

Summary for Input Data

Property Reference	Plot A	Issued on Date	29/04/2024
Assessment Reference	As Designed (Gas Boiler + WWH)	Prop Type Ref	
Property	40, Bulmershe Road, Reading, RG1 5RJ		

SAP Rating	85 B	DER	14.19	TER	15.56
Environmental	91 B	% DER < TER			8.80
CO ₂ Emissions (t/year)	0.56	DFEE	39.54	TFEE	40.79
Compliance Check	See BREL	% DFEE < TFEE			3.05
% DPER < TPER	2.90	DPER	80.14	TPER	82.53

Assessor Details	Mr. Lee Robbins	Assessor ID	U322-0001
Client			

SUMMARY FOR INPUT DATA FOR: New Build (As Designed)

Orientation	Northeast	
Property Tenture	ND	
Transaction Type	5	
Terrain Type	Suburban	
1.0 Property Type	Flat, End-Terrace	
Position of Flat	Basement flat	
Which Floor	0	
2.0 Number of Storeys	1	
3.0 Date Built	2023	
3.0 Property Age Band	L	
4.0 Sheltered Sides	2	
5.0 Sunlight/Shade	Average or unknown	
6.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	N/A	kJ/m²K
7.0 Electricity Tariff	Standard	
Smart electricity meter fitted	Yes	
Smart gas meter fitted	Yes	

7.0 Measurements	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Basement:	0.00 m	0.00 m ²	0.00 m
Ground floor:	26.46 m	46.08 m ²	2.30 m
1st Storey:	0.00 m	0.00 m ²	0.00 m
2nd Storey:	0.00 m	0.00 m ²	0.00 m
3rd Storey:	0.00 m	0.00 m ²	0.00 m
4th Storey:	0.00 m	0.00 m ²	0.00 m
5th Storey:	0.00 m	0.00 m ²	0.00 m
6th Storey:	0.00 m	0.00 m ²	0.00 m
7th Storey:	0.00 m	0.00 m ²	0.00 m

8.0 Living Area	12.91	m ²
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9.0 External Walls	Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Gross Area(m ²)	Nett Area (m ²)	Shelter Res	Shelter	Openings	Area Calculation Type
	Wall 1 - Cavity Wall	Cavity Wall	Cavity wall : plasterboard on dabs, dense block, filled cavity, any outside structure	0.20	150.00	39.47	28.52	0.00	None	10.95	Enter Gross Area
	Wall 2 - Unheated Corridor	Cavity Wall	Cavity wall : plasterboard on dabs, dense block, filled cavity, any outside structure	0.19	150.00	9.34	7.45	0.00	None	1.89	Enter Gross Area
	Wall 3 - Basement Wall	Cavity Wall	Cavity wall : plasterboard on dabs, dense block, filled cavity, any outside structure	0.12	150.00	12.05	12.05	0.00	None	0.00	Enter Gross Area

9.1 Party Walls	Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Area (m ²)	Shelter Res	Shelter
	Party Wall 1	Filled Cavity with Edge Sealing	Single plasterboard on dabs on both sides, dense blocks, cavity or cavity fill	0.00	70.00	8.19	0.00	None

9.2 Internal Walls	Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
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Summary for Input Data

Internal Wall 1 Plasterboard on timber frame 9.00 89.88

10.0 External Roofs

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Code	Shelter Factor	Calculation Type	Openings
Roof 2 - Flat Roof	External Flat Roof	Plasterboard, insulated flat roof	0.11	9.00	7.49	7.49	None	0.00	Enter Gross Area	0.00

10.1 Party Ceilings

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Party Ceiling 1	Timber I-joists, carpeted	20.00	38.59

11.0 Heat Loss Floors

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Floor 1 - Ground Floor	Basement Floor	Lowest occupied	Suspended concrete floor, carpeted	0.10	None	0.00	75.00	46.08

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Windows	BFRC, BSI or CERTASS data	Window	Double Low-E Soft 0.05		Air Filled	0.60	Wood	1.00	1.20
Door	Manufacturer	Solid Door			Air Filled	0.00	Wood	0.70	1.00

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Opening	Door	Wall 2 - Unheated Corridor	North East	1.89	0
Opening	Windows	Wall 1 - Cavity Wall	North East	3.24	0
Opening	Windows	Wall 1 - Cavity Wall	South West	7.71	0

14.0 Conservatory

None

15.0 Draught Proofing

100 %

16.0 Draught Lobby

No

17.0 Thermal Bridging

Calculate Bridges

17.1 List of Bridges

Bridge Type	Source Type	Length	Psi	Adjusted	Reference:	Imported
E2 Other lintels (including other steel lintels)	Independently assessed	7.08	0.01	0.01		No
E3 Sill	Independently assessed	2.40	0.02	0.02		No
E4 Jamb	Independently assessed	20.46	0.02	0.02		No
E5 Ground floor (normal)	Table K1 - Default	21.22	0.32	0.32		No
E22 Basement floor	Table K1 - Default	5.24	0.22	0.22		No
E7 Party floor between dwellings (in blocks of flats)	Independently assessed	18.36	0.04	0.04		No
E24 Eaves (insulation at ceiling level - inverted)	Table K1 - Default	5.24	0.15	0.15		No
E14 Flat roof	Table K1 - Default	8.10	0.16	0.16		No
E16 Corner (normal)	Independently assessed	11.50	0.05	0.05		No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	2.30	-0.09	-0.09		No
E18 Party wall between dwellings	Independently assessed	2.30	0.04	0.04		No
E25 Staggered party wall between dwellings	Table K1 - Default	4.60	0.24	0.24		No
P1 Party wall - Ground floor	Table K1 - Default	3.56	0.32	0.32		No
P3 Party wall - Intermediate floor between dwellings (in blocks of flats)	Table K1 - Default	3.56	0.00	0.00		No

Y-value 0.12 W/m²K

18.0 Pressure Testing

Yes

Designed AP₅₀ 5.00 m³/(h.m²) @ 50 Pa

Property Tested? Yes

Test Method Blower Door

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present No

20.0 Fans, Open Fireplaces, Flues

21.0 Fixed Cooling System

No

22.0 Lighting

No Fixed Lighting No

Name	Efficacy	Power	Capacity	Count
LED	80.00	5	400	6

24.0 Main Heating 1

Database

Summary for Input Data

Percentage of Heat	100.00	%
Database Ref. No.	17955	
Fuel Type	Mains gas	
SAP Code	0	
In Winter	89.00	
In Summer	87.30	
Model Name	LOGIC COMBI	
Manufacturer	Ideal Boilers	
System Type	Combi boiler	
Controls SAP Code	2110	
Delayed Start Stat	Yes	
Burner Control	Modulating	
HETAS approved System	No	
Oil Pump Inside	No	
FI Case	0.00	
Flue Type	Balanced	
Fan Assisted Flue	Yes	
Is MHS Pumped	Pump in heated space	
Heating Pump Age	2013 or later	
Heat Emitter	Radiators	
Flow Temperature	Unknown	
Boiler Interlock	Yes	
Combi boiler type	Standard Combi	
Combi keep hot type	None	

25.0 Main Heating 2

None

26.0 Heat Networks

None

	Heat Source	Fuel Type	Heating Use	Efficiency	Percentage Of Heat	Heat	Heat Power Ratio	Electrical	Fuel Factor	Efficiency type
Heat source 1	None									
Heat source 2	None									
Heat source 3	None									
Heat source 4	None									
Heat source 5	None									

28.0 Water Heating

Water Heating	Main Heating 1
SAP Code	901
Flue Gas Heat Recovery System	No
Waste Water Heat Recovery Instantaneous System 1	Yes
Waste Water Heat Recovery Instantaneous System 2	No
Waste Water Heat Recovery Storage System	No
Solar Panel	No
Water use <= 125 litres/person/day	No
Summer Immersion	No
Cold Water Source	From mains
Bath Count	0
Supplementary Immersion	No
Immersion Only Heating Hot Water	No

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
Shower	Combi boiler or unvented hot water system	9.00		Yes	Instantaneous System 1

Summary for Input Data

28.3 Waste Water Heat Recovery System Instantaneous System 1

Database ID	80116
Brand Model	Showersave, QB1-21
Details	Year: 2017 + current Efficiency: 67.2 Utilisation factor: 0.973

29.0 Hot Water Cylinder

	None
Cylinder Stat	No
Cylinder In Heated Space	No
Independent Time Control	No
In Airing Cupboard	No

31.0 Thermal Store

None

34.0 Small-scale Hydro

	None	
Electricity Generated	0.00	
Apportioned	0.00	kWh/Year
Connected to dwelling's electricity meter	Yes	
Electricity Generation	Annual	

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

None