

PREDICTED ENERGY ASSESSMENT

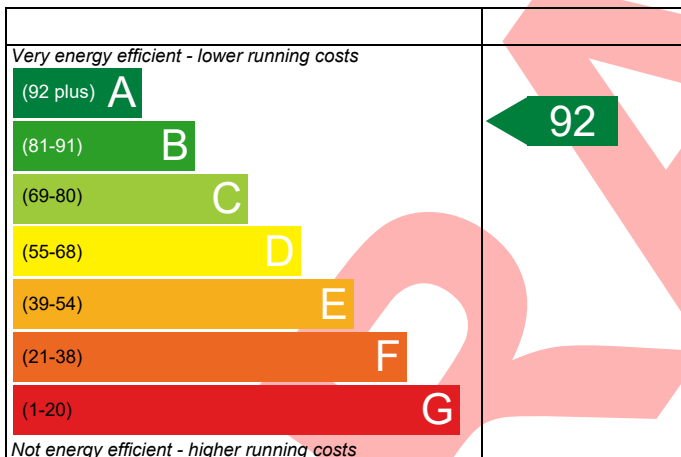
Flat 7, 42 Welcomes Road,
Kenley,
CR8 5HD

Dwelling type: Flat, Semi-Detached
Date of assessment: 09/10/2024
Produced by: AGP Consultants Ltd
Total floor area: 174.6 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.

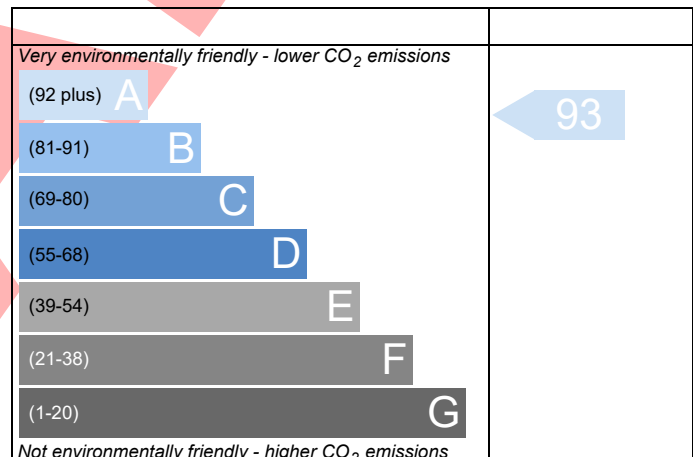
Energy Efficiency Rating



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	Flat 7	Issued on Date	09/10/2024
Assessment Reference	Flat 7	Prop Type Ref	Flat 7
Property	Flat 7, 42 Welcomes Road, Kenley, CR8 5HD		

SAP Rating	92 A	DER	6.75	TER	19.12
Environmental	93 A	% DER<TER	64.69		
CO ₂ Emissions (t/year)	1.18	DFEE	40.69	TFEE	43.64
General Requirements Compliance	Pass	% DFEE<TFEE	6.76		

Assessor Details	Mr. Neil Addington, AGP Consultants Ltd, Tel: 07710420753, naddington@agpartnership.com	Assessor ID	AY41-0001
Client	Reflect Welcomes Road		

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	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	19.12	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	6.75	kgCO ₂ /m ²	Pass
	-12.37 (-64.7%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	43.64	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	40.69	kWh/m ² /yr	
	-2.9 (-6.7%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.18 (max. 0.30)	0.18 (max. 0.70)	Pass
Roof	0.12 (max. 0.20)	0.12 (max. 0.35)	Pass
Openings	1.60 (max. 2.00)	1.60 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated using default y-value of 0.15

3 Air permeability

Air permeability at 50 pascals	4.00 (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

Main heating system	Room heaters - Electric Data from manufacturer PHEX dimplex	
Secondary heating system	None	

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)

5 Cylinder insulation

Hot water storage	Measured cylinder loss: 1.77 kWh/day Permitted by DBSCG 2.68	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Programmer and appliance thermostats	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	Pass

7 Low energy lights

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

8 Mechanical ventilation

Continuous supply and extract system			
Specific fan power	0.50		
Maximum	1.5		Pass
MVHR efficiency	92	%	
Minimum	70	%	Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Medium	Pass
Based on:		
Overshading	Average	
Windows facing East	2.81 m ² , No overhang	
Windows facing West	14.26 m ² , No overhang	
Air change rate	3.00 ach	
Blinds/curtains	Light-coloured curtain or roller blind, closed 25% of daylight hours	

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	4.00 (design value)	m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0	m ³ /(h.m ²) @ 50 Pa	Pass

10 Key features

None	N/A
------	-----

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

RECOMMENDATIONS

	Typical cost	Typical savings per year	Energy efficiency	Environmental impact	Result
Low energy lights			0	0	Already installed
Solar water heating			0	0	Not applicable
Photovoltaic			0	0	Not applicable
Wind turbine			0	0	Not applicable
Totals	£0	£0	A 92	A 93	

DRAFT

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