

# SUMMARY FOR INPUT DATA

## Calculation Type: New Build (As Designed)

Property Reference	Withington Step Places, 007		Issued on Date	28/09/2020
Assessment Reference	007	Prop Type Ref	007	
Property				

SAP Rating	86 B	DER	21.19	TER	28.48
Environmental	88 B	% DER<TER	25.60		
CO <sub>2</sub> Emissions (t/year)	0.83	DFEE	43.23	TFEE	45.09
General Requirements Compliance	Pass	% DFEE<TFEE	4.13		

Assessor Details	Mr. Thomas Claffey, TWC Consulting (Sustainable Prop. Consultants) Ltd, Tel: 01455883250, t.claffey@twcconsulting.com	Assessor ID	W747-0001
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Client	
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Orientation	South West
Property Tenure	Owner-occupied
Transaction Type	New dwelling
Terrain Type	Urban
1.0 Property Type	Flat, End-Terrace
2.0 Number of Storeys	1
3.0 Date Built	2020
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:	13.95 m	48.64 m <sup>2</sup>	3.15 m

7.0 Living Area	21.20	m <sup>2</sup>
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8.0 Thermal Mass Parameter	Simple calculation - Medium	
Thermal Mass	250.00	kJ/m <sup>2</sup> K

#### 9.0 External Walls

Description	Type	U-Value (W/m <sup>2</sup> K)	Gross Area (m <sup>2</sup> )	Nett Area (m <sup>2</sup> )
External Wall 1	Cavity Wall	0.25	43.94	35.83

#### 9.1 Party Walls

Description	Type	Construction	U-Value (W/m <sup>2</sup> K)	Area (m <sup>2</sup> )
Heated Corridor	Filled Cavity with Edge Sealing		0.00	22.37
Party Wall	Filled Cavity with Edge Sealing		0.00	21.58

#### 10.1 Party Ceilings

Description	Construction	Area (m <sup>2</sup> )

#### 12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Argon Filled	G-value	Frame Type	Frame Factor	U Value (W/m <sup>2</sup> K)
DG Units	Manufacturer	Window	Double Low-E Soft 0.1			0.63		0.70	1.40

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### 13.0 Openings

Name	Opening Type	Location	Orientation	Curtain Type	Overhang Ratio	Wide Overhang	Width (m)	Height (m)	Count	Area (m <sup>2</sup> )	Curtain Closed
Rear elevation	Window	[1] External Wall 1	North East	None	0.00					8.11	

### 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)	3.49	0.300	No
Table K1 - Approved	E3 Sill	3.49	0.040	No
Table K1 - Approved	E4 Jamb	9.30	0.050	No
Table K1 - Approved	E7 Party floor between dwellings (in blocks of flats)	13.95	0.070	No
Table K1 - Approved	E16 Corner (normal)	3.15	0.090	No
Table K1 - Approved	E17 Corner (inverted – internal area greater than external area)	3.15	-0.090	No
Table K1 - Approved	E18 Party wall between dwellings	3.15	0.060	No
Table K1 - Default	P3 Party wall - Intermediate floor between dwellings (in blocks of flats)	13.95	0.000	No

Y-value

W/m<sup>2</sup>K

### 18.0 Pressure Testing

Designed AP<sub>50</sub>

m<sup>3</sup>/(h.m<sup>2</sup>) @ 50 Pa

Property Tested ?

As Built AP<sub>50</sub>

m<sup>3</sup>/(h.m<sup>2</sup>) @ 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

Approved Installation

Mechanical Ventilation data Type

Type

MV Reference Number

Configuration

MVHR Duct Insulated

Manufacturer SFP

Duct Type

MVHR Efficiency

Wet Rooms

### 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

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Number of passive vents 0  
 Number of flueless gas fires 0

**21.0 Fixed Cooling System**

### 22.0 Lighting

#### Internal

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

#### External

External lights fitted

**23.0 Electricity Tariff**

**24.0 Main Heating 1**

Percentage of Heat  %  
 Database Ref. No.   
 Fuel Type   
 Main Heating   
 SAP Code   
     In Winter   
     In Summer   
 Controls   
 PCDF Controls   
 Sap Code   
 Is MHS Pumped   
 Heat Emitter   
 Flow Temperature

**25.0 Main Heating 2**

Community Heating

**28.0 Water Heating**

Water Heating   
 Flue Gas Heat Recovery System   
 Waste Water Heat Recovery Instantaneous System 1   
 Waste Water Heat Recovery Instantaneous System 2   
 Waste Water Heat Recovery Storage System   
 Solar Panel   
 Water use <= 125 litres/person/day   
 SAP Code   
 Immersion Only Heating Hot Water

**29.0 Hot Water Cylinder**

Cylinder Stat   
 Cylinder In Heated Space   
 Independent Time Control

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## Calculation Type: New Build (As Designed)

Insulation Type	Measured Loss	
Cylinder Volume	200.00	L
Loss	1.56	kWh/day
Pipes insulation	Fully insulated primary pipework	
<b>31.0 Thermal Store</b>	None	

### Recommendations

#### Lower cost measures

None

#### Further measures to achieve even higher standards

None