

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Designed)



Property Reference	18-049	Issued on Date	15/01/2019
Assessment Reference	As Designed	Prop Type Ref	Conversion and Extension
Property	150, Haverstock Hill, LONDON, NW3 2AY		

SAP Rating	84 B	DER	16.91	TER	21.58
Environmental	88 B	% DER<TER	21.62		
CO ₂ Emissions (t/year)	0.93	DFEE	42.87	TFEE	62.93
General Requirements Compliance	Pass	% DFEE<TFEE	31.88		

Assessor Details	Mrs. Anna Jardine, Red House, Tel: 01933 358617, anna@redhouseplans.co.uk	Assessor ID	K472-0001
------------------	---	-------------	-----------

Client	Procon Developments
--------	---------------------

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

Orientation	South West
Property Tenure	Owner-occupied
Transaction Type	New dwelling
Terrain Type	Urban
1.0 Property Type	House, Mid-Terrace
2.0 Number of Storeys	2
3.0 Date Built	2018
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:	35.50 m	37.40 m ²	2.40 m
1st Storey:	31.30 m	27.10 m ²	2.70 m

7.0 Living Area	35.58	m ²
-----------------	-------	----------------

8.0 Thermal Mass Parameter	Simple calculation - Low	
Thermal Mass	100.00	kJ/m ² K

9.0 External Walls			U-Value (W/m ² K)	Gross Area (m ²)	Nett Area (m ²)
Description	Type	Construction			
External Wall 1	System Build	Other	0.15	169.71	160.11

9.1 Party Walls			U-Value (W/m ² K)	Area (m ²)
Description	Type	Construction		
Party Wall 1	Solid Wall	Other	0.00	72.90

10.0 External Roofs			U-Value (W/m ² K)	Gross Area (m ²)	Nett Area (m ²)
Description	Type	Construction			
External Roof Terrace	External Flat Roof	Plasterboard, insulated flat roof	0.10	8.14	6.94
Flat Roof Top Floor	External Flat Roof	Plasterboard, insulated flat roof	0.10	29.26	27.76

11.0 Heat Loss Floors			U-Value (W/m ² K)	Area (m ²)
Description	Type	Construction		
Heat Loss Floor 1	Ground Floor - Solid	Slab on ground, screed over insulation	0.12	37.40

12.0 Opening Types

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Designed)



Description	Data Source	Type	Glazing	Glazing Gap	Argon Filled	G-value	Frame Type	Frame Factor	U Value (W/m ² K)
Door	Manufacturer	Half Glazed Door	Double Low-E Soft 0.1			0.63		0.70	1.20
Windows	Manufacturer	Window	Double Low-E Soft 0.1			0.63		0.70	1.00
Roof lanterns	Manufacturer	Roof Window	Double Low-E Soft 0.05			0.63		0.70	1.00

13.0 Openings

Name	Opening Type	Location	Orientation	Curtain Type	Overhang Ratio	Wide Overhang	Width (m)	Height (m)	Count	Area (m ²)	Curtain Closed
D1	Half Glazed Door	[1] External Wall 1	South West							1.90	
W1	Window	[1] External Wall 1	South West	None	0.00					2.50	
W2	Window	[1] External Wall 1	South West	None	0.00					2.00	
D2 Glazed Doors	Window	[1] External Wall 1	North East	None	0.00					3.20	
RL1	Roof Window	[1] External Roof Terrace	North East	None						1.20	
RL3	Roof Window	[2] Flat Roof Top Floor	South West	None						1.50	

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)	0.54	0.300	No
Table K1 - Approved	E3 Sill	0.30	0.040	No
Table K1 - Approved	E4 Jamb	1.32	0.050	No
Table K1 - Approved	E5 Ground floor (normal)	0.82	0.160	No
Table K1 - Default	E14 Flat roof	0.37	0.080	No
Table K1 - Approved	E16 Corner (normal)	0.20	0.090	No

Y-value W/m²K

18.0 Pressure Testing

Designed AP₅₀ m³/(h.m²) @ 50 Pa

Property Tested ?

As Built AP₅₀ m³/(h.m²) @ 50 Pa

19.0 Mechanical Ventilation

Summer Overheating

Windows open in hot weather

Cross ventilation possible

Night Ventilation

Air change rate

Mechanical Ventilation

Mechanical Ventilation System Present

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				2
Number of passive vents				0
Number of flueless gas fires				0

21.0 Fixed Cooling System

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Designed)



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	Database	
Percentage of Heat	100	%
Database Ref. No.	18123	
Fuel Type	Mains gas	
Main Heating	BGW	
SAP Code	104	
In Winter	90.5	
In Summer	87.3	
Controls	CBI Time and temperature zone control	
PCDF Controls	0	
Delayed Start Stat	Yes	
Sap Code	2110	
Flue Type	Balanced	
Fan Assisted Flue	Yes	
Is MHS Pumped	Pump in heated space	
Heat Emitter	Radiators and Underfloor	
Underfloor Heating	Yes - Pipes in Wood	
Flow Temperature	<= 35°C	
Combi boiler type	Standard Combi	
Combi keep hot type	None	

25.0 Main Heating 2

None

Community Heating

None

28.0 Water Heating

HWP From main heating 1	HWP From main heating 1
Water Heating	Main Heating 1
Flue Gas Heat Recovery System	Yes
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

28.1 Flue Gas Heat Recovery System

SUMMARY FOR INPUT DATA

Calculation Type: New Build (As Designed)



29.0 Hot Water Cylinder

None

Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

	Typical Cost	Typical savings per year	Ratings after improvement	
			SAP rating	Environmental Impact
Solar water heating	£4,000 - £6,000	£26	B 85	
	Typical Cost	Typical savings per year	Ratings after improvement	
Solar photovoltaic panels, 2.5 kWp	£3,500 - £5,500	£303	SAP rating	Environmental Impact
			A 97	