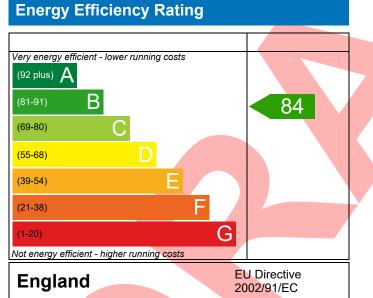
PREDICTED ENERGY ASSESSMENT



Plot 171, 4 Bed, K, WC, B Dwelling type: Date of assessment: Produced by: Total floor area: House, Semi-Detached 19/02/2024 Henry Knight 98 m²

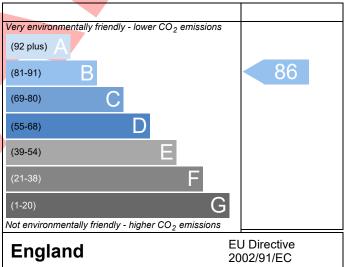
This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance 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 (CO_2) 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.

Environmental Impact (CO₂) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO_2) 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.



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

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



Environmental 86 B % DER 4.16 CO2 Emissions (t/year) 1.36 DFEE 45.43 TFEE 50.8 General Requirements Compliance Pass % DFEE 10.71 45.43 TFEE 10.71 Assessor Details Mr. Henry Knight, Henry Knight, Tel: 01173183565, Henry Knight, Zei: 011731836, Henry	Property Reference	4907-U528-4444-171				Issued on Date	19/02/2024		
Property Plot 171, 4 Bed, K, WC, B SAP Rating 84 B DER 16.81 TER 17.5 Environmental 86 B ½ DER 4.16 50.8 General Requirements Compliance Pass ½ DER 4.5.43 TER 10.71 Assessor Details Mr. Henry Knight, Henry Knight, Tel: 01173183565, Assessor ID U528-00 SUMARY FOR INPUT DATA FOR New Build (As Designed) 500 50		171 Prop Type Ref 4B HTR Semi (As)							
SAP Rating S4 B DER 16.81 TER 17.55 Environmental 86 B % DER <ter< td=""> 4.16 0.07 0.136 DFEE 45.43 TFEE 50.8 General Requirements Compliance Pass % DEE 45.43 TFEE 50.8 Assessor Details Mr. Henry Knight, Henry Knight, Tel: 01173183565, Henry Knight@asss.co.uk Assessor ID U528-00 Client Defet 45.43 TFEE 10.71 SUMARY FOR INPUT DATA FOR New Build (As Designed) Triterion 1 - Achieving the TER and TFEE rate 40.60 10 Target Carbon Dioxide Emission Rate (TER) 17.54 kgCO2/m² Part Fuel factor 1.00 (mains gas) -0.73 (-4.2%) kgCO2/m² Part Target Fabric Energy Efficiency (TFEE) 50.88 KWh/m²/yr kgCO2/m² Part Dwelling Fabric Energy Efficiency (TFEE) 50.88 KWh/m²/yr Part S5.1-10.8%) KWh/m²/yr Part Criterion 2 - Limits on design flexibility Use floar 0.20) - - Party wall 0.02 (max. 0.20) - Pa</ter<>									
Environmental 86 B % DER <ter< th=""> 4.16 C02_Emissions (L/year) 1.36 DFE 45.43 TFEE 50.8 General Requirements Compliance Pass % DFEC<tfee< td=""> 10.71 45.43 TFEE 50.8 Assessor Details Mr. Henry Knight, Henry Knight, Tel: 01173183565, Assessor ID U528-00 Client Henry, Knight@aessc.co.uk Henry, Knight@aessc.co.uk Assessor ID U528-00 Client Image: Compliance Image: Compliance</tfee<></ter<>	Property	Plot 171, 4 Bed, K, WC	с, в						
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General Requirements Compliance Pass % DFEE 10.71 Assessor Details Mr. Henry Knight, Henry Knight, Tel: 01173183565, Assessor ID U528-00 Client UMARY FOR INPUT DATA FOR New Build (As Designed) Virterion 1 - Achieving the TER and TFEE rate Assessor ID U528-00 a TER and DER Fuel for main heating Mains gas Fuel for 1.00 (mains gas) Fuel factor Fuel fa			86 B	% DER <ter< td=""><td></td><td></td><td></td></ter<>					
Assessor Details Mr. Henry Knight, Henry Knight, Tel: 01173183565, Henry.knight@aessc.co.uk Assessor ID U528-00 Client UMARY FOR INPUT DATA FOR New Build (As Designed) Image: Construction of the constructio	· · · ·		1.36		45.43		50.88		
Henry.knight@aessc.co.uk Client UMARY FOR INPUT DATA FOR New Build (As Designed) riterion 1 - Achieving the TER and TFEE rate a TER and DER Fuel for main heating Main's gas Fuel for comin heating I.00 (mains gas) Target Carbon Dioxide Emission Rate (TER) I.7.54 Dwelling Carbon Dioxide Emission Rate (DER) I6.81 -0.73 (-4.2%) kgC0_2/m² b TEE and DEE	General Requirements	Compliance	Pass	% DFEE <tfee< td=""><td></td><td>10.71</td><td></td></tfee<>		10.71			
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4 Heating efficiency	Limiting System Effic	liencies							

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



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

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



Main heating system	Boiler system with radiators or underfloor - Mains gas Pass			
	Data from database Worcester Greenstar 32CDi Compact ErP Combi boiler Efficiency: 89.8% SEDBUK2009 Minimum: 88.0%			
Secondary heating system				
<u>5 Cylinder insulation</u>				
	No cylinder			
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		
<u>7 Low energy lights</u>				
Percentage of fixed lights with low-energy fittings	100 %			
Minimum	75 %	Pass		
8 Mechanical ventilation				
Not applicable				
	ummer			
riterion 3 – Limiting the effects of heat gains in su	ummer			
riterion 3 – Limiting the effects of heat gains in su Summertime temperature		Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England)	ummer Not significant	Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England)		Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading	Not significant Average	Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) ased on:	Not significant Average 6.56 m ² , No overhang 3.22 m ² , No overhang	Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North	Not significant Average 6.56 m², No overhang	Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South	Not significant Average 6.56 m ² , No overhang 3.22 m ² , No overhang	Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West	Not significant Average 6.56 m ² , No overhang 3.22 m ² , No overhang 0.60 m ² , No overhang	Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None	Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None	Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None	Pass		
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls	Not significant Average 6.56 m ² , No overhang 3.22 m ² , No overhang 0.60 m ² , No overhang 3.00 ach None DER and DFEE rate			
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value			
riterion 3 – Limiting the effects of heat gains in su <u>Summertime temperature</u> Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value			
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value	Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value 0.00	 Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value 0.00 W/m²K	 Pass		
riterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) ased on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value 0.00 W/m²K	 Pass		
Friterion 3 – Limiting the effects of heat gains in su Summertime temperature Overheating risk (South West England) based on: Overshading Windows facing North Windows facing South Windows facing West Air change rate Blinds/curtains Friterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum 0 Key features	Not significant Average 6.56 m², No overhang 3.22 m², No overhang 0.60 m², No overhang 3.00 ach None DER and DFEE rate U-value 0.00 W/m²K 5.01 (design value) m³/(h.m²) @ 50 P 10.0 m³/(h.m²) @ 50 P	 Pass		

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



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	£63	B 85	B 88	Recommended
Photovoltaic	£3,500 - £5,500	£607	A 95	A 96	Recommended
Wind turbine			0	0	Not applicable
Totals	£7,500 - £11,500	£670	A 95	A 96	

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