

Summary Information Property Reference: 444577 Flat 6 Issued on Date: 22.Oct.2020 Survey Reference: 001 Prop Type Ref: George Street, Richmond Property: 71 C CO2 Emissions (t/year): 1.78 **DER:**44.26 Pass FEE: 52.1 ZC8: SAP Rating: Reduction: 1.4% 0.00 Environmental: 73 C General Requirements Compliance: Pass TER: 44.87 HLP: 1.35 Energy cost: £ 734 CfSH Results ENE1 Credits: N/A ENE2 Credits: N/A ENE7 Credits: N/A CfSH Level: N/A Version: 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) Page 1 of 4 Orientation South West 1.0 Property Type Flat, End-Terrace 2.0 Number of Storeys 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 15 36 43 17 3.94 7.0 Living Area 34.84 8.0 Thermal Mass Parameter Simple calculation - Low 9.0 External Walls **U-Value** Description Construction Element Kappa Gross Area Nett Area Timber framed wall (one layer of External Wall 0.18 9.00 60.52 52.74 plasterboard) 9.1 Party walls Construction Description Flement Area Kappa Party Wall Other 0.00 56.66 10.0 External Roofs **U-Value** Description Construction Element Kappa Gross Area Nett Area External Roof Plasterboard, insulated flat roof 0.12 9 43.17 43.17 11.1 Party Floors Description Construction Element Kappa Area Party Floor Other 0 43.17 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 Overhang Wide Curtain Orientation Curtain Type Name Opening Type Location Width Height Count Area Ratio Overhang Closed Opening 1 Window - Window External Wall South East None 0 No 0 0 0 4.00 0 Opening 2 Solid Door - Door External Wall South West 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

SUMMARY FOR INPUT DATA FOR New Build (As Designed)

Source Type	Bridge Type		Length	Psi	Imported
Independently assessed	E2 Other linte	s (including other steel lintels)	3.40	0.037	No
	E3 Sill	(1.60	0.033	Yes
	E4 Jamb		9.20	0.031	Yes
		te floor between dwellings (in blocks of flats)	15.36	0.063	Yes
. ,	E14 Flat roof		15.36	0.06	Yes
		ormal)	7.88	0.038	Yes
	E16 Corner (normal) E17 Corner (inverted - internal area greater than external area)		7.88 3.94	-0.029	No
		between dwellings	0.09	0.12	No
Independently assessed 18.0 Pressure Testing	P4 Party wall	Roof (insulation at ceiling level) Yes	14.38	0.09	No
Designed q50 Property Tested ? As Built q50 Same As Designed ?		4.50			
19.0 Mechanical Ventilation		N1-			
Mechanical Ventilation S Present	System	No			
Approved Installation	oothor	Windows fully open			
Windows open in hot we Cross ventilation possible		Windows fully open No			
Night Ventilation		No			
Air change rate		4.00			
Mechanical Ventilation of	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	s, Flues				
	MH	S 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	6	0			
21.0 Cooling System		No			
22.0 Lighting					
Internal					
Total number of light Total number of L.E.		4 4			
Percentage of L.E.L		100.00			
External					
External lights fitted		No			
Light and motion ser	nsors	Otras dand			
23.0 Electricity Tariff		Standard			
24.0 Heating Systems Main Heating 1		SAPTable			
Description		400.00			
Percentage of Heat		100.00 None			
Main Heating 2 Description		None			
Percentage of Heat					
Community Heating					
Secondary Heating					
Water Heating Flue Gas Heat Recovery	v Svetom	Main Heating 1 No			
Waste Water Heat Recovery					
1 Waste Water Heat Reco					
2	Svery System				
Solar Panel		No			
25.0 Main Heating 1 Database Ref. No.					
Fuel Type					

SUMMARY FOR INPUT DATA FOR New Build (As Designed)

Main Heating	Electricity BEE Direct-acting boiler
TestMethod	
SAP Code	191
Efficiency (SAP Table) % In Winter	100
In Summer	
Model Name	
Manufacturer	
Controls	CBI Time and temperature zone control
Delayed Start Stat Sap Code	Yes 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	
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	HWP From main heating 1
Water use <= 125 litres/person/day SAP Code	No 901
Immersion Heater	Dual
Summer Immersion	
Suplementary 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 Loss (kwh/day)	150
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	
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	
Recommendations	
None	

Further measures to achieve even higher standards

None