

PREDICTED ENERGY ASSESSMENT

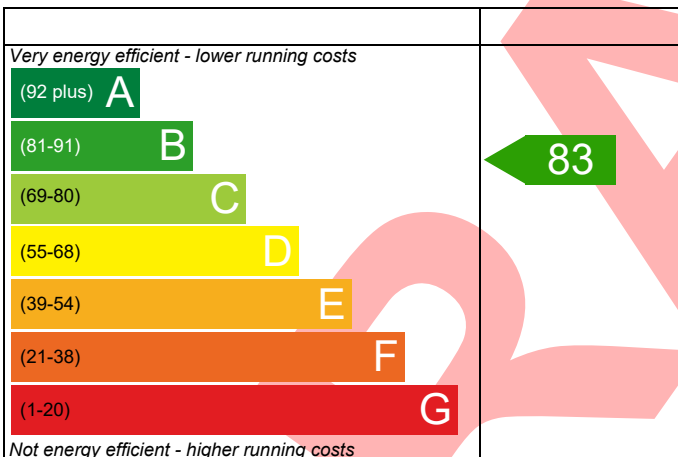
Type A Handed, Plot 3, Ashlawn Road,
Rugby,
Warwickshire

Dwelling type: House, Detached
Date of assessment: 26/02/2020
Produced by: Energy Surveys (PL) Ltd
Total floor area: 243.7 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.

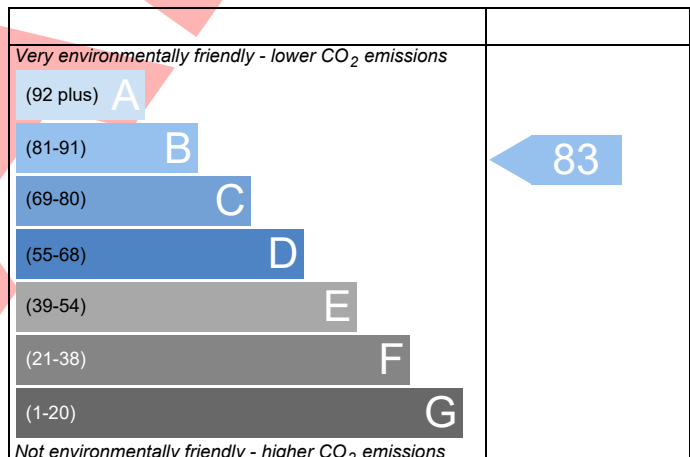
Energy Efficiency Rating



England EU Directive 2002/91/EC

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



England EU Directive 2002/91/EC

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)

Property Reference	CUR-11-19-03	Issued on Date	26/02/2020
Assessment Reference	CUR-11-19-03	Prop Type Ref	
Property	Type A Handed, Plot 3, Ashlawn Road, Rugby, Warwickshire		

SAP Rating	83 B	DER	16.00	TER	16.29
Environmental	83 B	% DER<TER	1.80		
CO ₂ Emissions (t/year)	3.60	DFEE	59.09	TFEE	67.12
General Requirements Compliance	Pass	% DFEE<TFEE	11.97		

Assessor Details	Mr. Peter Loveday, Energy Surveys (PL) Ltd, Tel: 01885 488418, sales@energysurveysgb.co.uk	Assessor ID	L623-0001
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Client	
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SUMMARY FOR INPUT DATA FOR New Build (As Designed)

Criterion 1 – Achieving the TER and TFEE rate

1a TER and DER

Fuel for main heating	Mains gas		
Fuel factor	1.00 (mains gas)		
Target Carbon Dioxide Emission Rate (TER)	16.29	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	16.00	kgCO ₂ /m ²	Pass
	-0.29 (-1.8%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	67.12	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	59.09	kWh/m ² /yr	
	-8.0 (-11.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.16 (max. 0.30)	0.16 (max. 0.70)	Pass
Floor	0.16 (max. 0.25)	0.21 (max. 0.70)	Pass
Roof	0.16 (max. 0.20)	0.16 (max. 0.35)	Pass
Openings	1.31 (max. 2.00)	1.60 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	6.00 (design value)	m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0	m ³ /(h.m ²) @ 50 Pa	Pass

Limiting System Efficiencies

4 Heating efficiency

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BUILDING REGULATION COMPLIANCE

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Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Worcester Greenstar 35 CDi Classic System Efficiency: 89.2% SEDBUK2009 Minimum: 88.0%	Pass
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Secondary heating system	Room heaters - Wood Logs Closed room heater Efficiency: 65% Minimum: 65%	Pass
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5 Cylinder insulation

Hot water storage	Nominal cylinder loss: 2.55 kWh/day Permitted by DBSCG 2.86	Pass
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Primary pipework insulated	Yes	Pass
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6 Controls

Space heating controls	Time and temperature zone control	Pass
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Hot water controls	Cylinderstat	Pass
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	Independent timer for DHW	Pass
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Boiler interlock	Yes	Pass
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7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
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Minimum	75	%	Pass
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8 Mechanical ventilation

Not applicable

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Midlands)	Slight	Pass
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Based on:

Overshading	Average
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Windows facing North	20.28 m ² , No overhang
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Windows facing East	18.03 m ² , No overhang
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Windows facing South	15.03 m ² , No overhang
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Windows facing West	22.22 m ² , No overhang
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Air change rate	4.00 ach
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Blinds/curtains	None
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Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	6.00 (design value)	m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0	m ³ /(h.m ²) @ 50 Pa	Pass

10 Key features

Secondary heating (wood logs)	N/A
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Secondary heating fuel:	wood logs
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