

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Built)

Property Reference	2- plot 14 ASHP	Issued on Date	06/02/2024
Assessment Reference	001	Prop Type Ref	New Build Plot 14
Property	Flat 14, Quilter House, 2A Tankerville Road, London, SW16 5FX		

SAP Rating	83 B	DER	21.22	TER	31.12
Environmental	85 B	% DER<TER	31.81		
CO ₂ Emissions (t/year)	1.13	DFEE	64.12	TFEE	62.99
General Requirements Compliance	Fail	% DFEE<TFEE	-1.80		

Assessor Details	Mr. Matthew Edis, Sustainable Construction Services Ltd, Tel: 0845 6807 175, medis@scspartnership.co.uk	Assessor ID	V539-0001
------------------	---	-------------	-----------

Client	
--------	--

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

Orientation	North 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	1
5.0 Sunlight/Shade	Average or unknown

6.0 Measurements

	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Ground Floor:	1.00 m	67.10 m ²	2.70 m

7.0 Living Area	25.50	m ²
-----------------	-------	----------------

8.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	218.42	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	73.04	55.88

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	26.25

9.2 Internal Walls

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
Internal Wall	Plasterboard on timber frame	9.00	127.51

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)
Pitched Roof	External Slope Roof	Plasterboard, insulated slope	0.12	9.00	8.58	8.58
Flat Roof	External Flat Roof	Plasterboard, insulated at ceiling level	0.12	9.00	58.66	58.66

11.1 Party Floors

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Built)

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
Party Floor	Precast concrete planks floor, screed, carpeted	40.00	67.10

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)
D7 Balcony Door ET16	Manufacture	Half Glazed Door	Triple glazed			0.53		0.57	0.92
W7 Window ET10	Manufacture	Window	Triple glazed			0.53		0.78	0.92
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
W17 Window ET17.1	Manufacture	Window	Triple glazed			0.53		0.43	0.69

13.0 Openings

Name	Opening Type	Location	Orientation	Curtain Type	Overhang Ratio	Wide Overhang	Width (m)	Height (m)	Count	Area (m ²)	Curtain Closed
D7 Balc Door ET16	Half Glazed Door	[1] External Wall MAT 1 New	South West							7.43	
W7 Window ET10	Window	[1] External Wall MAT 1 New	South West	None	0.00					3.60	
W14 Window ET15	Window	[1] External Wall MAT 1 New	South West	None	0.00					2.03	
W16 Window ET17	Window	[1] External Wall MAT 1 New	South East	None	0.00					2.05	
W17 Window ET17.1	Window	[1] External Wall MAT 1 New	South 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)	7.62	0.300	No
Table K1 - Default	E4 Jamb	22.50	0.100	No
Table K1 - Approved	E7 Party floor between dwellings (in blocks of flats)	15.43	0.070	No
Table K1 - Default	E23 Balcony within or between dwellings, balcony support penetrates wall insulation	10.92	1.000	No
Table K1 - Default	E10 Eaves (insulation at ceiling level)	3.16	0.120	No
Table K1 - Approved	E11 Eaves (insulation at rafter level)	2.80	0.040	No
Table K1 - Default	E12 Gable (insulation at ceiling level)	8.44	0.480	No
Table K1 - Default	E13 Gable (insulation at rafter level)	3.00	0.080	No
Table K1 - Default	E15 Flat roof with parapet	17.15	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)	2.77	0.000	No
Table K1 - Default	E18 Party wall between dwellings	5.54	0.120	No
Table K1 - Default	P3 Party wall - Intermediate floor between dwellings (in blocks of flats)	9.47	0.000	No
Table K1 - Default	P4 Party wall - Roof (insulation at ceiling level)	9.47	0.240	No

Y-value	<input type="text" value="0.252"/>	W/m ² K
---------	------------------------------------	--------------------

18.0 Pressure Testing

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="3.78"/>	m ³ /(h.m ²) @ 50 Pa

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Built)

19.0 Mechanical Ventilation

Summer Overheating

Windows open in hot weather	Windows slightly open
Cross ventilation possible	Yes
Night Ventilation	No
Air change rate	0.00

Mechanical Ventilation

Mechanical Ventilation System Present	Yes
Approved Installation	No
Mechanical Ventilation data Type	Database
Type	Balanced mechanical ventilation with heat recovery
MV Reference Number	500140
Configuration	1
MVHR Duct Insulated	Yes
Manufacturer SFP	0.76
Duct Type	Rigid
MVHR Efficiency	91.00
Wet Rooms	1

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

No

22.0 Lighting

Internal

Total number of light fittings	10	
Total number of L.E.L. fittings	10	
Percentage of L.E.L. fittings	100.00	%

External

External lights fitted	No
------------------------	----

23.0 Electricity Tariff

Standard

24.0 Main Heating 1

	Database	
Percentage of Heat	100	%
Database Ref. No.	104367	
Fuel Type	Electricity	
Main Heating	PET	
SAP Code	224	
In Winter	0.0	
In Summer	0.0	
Controls	CHF Programmer and at least two room thermostats	
PCDF Controls	0	
Sap Code	2205	

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Built)

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

Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

None

L