

## Summary Information

**Property Reference:** 444577 Flat 7  
**Survey Reference:** 002

**Issued on Date:** 29.Oct.2020  
**Prop Type Ref:**

**Property:** George Street, Richmond

**SAP Rating:** 81 B **CO2 Emissions (t/year):** 1.19 **DER:** 20.08 Pass **Reduction:** 22.4% **FEE:** 61.3 **ZC8:** 0.00  
**Environmental:** 85 B **General Requirements Compliance:** Pass **TER:** 25.89 **HLP:** 1.46 **Energy cost:** £ 368

**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:	31.29	62.96	3.94

**7.0 Living Area** 37.87

**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	123.28	111.05

#### 9.1 Party walls

Description	Construction	Element	Kappa	Area
Party Wall	Other		0.00	53.58

#### 10.0 External Roofs

Description	Construction	U-Value	Element	Kappa	Gross Area	Nett Area
External Roof	Plasterboard, insulated flat roof	0.12		9	62.96	62.96

#### 11.1 Party Floors

Description	Construction	Element	Kappa	Area
Party Floor	Other		0	62.96

#### 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	North West	None	0	No	0	0	0	6.44	0
Opening 2	Solid Door - Door	External Wall	South West	None	0	No	0	0	0	3.78	0
Opening 3	Window - Window	External Wall	North East	None	0	No	0	0	0	2.01	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)	7.60	0.037	Yes
Independently assessed	E3 Sill	5.80	0.033	No
Independently assessed	E4 Jamb	18.60	0.031	Yes
Independently assessed	E7 Intermediate floor between dwellings (in blocks of flats)	31.29	0.063	Yes
Independently assessed	E14 Flat roof	31.29	0.06	Yes
Independently assessed	E16 Corner (normal)	19.70	0.038	No
Independently assessed	E17 Corner (inverted - internal area greater than external area)	11.82	-0.029	No
Independently assessed	E18 Party wall between dwellings	7.88	0.086	Yes
Independently assessed	P4 Party wall - Roof (insulation at ceiling level)	4.90	0.09	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				
23.0 Electricity Tariff	Standard			
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24.0 Heating Systems				
Main Heating 1	Database			
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	Yes			
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.	16661			
Fuel Type	Mains gas			

Main Heating	Mains gas BGW Post 98 Combi condens. with auto ign.
TestMethod	
SAP Code	104
Efficiency ( Split Efficiencies ) %	
Efficiency ( Split Efficiencies ) %	
In Winter	89.7
In Summer	87
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	Balanced
Smoke Control Area	
Fan Assisted Flue	Yes
Is MHS Pumped	Pump in heated space
Heat Emitter	Radiators
Underfloor Heating	
Electric CPSU Temperature	
Combi boiler type	Standard Combi
Combi keep hot type	None
Combi store type	

## 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	

## 28.0 Secondary Heating

Description	
SHS efficiency %	
SAP Code	
HETAS Approved System	
Smoke Control Area	
Test Method	
Manufacturer	
Model Name	

## 29.0 Water Heating

Water use <= 125 litres/person/day	HWP From main heating 1
SAP Code	No
Immersion Heater	901
Summer Immersion	
Supplementary Immersion	
Immersion Only Heating Hot Water	

## 29.1 Flue Gas Heat Recovery System

Database ID	60001
Brand Model	Zenex, GasSaver
Details	Year: + current
	Applicable Fuel: 1
	Boiler Types: RCSK
	Heat Store Volume: 0
	PV module: 0

## 29.2 Waste Water Heat Recovery

System

Total rooms with shower and/or bath

## 30.0 Hot Water Cylinder

Cylinder Stat	None
Cylinder In Heated Space	
Independent Time Control	
Insulation Type	
Insulation Thickness	
Cylinder Volume	
Loss (kwh/day)	
Pipes insulation	
In Airing Cupboard	

## 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