PREDICTED ENERGY ASSESSMENT



Plot 051, 2 Bed, Dwelling type: House, Semi-Detached K. WC. B Date of assessment: 20/10/2022

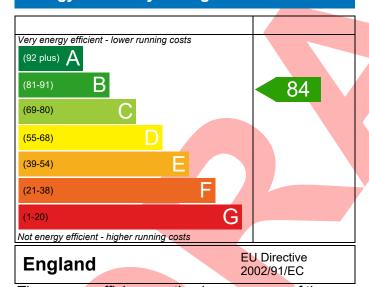
Date of assessment: 20/10/2022 Produced by: Silvio Junges

Total floor area: 79 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.

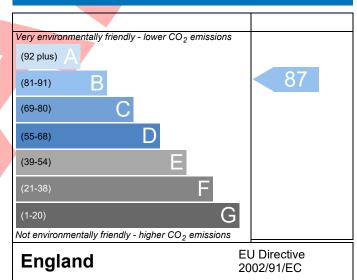
The energy performance has been assessed using the Government approved SAP2012 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO₂) emissions.

Energy Efficiency Rating



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



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.

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)



Assessment Reference Property Plot 051, 2 Bed, K, WC, B SAP Rating Environmental 87 B SAP Rations (t/year) Semissions (t/year) General Requirements Compliance Pass Assessor Details Mr. Silvio Junges, Silvio Junges, Tel: 01884 242050, Silvio.junges@aessc.co.uk Client SUMARY FOR INPUT DATA FOR New Build (As Designed) Criterion 1 – Achieving the TER and TFEE rate	Property Reference	4907-0023-5953-05	1				Issued on Date	20/10/2022
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SAP Rating	Reference							
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Column C	SAP Rating			84 B	DER	17.09	TER	18.73
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Silvio.junges@aessc.co.uk SUMARY FOR INPUT DATA FOR New Build (As Designed) Criterion 1 - Achieving the TER and TFEE rate 1a TER and DER Fuel for main heating Fuel factor Target Carbon Dioxide Emission Rate (DER) Dwelling Carbon Dioxide Emission Rate (DER) Target Fabric Energy Efficiency (TFEE) Dwelling Fabric Energy Efficiency (DFEE) Target Fabric Energy Efficiency (DFEE) Dwelling Fabric Energy Efficiency (DFEE) Limiting Fabric Standards 2 Fabric U-values Element Average Highest External wall 0.02 (max. 0.30) 0.22 (max. 0.70) Pass Party wall 0.00 (max. 0.20) - Pass Floor 0.11 (max. 0.25) 0.11 (max. 0.70) Pass Openings 1.19 (max. 0.20) 1.20 (max. 3.30) Pass 2 Taremal bridging Thermal bridging calculated from linear thermal transmittances for each junction 3 Air permeability Air permeability at 50 pascals Maximum Mains gas	General Requiremen	nts Compliance		Pass	% DFEE <tfee< td=""><td></td><td>15.85</td><td></td></tfee<>		15.85	
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4 Heating efficiency

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



Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Ideal LOGIC COMBI ESP1 35	Pass
	Combi boiler Efficiency: 89.6% SEDBUK2009	
	Minimum: 88.0%	
Secondary heating system	None	
5 Cylinder insulation		
Hot water storage	No cylinder	
<u>6 Controls</u>		
Space heating controls	Programmer, room thermostat and TRVs	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		
Continuous extract system (decentralised)		
Specific fan power	0.1700 0.1800	
Maximum	0.7	Pass
Criterion 3 – Limiting the effects of heat gains in sur	nmer	
9 Summertime temperature		
Overheating risk (Southern England)	Slight	Pass
Based on:		
Overshading	Average	
Windows facing East	5.48 m ² , No overhang	
Windows facing West	6.42 m², No overhang	
Air change rate	4.00 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	5.01 (design value) m ³ /(h.m ²) @ 50	
Maximum	10.0 m ³ /(h.m ²) @ 50	Pa Pass
10 Key features		
Party wall U-value	0.00 W/m²K	
Roof U-value	0.11 W/m²K	
Floor U-value	0.11 W/m²K	
Door U-value	1.10	

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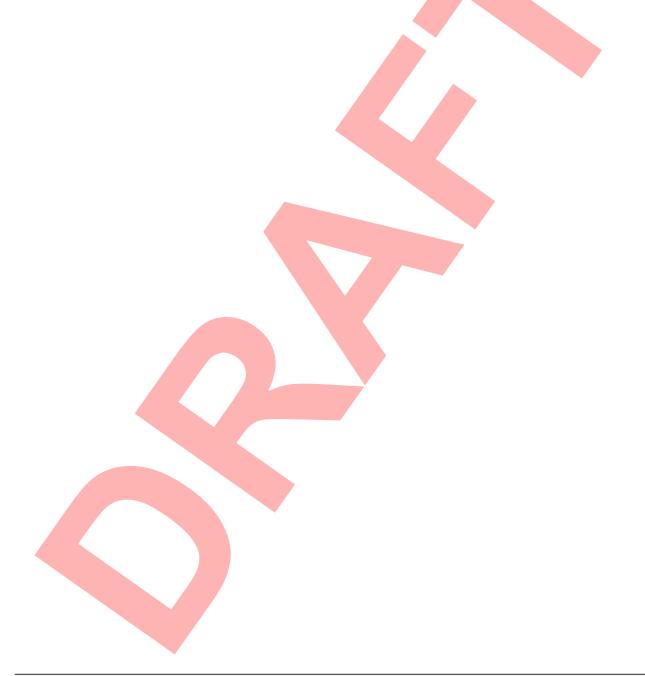


Regs Region: England Elmhurst Energy Systems SAP2012 Calculator (Design System) version 4.14r19

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	£26	B 85	B 89	Recommended
Photovoltaic	£3,500 - £5,500	£404	A 96	A 99	Recommended
Wind turbine			0	0	Not applicable
Totals	£7,500 - £11,500	£430	A 96	A 99	



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