0.3	5)	Pass	
Openings	1.33 (max. 2.	· · · · · · · · · · · · · · · · · · ·				
2a Thermal bridging	2.00 (1110/11 21	/	(	-,	Pass	
	near thermal tra	insmittances for eac	h iunction			
Thermal bridging calculated from li			,			
Thermal bridging calculated from ling  3 Air permeability						
3 Air permeability	5.0	00 (design value)		m³/(h.m²) @ 50 P	а	
3 Air permeability  Air permeability at 50 pascals		00 (design value)		m³/(h.m²) @ 50 P m³/(h.m²) @ 50 P		
3 Air permeability	5.0			m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50 P m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50 P		

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Regs Region: England Elmhurst Energy Systems SAP2012 Calculator (Design System) version 4.14r16

# **BUILDING REGULATION COMPLIANCE Calculation Type: New Build (As Designed)**



Main heating system	Boiler system with radiators or underfloor - Mains gas	Pass		
	Data from database			
	Ideal LOGIC COMBI ESP1 35			
	Combi boiler			
	Efficiency: 89.6% SEDBUK2009 Minimum: 88.0%			
Secondary heating system	None			
Secondary heating system	None			
5 Cylinder insulation				
Hot water storage	No cylinder			
<u>6 Controls</u>				
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				
Not applicable				
Criterion 3 – Limiting the effects of heat gains in sur	nmer			
9 Summertime temperature				
Overheating risk (South West England)	Not significant	Pass		
Based on:	THOU SIGNIFICANT	1 433		
Overshading	Average			
Windows facing South East	2.03 m², No overhang			
Windows facing North West	3.26 m², No overhang			
Air change rate	6.00 ach			
Blinds/curtains	None			
Criterion 4 – Building performance consistent with I	DER and DFEE rate			
Party Walls				
Туре	U-value			
Filled Cavity with Edge Sealing	0.00 W/m²K	Pass		
Air permeability and pressure testing				
3 Air permeability				
Air permeability at 50 pascals	5.00 (design value) m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50 Pa			
Maximum	10.0 m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50 Pa	Pass		
10 Key features				
Party wall U-value	0.00 W/m²K			
Roof U-value	0.11 W/m²K			
Roof U-value	0.11 W/m²K			
Door U-value	0.83 W/m²K			
Door o value	0.00 W/III 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	f0	fO	B 83	B 87	



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