

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Designed)

Property Reference	6787	Issued on Date	03/10/2025
Assessment Reference	6787	Prop Type Ref	Detached House
Property	40, Heroes Walk, Reading, Berkshire, RG2 8TY		
SAP Rating	80 C	DER	20.13
Environmental	82 B	TER	25.03
CO ₂ Emissions (t/year)	1.93	% DER<TER	19.59
General Requirements Compliance	Pass	DFEE	50.33
		TFEE	54.59
		% DFEE<TFEE	7.81
Assessor Details	Mr. Steve Saward, UKSAPs, Tel: 01763 241797, steve@uksaps.co.uk		Assessor ID
Client			M911-0001

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)	25.03	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	20.13	kgCO ₂ /m ²	Pass
	-4.90 (-19.6%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	54.59	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	50.33	kWh/m ² /yr	
	-4.3 (-7.9%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.18 (max. 0.30)	0.18 (max. 0.70)	Pass
Floor	0.13 (max. 0.25)	0.13 (max. 0.70)	Pass
Roof	0.12 (max. 0.20)	0.15 (max. 0.35)	Pass
Openings	1.34 (max. 2.00)	1.40 (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	5.00 (design value)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Mitsubishi ECODAN 8.5kW PUHZ-W85VHA(2)-BS	
Secondary heating system	None	

5 Cylinder insulation

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Hot water storage	Measured cylinder loss: 2.09 kWh/day Permitted by DBSCG 2.56	Pass
Primary pipework insulated	Yes	Pass

6 Controls

Space heating controls	Time and temperature zone control	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

Not applicable

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing North East	4.25 m ² , No overhang	
Windows facing South East	4.27 m ² , No overhang	
Windows facing South West	9.12 m ² , No overhang	
Air change rate	8.00 ach	
Blinds/curtains	None	

Criterion 4 – Building performance consistent with DER and DFEE rate

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	5.00 (design value)	
Maximum	10.0	Pass

10 Key features

Roof U-value	0.11	W/m ² K
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This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.