

Project Information

Building type Ground-floor maisonette

Reference

Date 11 September 2019

Project TYPE4_5BEDTH_S_BeLean

Cardinal Court

Woking

GU22

REGULATION COMPLIANCE REPORT - Approved Document L1A, 2012 Edition, England

assessed by program JPA Designer version 6.04a1, printed on 13/9/2019 at 11:31:08

New dwelling as designed**1 TER and DER**

Fuel for main heating system: Gas (mains) (fuel factor = 1.00)

Target Carbon Dioxide Emission Rate TER = 16.14

Dwelling Carbon Dioxide Emission Rate DER = 17.67

Excess emissions = 1.52kg/m² (9.4%)

Fail

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE) TFEE = 59.5

Dwelling Fabric Energy Efficiency (DFEE) DFEE = 53.1

OK

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

2b Fabric U-values

<u>Element</u>	<u>Average</u>	<u>Highest</u>	
Wall	0.13 (max. 0.30)	0.13 (max. 0.70)	OK
Floor	0.13 (max. 0.25)	0.13 (max. 0.70)	OK
Roof	0.13 (max. 0.20)	0.13 (max. 0.35)	OK
Openings	1.42 (max. 2.00)	1.60 (max. 3.30)	OK

3 Air permeability

Air permeability at 50 pascals: 3.00 OK

Maximum : 10.00

4 Heating efficiency

Main heating system:

Boiler and radiators, mains gas

Source of efficiency: default from Table 4 of SAP document

SAP default data default from Table 4 of SAP document

Efficiency: 84.0%

Minimum: 88.0%

Fail

Fail

Secondary heating system:

None -

5 Cylinder insulation

Hot water storage

Manufacturer's declared cylinder loss factor (kWh/day) 1.00

Permitted by DBSCG 2.56

Primary pipework insulated

Yes

OK

OK

6 Controls

(Also refer to "Domestic Building Services Compliance Guide" by the DCLG)

Space heating controls

Programmer + at least 2 room thermostats

Cylinderstat - Yes

Independent timer for DHW - Yes

Boiler Interlock

Yes

Fail

OK

OK

OK

7 Low energy lights

Percentage of fixed lights with low-energy fittings: 100.0%

Minimum: 75.0%

OK

8 Mechanical ventilation

Specific fan power : 0.79 Efficiency : 92.00

Maximum : 1.5W/(litre/sec) and efficiency not less than 70%

OK

9 Summertime temperature

Overheating risk (Thames Valley):

Not significant

OK

OK

Based on:

Thermal mass parameter : 100.00

Overshading : Average or unknown (20-60 % sky blocked)

Orientation : North

Ventilation rate : 8.00

Blinds/curtains :

None with blinds/shutters closed 0.00% of daylight hours

10 Key features

Pitched roofs insulated between joists U-value 0.13 W/m²K

Walls U-value 0.13 W/m²K

Design air permeability 3.0 m³/h.m²

Predicted Energy Assessment

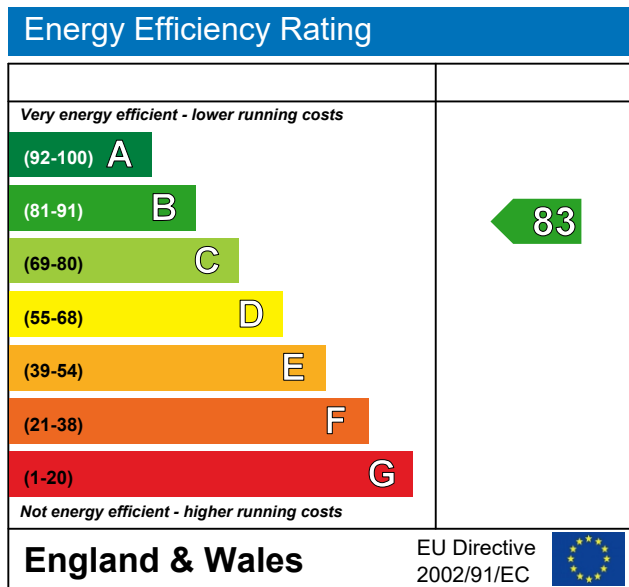
TYPE4_5BEDTH_S_BeLean
 Cardinal Court
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Dwelling type:
 Date of assessment:
 Produced by
 Total floor area:

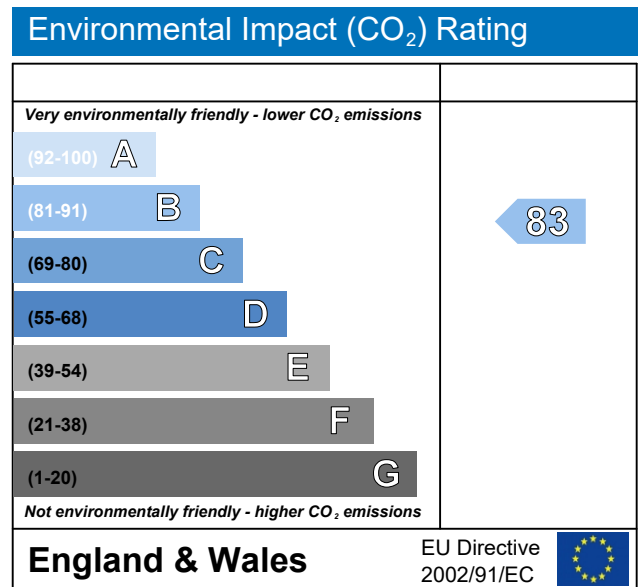
Ground-floor maisonette
 13 September 2019
 Elementa Consulting
 164 m²

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

Energy performance has been assessed using the SAP 2012 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions.



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating the less impact it has on the environment.