BASIC COMPLIANCE REPORT
Calculation Type: New Build (As Built)

Property Reference	2 The Ridgeway	**Issued on Date**	04/03/2025
Assessment Reference	001	**Prop Type Ref**	3322
Property	2 The Ridgeway, Woodley, Reading, RG5 3QD		

SAP Rating	86 B	**DER**	14.13	**TER**	14.20
Environmental	84 B	**% DER<TER**	0.46		
CO_2 Emissions (t/year)	3.64	**DFEE**	51.31	**TFEE**	59.92
General Requirements Compliance	Pass	**% DFEE<TFEE**	14.37		

Assessor Details	Mr. Nick Gill, Nick Gill, Tel: 01444 657 756, info@pebble-energy.com	**Assessor ID**	AW10-0001
Client			

SUMARY FOR INPUT DATA FOR New Build (As Built)

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)	14.20	$kgCO_2/m^2$	
Dwelling Carbon Dioxide Emission Rate (DER)	14.13	$kgCO_2/m^2$	Pass
	-0.07 (-0.5%)	$kgCO_2/m^2$	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	59.92	$kWh/m^2/yr$	
Dwelling Fabric Energy Efficiency (DFEE)	51.31	$kWh/m^2/yr$	
	-8.6 (-14.4%)	$kWh/m^2/yr$	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.23 (max. 0.30)	0.23 (max. 0.70)	Pass
Floor	0.17 (max. 0.25)	0.23 (max. 0.70)	Pass
Roof	0.18 (max. 0.20)	0.18 (max. 0.35)	Pass
Openings	1.38 (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	4.84 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Ideal VOGUE MAX SYSTEM 32 Efficiency: 89.4% SEDBUK2009 Minimum: 88.0%	Pass
Secondary heating system	None	

5 Cylinder insulation

Hot water storage	Measured cylinder loss: 2.04 kWh/day Permitted by DBSCG 2.24	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
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

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)	Slight	Pass

Based on:

Overshading	Average
Windows facing North Windows facing South Windows facing West	28.83 m², No overhang 14.00 m², No overhang 4.20 m², No overhang
Air change rate	0.00 ach
Blinds/curtains	Dark-coloured curtain or roller blind, closed 100% 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	4.84 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

Thermal bridging y-value	0.028	W/m²K

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

DWELLING SIGN OFF REPORT

Section 1: Dwelling Information

Dwelling Address (Please confirm final postal address and post code of the dwelling.)

House Name	2 The Ridgeway	
House Number		
Postcode	RG5 3QD	
Street	Woodley	
Locality		
Town	Reading	
County		

Dwelling Orientation South (Please confirm orientation of main entrance door of the dwelling.)

Comments

Terrain Type Suburban

Property Type House, Detached

Comments

Overshading (called Sunlight/shade in assessment) Average or unknown

Comments

Section 2: Dwelling Construction Details

Thermal Mass Parameter Simple calculation

Thermal Mass 100.00 kJ/m²K

Comments

External Walls

Type	Cavity Wall		
Construction			
U-value	0.23	W/m²K	U-value calculations should be provided to verify the u-value entered in the survey.
Gross Area	283.78	m²	
Type	Timber Frame		
Construction			
U-value	0.19	W/m²K	U-value calculations should be provided to verify the u-value entered in the survey.
Gross Area	1.80	m²	

Comments

External Roofs

Type	External Slope Roof		
Construction			
U-value	0.18	W/m²K	U-value calculations should be provided to verify the u-value entered in the survey.
Gross Area	174.00	m²	

DWELLING SIGN OFF REPORT

Type	External Flat Roof		
Construction			
U-value	0.16	W/m²K	U-value calculations should be provided to verify the u-value entered in the survey.
Gross Area	60.00	m²	

Comments

Heat Loss Floors

Type	Ground Floor - Solid		
Construction			
U-value	0.15	W/m²K	U-value calculations should be provided to verify the u-value entered in the survey.
Area	156.00	m²	
Type	Exposed Floor - Solid		
Construction			
U-value	0.23	W/m²K	U-value calculations should be provided to verify the u-value entered in the survey.
Area	50.40	m²	

Comments

Opening Types

Description	Type	Glazing	Frame Type	U Value (W/m²K)
Entrance	Half Glazed Door	Double Low-E Soft 0.05		1.40
Solid door	Solid Door			1.40
Window	Window	Double Low-E Soft 0.05		1.40
Roof window	Roof Window	Double Low-E Soft 0.05		1.30

Comments

Openings

DWELLING SIGN OFF REPORT

Name	Opening Type	Location	Orientation	Area (m²)
Entrance	Half Glazed Door	[1] External walls	South	3.68
Utility	Half Glazed Door	[1] External walls	East	2.06
Garage	Solid Door	[1] External walls	South	4.12
Lounge	Window	[1] External walls	South	2.03
Kitchen	Window	[1] External walls	West	2.94
Breakfast	Window	[1] External walls	North	10.50
Living	Window	[1] External walls	North	7.14
Gym	Window	[1] External walls	North	4.05
Bedroom	Window	[1] External walls	South	2.03
Master bedroom	Window	[1] External walls	South	2.18
Room 2	Window	[1] External walls	South	3.30
Bathroom	Window	[1] External walls	South	1.16
Bedroom 4	Window	[1] External walls	South	3.30
En-suite	Window	[1] External walls	West	1.26
Bedroom 5	Window	[1] External walls	North	1.90
Landing	Window	[1] External walls	North	1.16
Bedroom 3	Window	[1] External walls	North	1.90
Master bedroom	Window	[1] External walls	North	2.18
RL01	Roof Window	[1] Roof	East	1.46
RL02	Roof Window	[1] Roof	North	1.46
RL03	Roof Window	[1] Roof	South	1.46
RL04	Roof Window	[2] Flat roof	Horizontal	10.80

Comments

Thermal Bridging Calculate Bridges

List of Bridges

Bridge Type	Source Type	Length (m)	Psi (W/mK)	Reference
E2 Other lintels (including other steel lintels)	Independently assessed	34.91	0.026	
E3 Sill	Independently assessed	30.22	0.023	
E4 Jamb	Independently assessed	65.30	0.018	
E5 Ground floor (normal)	Independently assessed	62.30	0.068	
E20 Exposed floor (normal)	Table K1 - Default	14.00	0.320	
E21 Exposed floor (inverted)	Table K1 - Default	14.00	0.320	
E6 Intermediate floor within a dwelling	Independently assessed	42.00	0.001	
E24 Eaves (insulation at ceiling level - inverted)	Table K1 - Default	11.40	0.240	
E11 Eaves (insulation at rafter level)	Independently assessed	51.50	0.018	
E13 Gable (insulation at rafter level)	Independently assessed	14.20	0.039	
E16 Corner (normal)	Independently assessed	32.30	0.040	
E17 Corner (inverted – internal area greater than external area)	Independently assessed	11.60	-0.082	

Y-value 0.028 W/m²K

Comments

Where specific construction details have been used documentary evidence should be provided to the SAP assessor, usually in the form of signed checklists.

Pressure Testing Yes

As Built AP_{50}	4.84	$m^3/(h.m^2)$ @ 50 Pa

Where an air pressure test has been carried out a copy of the test certificate should be forwarded to the SAP assessor.

Comments

Section 3: Dwelling Systems

Fans, Open Fireplaces, Flues

	MHS	SHS	Other	Total
Number of Chimneys	0		0	0
Number of open flues	0		0	0
Number of intermittent fans				6
Number of passive vents				0
Number of flueless gas fires				0

Comments

Internal Lighting

Total number of light fittings	25	
Total number of L.E.L. fittings	25	
Percentage of L.E.L. fittings	100.00	%

Comments

External Lighting

External lights fitted	Yes	
Light and motion sensor	Yes	

Comments

Electricity Tariff	Standard	

Comments

Main Heating 1	Database	
Fuel Type	Mains gas	
Main Heating	Mains gas BGB Post 98 Regular condens. with auto ign.	
Efficiency (Split Efficiences)	89.4	%
Brand, Model	Ideal, VOGUE MAX SYSTEM	
Flue Type	Balanced	
Fan Assisted Flue	Yes	
Heat Emitter	Radiators and Underfloor	
Flow Temperature	36° - 45°C	

Comments

Heating Controls

Description	CBI Time and temperature zone control

DWELLING SIGN OFF REPORT

Boiler Interlock	Yes
Delayed Start Stat	Yes
Compensator	

Comments

Main Heating 2 None

Comments

Water Heating System HWP From main heating 1

Water Heating	Main Heating 1
Supplementary Immersion	

Comments

Hot Water Cylinder Hot Water Cylinder

Independent Time Control	Yes	
Cylinder Stat	Yes	
Insulation Type	Measured Loss	
Insulation Thickness		
Cylinder Volume	200.00	L
Measured Loss	2.04	kWh/day
Pipes insulation	Fully insulated primary pipework	

Comments

Section 4: Dwelling Renewable Energy

Section 5: Declaration

I confirm that all details prov[redacted]t of my knowledge.

Signed [redacted]

Date 01/05/2025