

## Summary Information

**Property Reference:** 444577 Flat 2  
**Survey Reference:** 001

**Issued on Date:** 22.Oct.2020  
**Prop Type Ref:**

**Property:** George Street, Richmond

**SAP Rating:** 71 C **CO2 Emissions (t/year):** 1.67 **DER:** 46.15 Pass **Reduction:** 10.1% **FEE:** 54.8 **ZC8:** 0.00  
**Environmental:** 73 C **General Requirements Compliance:** Pass **TER:** 51.33 **HLP:** 1.49 **Energy cost:** £ 694

**CfSH Results** **Version:** **ENE1 Credits:** N/A **ENE2 Credits:** N/A **ENE7 Credits:** N/A **CfSH Level:** N/A

**Surveyor:** Raymond McGurk, Tel: 0141 375 1480

**Surveyor ID:** e192-0001

**Address:**

**Client:**

**Software Version:** Elmhurst Energy Systems SAP2009 Calculator (Design System) version 4.04r04

**SAP version:** SAP 2009, **Regs Region:** England and Wales (Part L1A 2010), **Calculation Type:** New Dwelling As Designed

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

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**Orientation** South West  
**1.0 Property Type** Flat, End-Terrace  
**2.0 Number of Storeys** 1  
**3.0 Date Built** 2020  
**3.0 Property Age Band**  
**4.0 Sheltered Sides** 3  
**5.0 Sunlight/Shade** Average or unknown

#### 6.0 Measurements

	Internal Perimeter	Internal Floor Area	Average Storey Height
Ground Floor:	30.12	38.43	3.56

**7.0 Living Area** 33.87

**8.0 Thermal Mass Parameter** Simple calculation - Low

#### 9.0 External Walls

Description	Construction	U-Value	Element	Kappa	Gross Area	Nett Area
External Wall	Timber framed wall (one layer of plasterboard)	0.18		9.00	107.23	97.51

#### 10.1 Party Ceilings

Description	Construction	Element	Kappa	Area
Party Ceiling	Other		0	38.43

#### 11.1 Party Floors

Description	Construction	Element	Kappa	Area
Party Floor	Other		0	38.43

#### 12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Argon Filled	Solar Trans	Frame Type	Frame Factor	U value
Window	BFRC data	Window	Double glazed			0.86			1.20
Door	BFRC data	Solid Door							1.20

#### 13.0 Openings

Name	Opening Type	Location	Orientation	Curtain Type	Overhang Ratio	Wide Overhang	Width	Height	Count	Area	Curtain Closed
Opening 1	Window - Window	External Wall	South West	None	0	No	0	0	0	5.94	0
Opening 2	Solid Door - Door	External Wall	North East	None	0	No	0	0	0	3.78	0

**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

Source Type	Bridge Type	Length	Psi	Imported
Independently assessed	E2 Other lintels (including other steel lintels)	4.50	0.037	Yes
Independently assessed	E3 Sill	2.70	0.033	Yes

Independently assessed	E4 Jamb				13.00	0.031	Yes
Independently assessed	E7 Intermediate floor between dwellings (in blocks of flats)				30.12	0.063	Yes
Independently assessed	E16 Corner (normal)				14.24	0.038	No
Independently assessed	E17 Corner (inverted - internal area greater than external area)				7.12	-0.029	No
Independently assessed	E18 Party wall between dwellings				3.56	0.086	No
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18.0	Pressure Testing	Yes					
	Designed q50	4.50					
	Property Tested ?						
	As Built q50						
	Same As Designed ?						
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19.0	Mechanical Ventilation						
	Mechanical Ventilation System	No					
	Present						
	Approved Installation						
	Windows open in hot weather	Windows fully open					
	Cross ventilation possible	No					
	Night Ventilation	No					
	Air change rate	4.00					
	Mechanical Ventilation data Type						
	Type						
	MV Reference Number						
	Configuration						
	MVHR Duct Insulated						
	Manufacturer SFP						
	Duct Type						
	MVHR Efficiency						
	Wet Rooms						
	Brand, Model						
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		
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21.0	Cooling System	No					
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22.0	Lighting						
	Internal						
	Total number of light fittings	5					
	Total number of L.E.L. fittings	5					
	Percentage of L.E.L. fittings	100.00					
	External						
	External lights fitted	No					
	Light and motion sensors						
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23.0	Electricity Tariff	Standard					
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24.0	Heating Systems						
	Main Heating 1	SAP Table					
	Description						
	Percentage of Heat	100.00					
	Main Heating 2	None					
	Description						
	Percentage of Heat						
	Community Heating						
	Secondary Heating						
	Water Heating	Main Heating 1					
	Flue Gas Heat Recovery System	No					
	Waste Water Heat Recovery System	No					
1	Waste Water Heat Recovery System	No					
2	Solar Panel	No					
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25.0	Main Heating 1						
	Database Ref. No.						
	Fuel Type						
	Main Heating	Electricity BEE Direct-acting boiler					
	TestMethod						
	SAP Code	191					
	Efficiency ( SAP Table ) %	100					
	In Winter						
	In Summer						
	Model Name						

Manufacturer	
Controls	CBI Time and temperature zone control
Delayed Start Stat	Yes
Sap Code	2110
Burner Control	
Boiler Compensator	None
HETAS approved System	
Oil Pump Inside	
FI Case	
FI Water	
Flue Type	
Smoke Control Area	
Fan Assisted Flue	
Is MHS Pumped	Pump in heated space
Heat Emitter	Radiators
Underfloor Heating	
Electric CPSU Temperature	
Combi boiler type	
Combi keep hot type	
Combi store type	
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27.0 Community Heating	
Space Community Heating	
Distribution Loss	
Distribution Loss Value	
Controls	
SAP Code	
Water Community Heating	
Distribution Loss	
Distribution Loss Value	
Charging Linked To Heat Use	
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28.0 Secondary Heating	
Description	
SHS efficiency %	
SAP Code	
HETAS Approved System	
Smoke Control Area	
Test Method	
Manufacturer	
Model Name	
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29.0 Water Heating	HWP From main heating 1
Water use <= 125 litres/person/day	No
SAP Code	901
Immersion Heater	Dual
Summer Immersion	
Supplementary Immersion	
Immersion Only Heating Hot Water	
29.1 Flue Gas Heat Recovery System	
Database ID	
Brand Model	
Details	
29.2 Waste Water Heat Recovery System	
Total rooms with shower and/or bath	
30.0 Hot Water Cylinder	Hot Water Cylinder
Cylinder Stat	
Cylinder In Heated Space	Yes
Independent Time Control	
Insulation Type	Foam
Insulation Thickness	80
Cylinder Volume	150
Loss (kwh/day)	
Pipes insulation	
In Airing Cupboard	
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31.0 Solar Panel	
Solar Panel Area	
Area Type	
Panel Type	
n0, a1, A/G ratio	
Orientation	
Elevation	
Overshading	
Solar Storage Volume	
Pump electrically powered	
Combined Cylinder	
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32.0 Thermal Store	None
Thermal Store Pipework	within a single casing

33.0 Photovoltaic Unit  
Apportioned KWh/Year

34.0 Wind Turbines

Terrain Type                      Urban

Wind Turbines

Count

Apportioned Kwh/year

Rotor Diameter

Hub Height

35.0 Small-scale Hydro

Electricity Generated

Description

Apportioned kWh/Year

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Recommendations

None

Further measures to achieve even higher  
standards

None