

Building Regulation Compliance

Property Reference: 4908-0001-1013a

Issued on Date: 05.Jul.2012

Survey Reference: 1013a

Prop Type Ref:

Property: Apartment 9 The Watchmakers, 22, Lord Street, COVENTRY, CV5 8DA,

SAP Rating: 83 B **CO2 Emissions (t/year):** 1.15 **DER:** 17.16 Pass **Reduction:** 0.2% **FEE:** 41.2 **ZC8:** 0.00
Environmental: 87 B **General Requirements Compliance:** Pass **TER:** 17.19 **HLP:** 1.03 **Energy cost:** £ 339

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

Surveyor: Alison Cleaver, Tel: 01858434392

Address: Overfield Avenue, Market Harborough, Leics, LE16 7LS

Client:

Software Version: Elmhurst Energy Systems SAP2009 Calculator (Design System) version 3.06r13

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

SUMMARY FOR INPUT DATA FOR New Build (As Built)

1 TER and DER

Fuel for main heating:	Mains gas	
Fuel factor:	1.00 (mains gas)	
Target Carbon Dioxide Emission Rate (TER)	17.19 kg/m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	17.16 kg/m ²	OK

2 Fabric U-values

Element	Average	Highest	
External wall	0.26 (max. 0.30)	0.26 (max. 0.70)	OK
Roof	0.14 (max. 0.20)	0.14 (max. 0.35)	OK
Openings	1.40 (max. 2.00)	1.40 (max. 3.30)	OK

2a Thermal bridging

Thermal bridging calculated using user-specified y-value of 0.080

3 Design air permeability

Design air permeability at 50 pascals:	3.09	
Maximum	10.0	OK

4 Heating efficiency

Main heating system:	Boiler system with radiators or underfloor - Mains gas Data from database Main Combi 25 Eco Combi boiler Efficiency: 89.0% SEDBUK2009 Minimum: 88.0%	OK
Secondary heating system:	None	

5 Cylinder insulation

Hot water storage	No cylinder	
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6 Controls

Space heating controls:	Time and temperature zone control	OK
Hot water controls:	No cylinder	
Boiler interlock	Yes	OK

7 Low energy lights

Percentage of fixed lights with low-energy fittings:	100%	
Minimum	75%	OK

8 Mechanical ventilation

Not applicable

9 Summertime temperature

Overheating risk (Midlands):	Not significant	OK
Based On:		
Overshading:	Average	

Windows facing North:	0.66 m ² , No overhang
Windows facing South:	2.16 m ² , No overhang
Windows facing West:	6.12 m ² , No overhang
Ventilation rate:	6.00
Blinds/curtains:	None

10 Key features

Window U-value	1.40 W/m ²
Party wall U-value	0.00 W/m ²
Party wall U-value	0.00 W/m ²
Design air permeability	3.1 m ³ /m ²

Summary Information

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1.0 Property Type Flat, End-Terrace
 2.0 Number of Storeys 1
 3.0 Date Built 2011
 3.0 Property Age Band
 4.0 Sheltered Sides 2
 5.0 Sunlight/Shade Average or unknown
 6.0 Measurements

	Internal Perimeter	Internal Floor Area	Average Storey Height
Ground Floor:	25.1	74.99	2.37

7.0 Living Area 22.68

8.0 Thermal Mass Parameter Simple calculation

9.0 External Walls						
Description	Construction	U-Value	Element	Kappa	Gross Area	Nett Area
External Wall 1	Cavity wall : plasterboard on dabs, AAC block, filled cavity, any outside structure	0.26		60.00	59.48	50.54

9.1 Party walls				
Description	Construction	Element	Kappa	Area
part	Plasterboard on dabs mounted on cement render on both sides, AAC blocks, cavity		45.00	19.38
part	Other		0.00	4.64

10.0 External Roofs						
Description	Construction	U-Value	Element	Kappa	Gross Area	Nett Area
External Roof 1	Plasterboard, insulated at ceiling level	0.14		9	74.99	74.99

11.1 Party Floors				
Description	Construction	Element	Kappa	Area
Party Floor 1	Timber I-joists, carpeted		20	74.99

12.0 Opening Types									
Description	Data Source	Type	Glazing	Glazing Gap	Argon Filled	Solar Trans	Frame Type	Frame Factor	U value
Opening Type 2	Manufacturer	Window	Double Low-E Soft 0.05			0.63		0.70	1.40

13.0 Openings											
Name	Opening Type	Location	Orientation	Curtain Type	Overhang Ratio	Wide Overhang	Width	Height	Count	Area	Curtain Closed
Opening 2	Window - Opening Type 2	External Wall 1	West	None	0	No	0	0	0	6.12	0
Opening 3	Window - Opening Type 2	External Wall 1	North	None	0	No	0	0	0	0.66	0
Opening 3	Window - Opening Type 2	External Wall 1	South	None	0	No	0	0	0	1.08	0
Opening 4	Window - Opening Type 2	External Wall 1	South	None	0	No	0	0	0	1.08	0

14.0 Conservatory None

15.0 Draught Proofing	100			
16.0 Draught Lobby	Yes			
17.0 Thermal Bridging	User Input			
Y-value	0.08			
Description	accredited			
18.0 Pressure Testing	Yes			
Designed q50	4.00			
Property Tested ?	Yes			
As Built q50	3.09			
Same As Designed ?				
19.0 Mechanical Ventilation				
Mechanical Ventilation System Present	No			
Approved Installation				
Windows open in hot weather	Windows fully open			
Cross ventilation possible	Yes			
Night Ventilation	No			
Air change rate	6.00			
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
21.0 Cooling System	No			
22.0 Lighting				
Internal				
Total number of light fittings	8			
Total number of L.E.L. fittings	8			
Percentage of L.E.L. fittings	100.00			
External				
External lights fitted	No			
Light and motion sensors				
23.0 Electricity Tariff	Standard			
24.0 Heating Systems				
Main Heating 1	Database			
Description	main heating			
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			
25.0 Main Heating 1				
Database Ref. No.	15701			
Fuel Type	Mains gas			
Main Heating	BGW			
TestMethod				
SAP Code	104			
Efficiency (Split Efficiencies) %				
In Winter	89.9			
In Summer	79.8			
Model Name				
Manufacturer				
Controls	CBI			
Delayed Start Stat	Yes			
Sap Code	2110			
Burner Control				
Boiler Compensator	WeatherCompensator			

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	
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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	
<hr/>	
28.0 Secondary Heating	
Description	
SHS efficiency %	
SAP Code	
HETAS Approved System	
Smoke Control Area	
Test Method	
Manufacturer	
Model Name	
<hr/>	
29.0 Water Heating	HWP
Water use <= 125 litres/person/day	Yes
SAP Code	901
Immersion Heater	
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	None
Cylinder Stat	
Cylinder In Heated Space	
Independent Time Control	
Insulation Type	
Insulation Thickness	
Cylinder Volume	
Loss (kwh/day)	
Pipes insulation	
In Airing Cupboard	
<hr/>	
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

Recommendations
None

Further measures to achieve even higher
standards
None