Project Information

Building type Ground-floor maisonette

Reference
Date 11 September 2019
Project TYPE_4BEDTH_NW_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 11:29:47

New dwelling as designed

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1 TER and DER

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

Target Carbon Dioxide Emission Rate	TER = 16.50	
Dwelling Carbon Dioxide Emission Rate	DER = 17.71	Fail
Excess emissions = 1.21kg/m² (7.3%)		

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	TFEE = 60.1	
Dwelling Fabric Energy Efficiency (DFEE)	DFEE = 51.1	OK

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

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2b Fabric U-values

Element	Average	Highest	
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	1.44 (max. 2.00)	1.60 (max. 3.30)	OK

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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	Fail
	Efficiency: 84.0%	
	Minimum: 88.0%	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	OK
Primary pipework insulated	Yes		OK

6 Controls

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

Space heating controls	Programmer + at least 2 room thermostats	Fail
	Cylinderstat - Yes	OK
	Independent timer for DHW - Yes	OK
Boiler Interlock	Yes	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 : 0.94 Efficiency : 91.00	
	Maximum : 1.5W/(litre/sec) and efficiency not less than 70%	OK

9 Summertime temperature

Overheating risk (Thames Valley): OK

Not significant OK

Based on:

Thermal mass parameter :	100.00
Overshading :	Average or unknown (20-60 % sky blocked)

Orientation : SouthEast

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

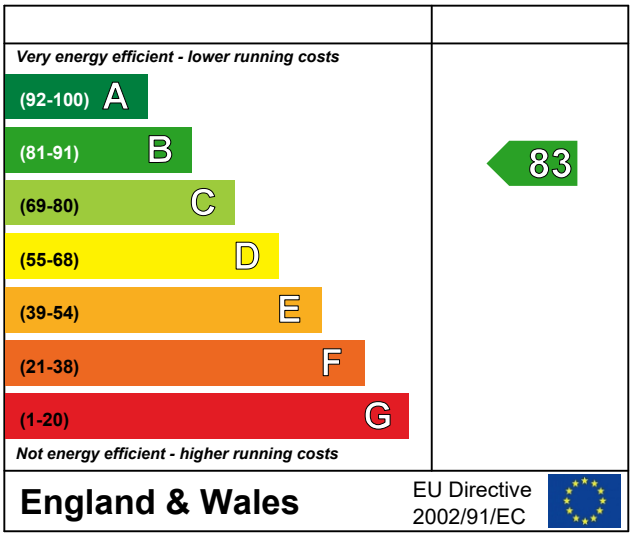
Predicted Energy Assessment

TYPE_4BEDTH_NW_BeLean	Dwelling type:	Ground-floor maisonette
Cardinal Court	Date of assessment:	13 September 2019
Woking	Produced by	Elementa Consulting
GU22	Total floor area:	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.

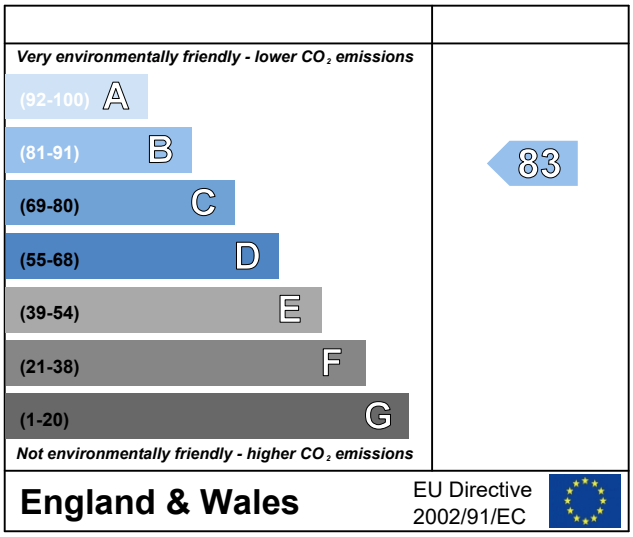
Energy performance has been assessed using the SAP 2012 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO_2) emissions.

Energy Efficiency Rating



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.

Environmental Impact (CO_2) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO_2) emissions. The higher the rating the less impact it has on the environment.