### **Project Information**

Building type Ground-floor maisonette

Reference

Date 11 September 2019

Project TYPE2A\_3BEDTH\_SE\_BeGreen

**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 11:27:42

## New dwelling as designed

1	TER	and	DER
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Fuel for main heating system: Standard tariff (fuel factor = 1.55)

Target Carbon Dioxide Emission Rate TER = 22.13

Dwelling Carbon Dioxide Emission Rate DER = 16.08

OK

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)

Dwelling Fabric Energy Efficiency (DFEE)

TFEE = 49.8

DFEE = 44.4

OK

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	1.45 (max. 2.00)	1.60 (max. 3.30)	OK

#### 3 Air permeability

Air permeability at 50 pascals: 3.00

Maximum: 10.00

#### 4 Heating efficiency

Main heating system:

Air source heat pump, radiators, electric

Mitsubishi Ecodan 11.2 kW

Source of efficiency: from boiler database

Secondary heating system:

None -

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5 Cylinder insulation

Hot water storage No cylinder

**6 Controls** 

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

Space heating controls 2205 Programmer + at least 2 room thermostats

Hot water controls No cylinder

Boiler Interlock No OK

7 Low energy lights

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

Minimum: 75.0% OK

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

Based on:

Thermal mass parameter: 100.00

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

Orientation: NorthWest

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/m<sup>2</sup>K

Walls U-value 0.13 W/m<sup>2</sup>K

Design air permeability 3.0 m<sup>3</sup>/h.m<sup>2</sup>

# **Predicted Energy Assessment**

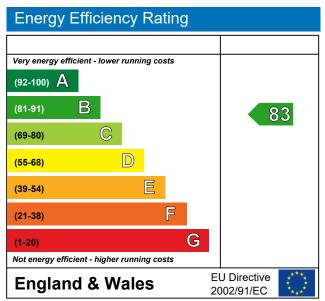
TYPE2A 3BEDTH SE BeGreen Dwelling type: Cardinal Court Woking GU22

Date of assessment: Produced by Total floor area:

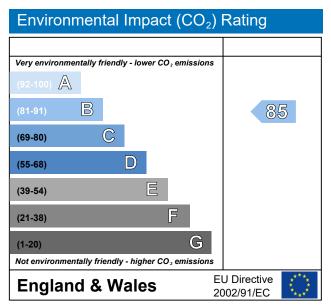
Ground-floor maisonette 13 September 2019 Elementa Consulting 147 m<sup>2</sup>

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<sub>2</sub>) 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 (CO<sub>2</sub>) emissions. The higher the rating the less impact it has on the environment.