#### PREDICTED ENERGY ASSESSMENT



Eastergate, Dwelling type: House, Mid-Terrace

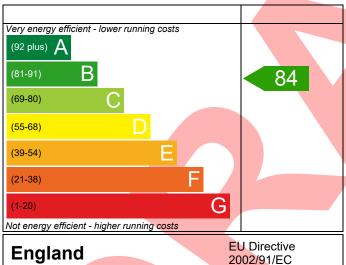
Hampshire Homes Date of assessment: 24/06/2021
Produced by: William Vincent

Total floor area: 85.46 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.

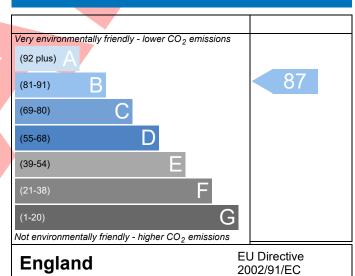
The energy performance has been assessed using the Government approved SAP2012 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO<sub>2</sub>) emissions.

### **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.

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.



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



Property Reference	Plot 019 3BB Mid-T				Issued on Date	24/06/2021	
	001 Prop Type Ref					24/00/2021	
Reference	701		110	op Type Ker			
Property	Eastergate, Hampshire H	omes					
SAP Rating		84 B	DER	16.73	TER	17.44	
Environmental		87 B	% DER <ter< td=""><th></th><th>4.10</th><td></td></ter<>		4.10		
CO₂ Emissions (t/year)		1.19	DFEE	43.94	TFEE	48.20	
General Requirements C	ompliance	Pass	% DFEE <tfee< td=""><th></th><th>8.83</th><td></td></tfee<>		8.83		
	William Vincent, William am.Vincent@ee-ltd.co.u		)1582544250,		Assessor ID	T759-0001	
Client							
SUMARY FOR INPUT DAT	A FOR New Build (As De	signed)					
Criterion 1 – Achieving th	e TER and TFEE rate						
1a TER and DER							
Fuel for main heating							
Fuel factor		1.00 (ma	ins gas)				
Target Carbon Dioxide	Emission Rate (TER)	17.44					
Dwelling Carbon Dioxi	16.73 kgCO <sub>2</sub> /m <sup>2</sup>				Pass		
		-0.71 (-4	.1%)		kgCO <sub>2</sub> /m <sup>2</sup>		
1b TFEE and DFEE							
Target Fabric Energy Efficiency (TFEE) 48.20 kWh/r					kWh/m²/yr		
Dwelling Fabric Energy Efficiency (DFEE)			43.94 kWh/m²/yr				
		-4.3 (-8.9	9%)		kWh/m²/yr	Pass	
Criterion 2 – Limits on de	sign flexibility						
<b>Limiting Fabric Standa</b>	rds						
2 Fabric U-values							
Element	Aver	age	Hi	ghest			
External wall	0.22	(max. 0.30)	0.	22 (max. 0.70	)	Pass	
Party wall	0.00	0.00 (max. 0.20)				Pass	
Floor	0.13	0.13 (max. 0.25) 0.13 (max. 0.25)		13 (max. 0.70	)	Pass	
Roof	0.11	0.11 (max. 0.20)		11 (max. 0.35	Pass		
Openings	1,47 (max. 2.00) 1.50 (ma			50 (max. 3.30	)	Pass	
2a Thermal bridging							
Thermal bridging c	alculated from linear the	ermal transmitt	ances for each jur	nction			
3 Air permeability							
Air permeability at 50 pascals		5.00 (design value)			m³/(h.m²) @ 50 Pa		
Maximum		10.0				a Pass	
Limiting Contains Efficie							
<b>Limiting System Efficie</b>	encies						

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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	
	Notice	
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	100 %	
fittings		
Minimum	75 %	Pass
8 Mechanical ventilation		
Not applicable		
Criterion 3 – Limiting the effects of heat gains in sur	mmer	
9 Summertime temperature		
Overheating risk (Thames Valley)	Slight	Pass
Based on:		
Overshading	Average	
Windows facing East	8.15 m², No overhang	
Windows facing West	4.32 m <sup>2</sup> , No overhang	
Air change rate	4.00 ach	
Blinds/curtains	Dark-coloured curtain or roller blind, closed 100% of daylig	ght
	hours	
Criterion 4 – Building performance consistent with	DER and DFEE rate	
Party Walls		
Туре	U-value	
Filled Cavity with Edge Sealing	0.00 W/m <sup>2</sup> K	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 P	a
Maximum	10.0 m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50 P	a Pass
10 Key features		
Party wall U-value	0.00 W/m²K	
Roof U-value	0.11 W/m²K	

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

### **RECOMMENDATIONS**



	Typical cost	Typical savings per year	Energy efficiency	Environmental impact	Result
Low energy lights			0	0	Already installed
Solar water heating	£4,000 - £6,000	£30	B 86	B 89	Recommended
Photovoltaic	£3,500 - £5,500	£341	A 96	A 98	Recommended
Wind turbine			0	0	Not applicable
Totals	£7,500 - £11,500	£371	A 96	A 98	



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