Summary for Input Data

Property Reference	P22691(5) Mount P	Issued on Date	24/02/2023
Assessment Reference	P22691(5)	Prop Type Ref	
Property	New House 5, 40-48, Mount Pleasant, Reading, RG1 2TF		

SAP Rating	84 B	DER	3.92	TER	11.95
Environmental	97 A	% DER < TER			67.20
CO_2 Emissions (t/year)	0.28	DFEE	34.83	TFEE	35.61
Compliance Check	See BREL	% DFEE < TFEE			2.20
% DPER < TPER	33.92	DPER	41.34	TPER	62.56

Assessor Details	Mr. Malcolm Lisle	Assessor ID	P736-0001
Client	Mount P, Jay Zaman		

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

Orientation	South
Property Tenture	ND
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	House, Mid-Terrace
2.0 Number of Storeys	3
3.0 Date Built	2023
4.0 Sheltered Sides	2
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation

7.0 Electricity Tariff	Standard
Smart electricity meter fitted	No
Smart gas meter fitted	No

7.0 Measurements

	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Ground floor:	15.80 m	29.56 m²	2.50 m
1st Storey:	15.80 m	31.08 m²	2.80 m
2nd Storey:	12.20 m	17.76 m²	2.90 m

8.0 Living Area 27.56 m²

9.0 External Walls

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Res	Shelter	Openings	Area Calculation Type
External Wall	Timber Frame	Timber framed wall (one layer of plasterboard)	0.15	9.00	62.68	42.31	0.00	None	20.37	Enter Gross Area

9.1 Party Walls

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Area (m²)	Shelter Res	Shelter
Party Wall 1	Filled Cavity with Edge Sealing	Single plasterboard on both sides, dense cellular blocks, cavity	0.00	70.00	108.24		None

9.2 Internal Walls

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Walls - Timber	Plasterboard on timber frame	9.00	105.30

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
External Roof - Sloping	External Slope Roof	Plasterboard, insulated slope	0.15	9.00	23.18	4.06	None	0.00	Enter Gross Area	4.06
External Roof - Flat Roof	External Flat Roof	Plasterboard, insulated flat roof	0.15	9.00	13.32	0.00	None	0.00	Enter Gross Area	0.00

10.2 Internal Ceilings

Description	Storey	Construction	Area (m²)
Internal Ceiling - G Floor	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	29.56
Internal Ceiling - 1st Floor	+1	Plasterboard ceiling, carpeted chipboard floor	17.76

11.0 Heat Loss Floors

Summary for Input Data

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Ground Floor	Ground Floor - Solid	Lowest occupied	Slab on ground, screed over insulation	0.10	None	0.00	110.00	29.56

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Floor - 1st Floor		Plasterboard ceiling, carpeted chipboard floor	9.00	29.56
Internal Floor - 2nd Floor		Plasterboard ceiling, carpeted chipboard floor	9.00	17.76

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Windows/Doors	Manufacturer	Window	Double Low-E Soft 0.05			0.63		0.70	1.20
Rooflights	Manufacturer	Roof Window	Double Low-E Soft 0.05			0.63		0.70	1.70

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Windows	Windows/Doors	External Wall	North	3.16	
Windows	Windows/Doors	External Wall	South	6.50	
Glazed Doors	Windows/Doors	External Wall	North	4.32	
Glazed Doors	Windows/Doors	External Wall	South	6.39	
Rooflights	Rooflights	External Roof - Sloping	East	4.06	40

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
E1 Steel lintel with perforated steel base plate	Independently assessed	10.40	0.06	0.06	No
E3 Sill	Independently assessed	5.90	0.04	0.04	No
E4 Jamb	Independently assessed	37.60	0.05	0.05	No
E5 Ground floor (normal)	Independently assessed	8.20	0.06	0.06	No
E6 Intermediate floor within a dwelling	Independently assessed	14.80	0.00	0.00	No
E13 Gable (insulation at rafter level)	Independently assessed	9.60	0.07	0.07	No
E15 Flat roof with parapet	Table K1 - Default	3.70	0.30	0.30	No
E16 Corner (normal)	Independently assessed	2.50	0.04	0.04	No
E18 Party wall between dwellings	Independently assessed	2.50	0.04	0.04	No
E25 Staggered party wall between dwellings	Independently assessed	29.20	0.04	0.04	No
P1 Party wall - Ground floor	Independently assessed	15.20	0.05	0.05	No
P2 Party wall - Intermediate floor within a dwelling	Table K1 - Default	26.40	0.00	0.00	No
P4 Party wall - Roof (insulation at ceiling level)	Independently assessed	6.60	0.08	0.08	No
P5 Party wall - Roof (insulation at rafter level)	Independently assessed	9.60	0.07	0.07	No
R1 Head of roof window	Table K1 - Default	3.10	0.24	0.24	No
R2 Sill of roof window	Table K1 - Default	3.10	0.24	0.24	No
R3 Jamb of roof window	Table K1 - Default	4.80	0.24	0.24	No
R4 Ridge (vaulted ceiling)	Table K1 - Default	4.80	0.12	0.12	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	2.50	-0.05	-0.05	No

Y-value	0.09	W/m²K

18.0 Pressure Testing	Yes	
Designed AP_{50}	4.00	m³/(h.m²) @ 50 Pa
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
Lighting 1	91.67	12	1100	16

24.0 Main Heating 1	Database	
Description	Heat Pump	
Percentage of Heat	100.00	%
Database Ref. No.	104634	
Fuel Type	Electricity	

In Winter	0.00	
In Summer	0.00	
Model Name	Ecodan 6.0 kW	
Manufacturer	Mitsubishi Electric Europe B.V.	
System Type	Heat Pump	
Controls SAP Code	2207	
Is MHS Pumped	Pump in heated space	
Heating Pump Age	2013 or later	
Heat Emitter	Underfloor	
Underfloor Heating	Yes - Pipes in thin screed	
Flow Temperature	Enter value	
Flow Temperature Value	35.00	
25.0 Main Heating 2	None	
26.0 Heat Networks	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	No	
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	
Cold Water Source	From mains	
Bath Count	1	
Immersion Only Heating Hot Water	No	
28.3 Waste Water Heat Recovery System		
29.0 Hot Water Cylinder	Hot Water Cylinder	
Cylinder Stat	Yes	
Cylinder In Heated Space	Yes	
Independent Time Control	Yes	
Insulation Type	Measured Loss	
Cylinder Volume	150.00	L
Loss	1.86	kWh/day
Pipes insulation	Fully insulated primary pipework	
In Airing Cupboard	No	
31.0 Thermal Store	None	

Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

	Typical Cost	Typical savings per year	Ratings after improvement SAP rating	Ratings after improvement Environmental Impact
	£4,000 - £6,000	£58	B 86	A 97
	£3,500 - £5,500	£157	A 92	A 98
			0	0