PREDICTED ENERGY ASSESSMENT

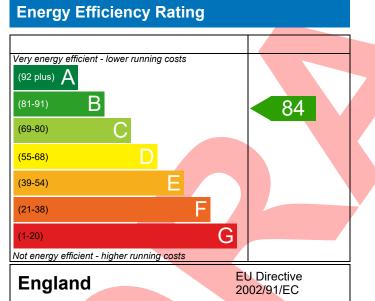


Plot 7, Land off Hawks Road, Welton, Lincoln, LN2 3BS Dwelling type: Date of assessment: Produced by: Total floor area:

House, Semi-Detached 19/07/2022 Jake Eaton 81.47 m²

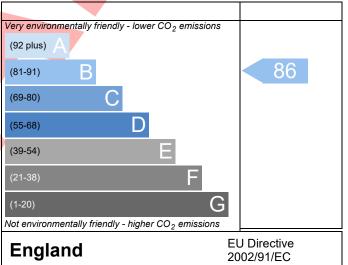
This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance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



Reference Property Piot 7, Land off Hawks Road, Welton, Lincoln, LN2 385 SAP Rating 84 B DER 18.03 Environmental 86 B % DERCTER 4.55 Cop, Emissions (L/year) 1.29 DFEE 46.59 TFEE Sceneral Requirements Compliance Pass % DEECTFEE 14.18 Assessor Details Mr. Jake Eaton, Tel: 01400283471, jake@acfatech.co.uk Assessor ID P711-0001 UMARY FOR INPUT DATA FOR New Build (As Designed) riterion 1 – Achieving the TER and TFEE rate a Target Carbon Dioxide Emission Rate (TER) 18.03 kgCO ₂ /m ² Pass Jwelling Carbon Dioxide Emission Rate (TER) 18.03 kgCO ₂ /m ² Pass kgCO ₂ /m ² Pass brefet and DFE 54.75 Wh/m ³ /yr D.08 (-4.6%) kgCO ₂ /m ² Pass brefet and DFE 54.75 kWh/m ³ /yr Pass v/m ³ /yr Pass chering Fabric Energy Efficiency (TFEE) 54.75 kWh/m ³ /yr Pass oxel (d. 6%) 0.19 (max. 0.70) Pass referion 2 - Limits on design flexibility 1.109 (max. 0.30) 0.19 (max. 0.70) Pass <t< th=""><th>Property Reference</th><th>LN2 3BS Plot 7</th><th></th><th></th><th></th><th>Issued on Date</th><th>19/07/2022</th></t<>	Property Reference	LN2 3BS Plot 7				Issued on Date	19/07/2022
Property Plot 7, Land off Hawks Road, Welton, Lincoln, LN2 3B5 SAP Rating 84 B DER 18.03 TER 18.89 Environmental 86 B % DERATER 4.55 4.55 CO2 Emissions (L/year) 1.29 DFEE 46.99 TFEE 54.75 Concerail Requirements Compliance Pass % DERECTFE 14.18 54.75 Assessor Dotalls Mr. Jake Eaton, Jake Eaton, Tel: 01400283471, Jake@aerfatch.co.uk Assessor ID P711-0001 Client Mr. Jake Eaton, Tel: 01400283471, Jake@aerfatch.co.uk Assessor ID P711-0001 UMARY FOR INPUT DATA FOR New Build (As Designed) Mains gas Free forman heating KgCO./m² Pass Fuel for main heating Mains gas Is0.33 KgCO./m² Pass Dwelling Carbon Dioxide Emission Rate (TER) Is8.99 KgCO./m² Pass DWELE S4.75 KWh/m³/yr Pass OBS (4.65%) KgCO./m² Pass Target Fabric Energy Efficiency (TFEE) S4.75 KWh/m³/yr Pass Dwelling Fabric Energy Efficiency (DFEE) <th>Assessment</th> <th>001</th> <th></th> <th>Pr</th> <th>op Type Ref</th> <th>Greenwich (Type B)</th> <th></th>	Assessment	001		Pr	op Type Ref	Greenwich (Type B)	
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Limiting System Efficiencies	Limiting System Effic	ciencies	·			- 	
4 Heating efficiency							

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)



71		
Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Vaillant ecoFIT sustain 835 VUW 356/6-3 (H-GB) Combi boiler Efficiency: 89.3% SEDBUK2009 Minimum: 88.0%	Pass
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 fittings	100 %	
Minimum	75 %	Pass
8 Mechanical ventilation		
Not applicable		
riterion 3 – Limiting the effects of heat gains in su	ummer	
Summertime temperature		
Overheating risk (East Pennines)	Slight	Pass
ased on:		_
Overshading	Average	
	6.91 m ² , No overhang	
Windows facing North		
Windows facing South	4.54 m^2 , No overhang	
Windows facing South Windows facing West	1.45 m ² , No overhang	
Windows facing South Windows facing West Air change rate	1.45 m ² , No overhang 2.50 ach	
Windows facing South Windows facing West	1.45 m ² , No overhang	
Windows facing South Windows facing West Air change rate Blinds/curtains	 1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours 	
Windows facing South Windows facing West Air change rate Blinds/curtains	 1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours 	
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with	 1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours 	
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls	 1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate 	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type	1.45 m ² , No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value	Pass
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	1.45 m ² , No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains Titerion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing	1.45 m ² , No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains Titerion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability	1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value 0.00 W/m²K	Pass
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	1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value 0.00 W/m²K 7.00 (design value) m³/(h.m²) @ 50 Pa	
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	1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value 0.00 W/m²K 7.00 (design value) m³/(h.m²) @ 50 Pa	
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 O Key features	1.45 m², No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value 0.00 W/m²K 7.00 (design value) m³/(h.m²) @ 50 Pa 10.0 m³/(h.m²) @ 50 Pa	

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