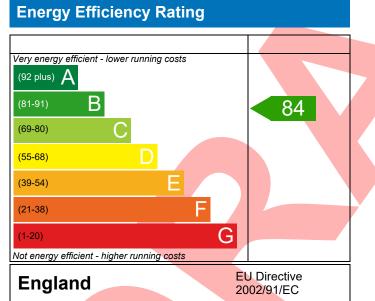
PREDICTED ENERGY ASSESSMENT



Plot S88, 3 Bed, K, WC, B, Mere, Wiltshire, BA12 Dwelling type: Date of assessment: Produced by: Total floor area: House, Semi-Detached 16/09/2021 Katrina Edgington 86.02 m²

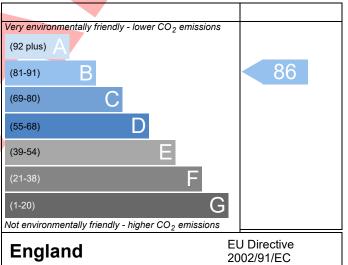
This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance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



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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)



SAP Rating 84 B DER 17.47 TER 18.00 Environmental 86 B % DER 7.47 TER 18.00 CQ: Emissions (f/year) 1.31 DFEE 46.51 TFEE 50.08 General Requirements Compliance Pass % DFEE 7.13 Assessor Details Ms. Katrina Edgington, Katrina Edgington, Tel: 01884 242 050, Katrina Edgington@aessc.co.uk Assessor ID P640-000 Katrina Edgington@aessc.co.uk CG Fry & Son Ltd. CG Fry & Son Son Son Context (Fry & Son	Property	Plot S88, 3 Bed, K,	WC <u>,</u> B, Me	re, Wiltsh	ire, BA12			
Environmental 86 B % DER <ter 2.97<br="">CO, Emissions (t/year) 1.31 DFEE 46.51 TFEE 50.08 General Requirements Compliance Pass % DFEK-TFEE 7.13 Assessor Details Ms. Katrina Edgington, Katrina Edgington, Tel: 01884 242 050, Assessor ID P640-000 Ms. Katrina Edgington@aessc.co.uk Client C G Fry & Son Ltd. UMARY FOR INPUT DATA FOR New Build (As Designed) Writerion 1 – Achieving the TER and TFEE rate a TER and DER Fuel for main heating 1.00 (mains gas) Target Carbon Dioxide Emission Rate (TER) 18.00 kgC0_/m² Dwelling Carbon Dioxide Emission Rate (TER) 17.47 Dwelling Carbon Dioxide Emission Rate (DER) 7.42 b TFEE and DFEE Target Fabric Energy Efficiency (TFEE) 50.08 kWh/m²/yr -0.53 (-2.9%) kgC0_/m² b TFEE and DFEE Target Fabric Energy Efficiency (DFEE) 46.51 kWh/m²/yr -3.6 (-7.2%) kWh/m²/yr -3.6 (-7.2%) 0.21 (max. 0.70) Pass kWh/m²/yr Pass Floor 0.14 (max. 0.20) - Pass Floor 0.14 (max. 0.20) 0.21 (max. 0.70) Pass Openings 1.40 (max. 0.20) 1.40 (max. 0.35) Pass Openings 1.40 (max. 0.20) 1.40 (max. 0.35) Pass 2 Thermal bridging calculated from linear thermal transmittances for each junction 3 Air permeability 150 pascals 500 (design value) m²/(h.m²) @ 50 Pa</ter>	SAP Rating			84 B	DER	17.47	TER	18.00
CO2 Emissions (L/year) 1.31 DFEE 46.51 TFEE 50.08 General Requirements Compliance Pass % DFEE 7.13 Assessor Details Ms. Katrina Edgington, Katrina Edgington, Tel: 01884 242 050, Katrina.Edgington@aessc.co.uk Assessor ID P640-000 Client C.G. Fry. & Son Ltd. C.G. Fry. & Son Ltd. Assessor ID P640-000 UMARY FOR INPUT DATA FOR New Build (As Designed) rriterion 1 – Achieving the TER and TFEE rate Assessor ID P640-000 a TER and DER Fuel for main heating Main's gas Pass Pass Pass Fuel for main heating I.00 (mains gas) RgCO ₂ /m ² Pass -0.53 (-2.9%) kgCO ₂ /m ² Pass Dwelling Carbon Dioxide Emission Rate (DER) 17.47 kgCO ₂ /m ² Pass -0.53 (-2.9%) kgCO ₂ /m ² Pass b TEEE and DEE 50.08 KWh/m ² /yr -3.6 (-7.2%) kW/m ² /yr Pass -0.53 (-2.9%) kW/m ² /yr Pass b TEEE and DEE Element Average Highest Element Pass	Ť							
General Requirements Compliance Pass % DFEE 7.13 Assessor Details Ms. Katrina Edgington, Katrina Edgington, Tel: 01884 242 050. Assessor ID P640-000 Katrina.Edgington@aessc.co.uk CG Fry & Son Ltd. UMARY FOR INPUT DATA FOR New Build (As Designed) Viterion 1 – Achieving the TER and TFEE rate a TER and DER Fuel for main heating Mains gas Target Carbon Dioxide Emission Rate (TER) 18.00 kgCO2/m² Pass Dwelling Carbon Dioxide Emission Rate (DER) 17.47 kgCO2/m² Pass Target Fabric Energy Efficiency (DFEE) 50.08 kWh/m²/yr Pass Dwelling Fabric Energy Efficiency (DFEE) 46.51 kWh/m²/yr Pass Viterion 2 – Limits on design flexibility 46.51 kWh/m²/yr Pass Umiting Fabric Standards 2 2 21 (max. 0.30) 0.21 (max. 0.70) Pass Party wall 0.00 (max. 0.20) - Pass 0.14 (max. 0.30) Pass Generating 1.40 (max. 2.00) 1.40 (max. 3.30) Pass Openings 1.40 (max. 2.00) 1.40 (max. 3.30) Pass		·)				46.51		50.08
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b TFEE and DFEE Target Fabric Energy Efficiency (TFEE) Dwelling Fabric Energy Efficiency (DFEE) 46.51 46.51 46.51 46.51 46.51 40.7.2%) 46.51 40.7.2%) 46.51 40.7.2%)	Target Carbon Diox	ide Emission Rate (TE	R)	18.00			kgCO₂/m²	
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2a Thermal bridging Thermal bridging calculated from linear thermal transmittances for each junction 3 Air permeability Air permeability at 50 pascals 5.00 (design value) m³/(h.m²) @ 50 Pa								Pass
Thermal bridging calculated from linear thermal transmittances for each junction <u>3 Air permeability</u> Air permeability at 50 pascals 5.00 (design value) m³/(h.m²) @ 50 Pa			1.40 (ma	x. 2.00)		1.40 (max. 3.3	0)	Pass
3 Air permeability Air permeability at 50 pascals 5.00 (design value) m³/(h.m²) @ 50 Pa								
Air permeability at 50 pascals 5.00 (design value) m³/(h.m²) @ 50 Pa	Thermal bridgin	ig calculated from line	ear therma	l transmit	tances for each	junction		
	<u>3 Air permeability</u>						_	
Maximum 10.0 m³/(h.m²) @ 50 Pa Pass	Air permeability	/ at 50 pasc <mark>als</mark>		5.00 (de	sign value)		m³/(h.m²) @ 50 Pa	
				10.0			m ³ /(h.m ²) @ 50 Pa	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 4.14r16

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



Main heating system	Boiler system with radiators or underfloor - Mains gas	Pass
	Data from database Vaillant ecoFIT sustain 835 VUW 356/6-3 (H-GB)	
	Combi boiler	
	Efficiency: 89.3% SEDBUK2009	
	Minimum: 88.0%]
Secondary heating system	None	
<u>5 Cylinder insulation</u>		
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		
Continuous extract system (decentralised)		
Specific fan power	0.1700 0.1600 0.2000]
Maximum	0.7	Pass
Criterion 3 – Limiting the effects of heat gains in sum	mer	
9 Summertime temperature		
<u>9 Summertime temperature</u> Overheating risk (Severn Valley)	Not significant	Pass
	Not significant	Pass
Overheating risk (Severn Valley)	Not significant Average	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East	Average 4.58 m ² , No overhang	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West	Average 4.58 m ² , No overhang 4.43 m ² , No overhang	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West	Average 4.58 m ² , No overhang 4.43 m ² , No overhang 0.30 m ² , No overhang	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate	Average 4.58 m ² , No overhang 4.43 m ² , No overhang 0.30 m ² , No overhang 4.00 ach	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value	
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value	
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value 0.00 W/m²K	
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value 0.00 W/m²K 5.00 (design value) m³/(h.m²) @ 50 Pa	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value 0.00 W/m²K	
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability Air permeability at 50 pascals Maximum	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value 0.00 W/m²K 5.00 (design value) m³/(h.m²) @ 50 Pa 10.0 m³/(h.m²) @ 50 Pa	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum 10 Key features Party wall U-value	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value 0.00 W/m²K 5.00 (design value) m³/(h.m²) @ 50 Pa 10.0 m³/(h.m²) @ 50 Pa 0.00 W/m²K	Pass
Overheating risk (Severn Valley) Based on: Overshading Windows facing North East Windows facing South West Windows facing North West Air change rate Blinds/curtains Criterion 4 – Building performance consistent with D Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability Air permeability at 50 pascals Maximum	Average 4.58 m², No overhang 4.43 m², No overhang 0.30 m², No overhang 4.00 ach None ER and DFEE rate U-value 0.00 W/m²K 5.00 (design value) m³/(h.m²) @ 50 Pa 10.0 m³/(h.m²) @ 50 Pa	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 4.14r16

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	£31	B 85	B 88	Recommended
Photovoltaic	£3,500 - £5,500	£331	A 95	A 97	Recommended
Wind turbine			0	0	Not applicable
Totals	£7,500 - £11,500	£361	A 95	A 97	
Totals	17,500 - 111,500	1301	A 33	A ST	
4					

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