

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Built)

Property Reference	2- Plot 12 ASHP	Issued on Date	06/02/2024
Assessment Reference	001	Prop Type Ref	New Build Plot 12
Property	Flat 12, Quilter House, 2A Tankerville Road, London, SW16 5FX		

SAP Rating	78 C	DER	36.93	TER	48.58
Environmental	80 C	% DER<TER	23.98		
CO ₂ Emissions (t/year)	1.07	DFEE	94.96	TFEE	83.86
General Requirements Compliance	Fail	% DFEE<TFEE	-13.24		

Assessor Details	Mr. Matthew Edis, Sustainable Construction Services Ltd, Tel: 0845 6807 175, medis@scspartnership.co.uk	Assessor ID	V539-0001
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Client	
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Orientation	South West
Property Tenure	Unknown
Transaction Type	New dwelling
Terrain Type	Urban
1.0 Property Type	Flat, Semi-Detached
2.0 Number of Storeys	1
3.0 Date Built	2021
4.0 Sheltered Sides	2
5.0 Sunlight/Shade	Average or unknown

6.0 Measurements		Heat Loss Perimeter	Internal Floor Area	Average Storey Height
	Ground Floor:	1.00 m	37.10 m ²	2.55 m

7.0 Living Area	28.90	m ²
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8.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	337.1	kJ/m ² K

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)
	External Wall MAT 1 New	Cavity Wall	Cavity wall : plasterboard on dabs, dense block, filled cavity, any outside structure	0.15	150.00	61.93	50.94
	Wall to Stairwell	Cavity Wall	Cavity wall : plasterboard on dabs, dense block, filled cavity, any outside structure	0.20	150.00	7.79	7.79

9.1 Party Walls	Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Area (m ²)
	Wall to Apartments	Filled Cavity with Edge Sealing	Single plasterboard on both sides, dense cellular blocks, cavity	0.00	70.00	20.75

9.2 Internal Walls	Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
	Internal Wall	Plasterboard on timber frame	9.00	47.40

10.0 External Roofs	Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Gross Area (m ²)	Nett Area (m ²)
	Flat Roof	External Flat Roof	Plasterboard, insulated at ceiling level	0.12	9.00	37.10	37.10

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11.1 Party Floors

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
Party Floor	Precast concrete planks floor, screed, carpeted	40.00	37.10

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Argon Filled	G-value	Frame Type	Frame Factor	U Value (W/m ² K)
W1 Door	Manufacture	Window	Triple glazed			0.53		0.70	0.85
D2 Front Door ET09.1	Manufacture	Solid Door							0.62
D9 Balcony Door Et18	Manufacture	Half Glazed Door	Triple glazed			0.53		0.59	0.91
W13 Window ET13.1	Manufacture	Window	Triple glazed			0.53		0.78	0.95
W14 Window ET15	Manufacture	Window	Triple glazed			0.53		0.60	0.88
W16 Window ET17	Manufacture	Window	Triple glazed			0.53		0.78	0.92

13.0 Openings

Name	Opening Type	Location	Orientation	Curtain Type	Overhang Ratio	Wide Overhang	Width (m)	Height (m)	Count	Area (m ²)	Curtain Closed
D2 Front Door ET09.1	Solid Door	[1] External Wall MAT 1 New	South West							2.48	
D9 Balc Door ET18	Half Glazed Door	[1] External Wall MAT 1 New	North East							3.50	
W13 Window ET13.1	Window	[1] External Wall MAT 1 New	South West	None	0.00					0.93	
W14 Window ET15	Window	[1] External Wall MAT 1 New	South East	None	0.00					2.03	
W16 Window ET17	Window	[1] External Wall MAT 1 New	North East	None	0.00					2.05	

14.0 Conservatory

15.0 Draught Proofing

 %

16.0 Draught Lobby

17.0 Thermal Bridging

17.1 List of Bridges

Source Type	Bridge Type	Length	Psi	Imported
Table K1 - Approved	E2 Other lintels (including other steel lintels)	5.41	0.300	No
Table K1 - Approved	E3 Sill	0.91	0.040	No
Table K1 - Default	E4 Jamb	19.94	0.100	No
Table K1 - Approved	E7 Party floor between dwellings (in blocks of flats)	14.12	0.070	No
Table K1 - Default	E7 Party floor between dwellings (in blocks of flats)	2.81	0.140	No
Table K1 - Default	E23 Balcony within or between dwellings, balcony support penetrates wall insulation	8.22	1.000	No
Table K1 - Approved	E10 Eaves (insulation at ceiling level)	12.24	0.060	No
Table K1 - Default	E12 Gable (insulation at ceiling level)	10.06	0.480	No
Table K1 - Default	E14 Flat roof	2.81	0.080	No
Table K1 - Default	E15 Flat roof with parapet	10.77	0.560	No
Table K1 - Default	E16 Corner (normal)	8.32	0.180	No
Table K1 - Default	E17 Corner (inverted – internal area greater than external area)	8.32	0.000	No
Table K1 - Default	E18 Party wall between dwellings	2.77	0.120	No
Table K1 - Default	E18 Party wall between dwellings	5.54	0.120	No
Table K1 - Default	E25 Staggered party wall between dwellings	2.77	0.120	No
Table K1 - Default	P3 Party wall - Intermediate floor between dwellings (in blocks of flats)	7.49	0.000	No
Table K1 - Default	P4 Party wall - Roof (insulation at ceiling level)	7.49	0.240	No

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Y-value	<input type="text" value="0.278"/>	W/m ² K		
18.0 Pressure Testing	<input type="text" value="Yes"/>			
Designed AP ₅₀	<input type="text" value="4.50"/>	m ³ /(h.m ²) @ 50 Pa		
Property Tested ?	<input type="text" value="Yes"/>			
As Built AP ₅₀	<input type="text" value="4.22"/>	m ³ /(h.m ²) @ 50 Pa		
19.0 Mechanical Ventilation				
Summer Overheating				
Windows open in hot weather	<input type="text" value="Windows slightly open"/>			
Cross ventilation possible	<input type="text" value="Yes"/>			
Night Ventilation	<input type="text" value="No"/>			
Air change rate	<input type="text" value="0.00"/>			
Mechanical Ventilation				
Mechanical Ventilation System Present	<input type="text" value="Yes"/>			
Approved Installation	<input type="text" value="No"/>			
Mechanical Ventilation data Type	<input type="text" value="Data Sheet"/>			
Type	<input type="text" value="Balanced mechanical ventilation with heat recovery"/>			
MVHR Duct Insulated	<input type="text" value="Yes"/>			
Manufacturer SFP	<input type="text" value="0.76"/>			
Duct Type	<input type="text" value="Rigid"/>			
MVHR Efficiency	<input type="text" value="76.00"/>			
Wet Rooms	<input type="text" value="1"/>			
Brand, Model	<input type="text" value="Komfort Ultra D105"/>			
20.0 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				0
Number of passive vents				0
Number of flueless gas fires				0
21.0 Fixed Cooling System	<input type="text" value="No"/>			
22.0 Lighting				
Internal				
Total number of light fittings	<input type="text" value="10"/>			
Total number of L.E.L. fittings	<input type="text" value="10"/>			
Percentage of L.E.L. fittings	<input type="text" value="100.00"/>			%
External				
External lights fitted	<input type="text" value="No"/>			
23.0 Electricity Tariff	<input type="text" value="Standard"/>			
24.0 Main Heating 1	<input type="text" value="Database"/>			
Percentage of Heat	<input type="text" value="100"/>			%
Database Ref. No.	<input type="text" value="104367"/>			
Fuel Type	<input type="text" value="Electricity"/>			
Main Heating	<input type="text" value="PET"/>			
SAP Code	<input type="text" value="224"/>			
In Winter	<input type="text" value="0.0"/>			

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In Summer	0.0
Controls	CHF Programmer and at least two room thermostats
PCDF Controls	0
Sap Code	2205
Is MHS Pumped	in unheated space
Heat Emitter	Radiators
Flow Temperature	Normal (> 45°C)
25.0 Main Heating 2	None

Community Heating	None
28.0 Water Heating	HWP From main heating 1
Water Heating	Main Heating 1
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	Yes
SAP Code	901
Immersion Only Heating Hot Water	No

29.0 Hot Water Cylinder	Hot Water Cylinder
Cylinder Stat	Yes
Cylinder In Heated Space	Yes
Independent Time Control	Yes
Insulation Type	Foam
Insulation Thickness	60
Cylinder Volume	150.00
Pipes insulation	Fully insulated primary pipework

31.0 Thermal Store	None
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Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

None

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