

Regulations Compliance Report

Approved Document L1A 2010 edition assessed by Stroma FSAP 2009 program, Version: 1.5.0.63

Printed on 24 March 2014 at 15:25:00

Project Information:

Assessed By: Gary Nicholls (STRO003305)

Building Type: Flat

Dwelling Details:

NEW DWELLING DESIGN STAGE

Site Reference : 40-42 Parker Street

Plot Reference: Flat 2 - new build

Address : Flat 2 - new build, 40-42 Parker Street, London, unknown

Client Details:

Name: Savills

Address : 33 Margaret Street, London, W1G 0JD

This report covers items included within the SAP calculations.

It is not a complete report of regulations compliance.

1 TER and DER

Fuel for main heating system: Electricity

Fuel factor: 1.47 (electricity)

Target Carbon Dioxide Emission Rate (TER) 30.13 kg/m²

Dwelling Carbon Dioxide Emission Rate (DER) 21.36 kg/m² **OK**

2 Fabric U-values

Element	Average	Highest	
External wall	0.24 (max. 0.30)	0.25 (max. 0.70)	OK
Party wall	0.00 (max. 0.20)	-	OK
Floor	(no floor)		
Roof	0.18 (max. 0.20)	0.18 (max. 0.35)	OK
Openings	1.48 (max. 2.00)	1.50 (max. 3.30)	OK

3 Air permeability

Air permeability at 50 pascals	4.00	
Maximum	10.0	OK

4 Heating efficiency

Main Heating system: Heat pumps with radiators or underfloor - electric
Air-to-water heat pump (electric)

Secondary heating system: None

5 Cylinder insulation

Hot water Storage:	Nominal cylinder loss: 1.30 kWh/day Permitted by DBSCG: 1.58 kWh/day	
Primary pipework insulated:	Yes	OK

6 Controls

Space heating controls	Time and temperature zone control	OK
Hot water controls:	Cylinderstat	OK
	Independent timer for DHW	OK

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100.0%	
Minimum	75.0%	OK

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8 Mechanical ventilation

Not applicable

9 Summertime temperature

Overheating risk (Thames valley):

Medium

OK

Based on:

Overshading:

Average or unknown

Windows facing: North West

25.31m², Overhang twice as wide as window, ratio NaN

Windows facing: South East

15.4m², Overhang twice as wide as window, ratio NaN

Roof windows facing: Horizontal

4.2m²

Ventilation rate:

8.00

Blinds/curtains:

None

shutter closed 0% of daylight hours

10 Key features

Air permeability

4.0 m³/m²h

Roof window U-value

1.3 W/m²K

SAP Input

Property Details: Flat 2 - new build

Address: Flat 2 - new build, 40-42 Parker Street, London, unknown
 Located in: England
 Region: Thames valley
 UPRN: na
 Date of assessment: 24 March 2014
 Date of certificate: 24 March 2014
 Assessment type: New dwelling design stage
 Transaction type: New dwelling
 Tenure type: Unknown
 Related party disclosure: No related party
 Thermal Mass Parameter: Indicative Value Medium
 Dwelling designed to use less than 125 litres per Person per day: True

Property description:

Dwelling type: Flat
 Detachment:
 Year Completed: 2014
 Floor Location: Floor area: Storey height:
 Floor 0 46 m² 2.6 m
 Floor 1 42 m² 2.8 m
 Living area: 37 m² (fraction 0.42)
 Front of dwelling faces: North West

Opening types:

Name:	Source:	Type:	Glazing:	Argon:	Frame:
front door	Manufacturer	Solid			Metal
windows front	Manufacturer	Windows	double-glazed	Yes	Metal
windows rear	Manufacturer	Windows	double-glazed	Yes	Metal
rooflight	Manufacturer	Roof Windows	double-glazed	Yes	PVC-U

Name:	Gap:	Frame Factor:	g-value:	U-value:	Area:	No. of Openings:
front door	mm	0.8	0	1.5	1.89	1
windows front	16mm or more	0.8	0.8	1.5	25.31	1
windows rear	16mm or more	0.8	0.8	1.5	15.4	1
rooflight	16mm or more	0.8	0.8	1.3	4.2	1

Name:	Type-Name:	Location:	Orient:	Width:	Height:
front door		wall to common area	South West	0	0
windows front		external wall	North West	0	0
windows rear		external wall	South East	0	0
rooflight		flat roof	Horizontal	0	0

Overshading: Average or unknown

Opaque Elements:

Type:	Gross area:	Openings:	Net area:	U-value:	Ru value:	Curtain wall:	Kappa:
<u>External Elements</u>							
external wall	81.34	40.71	40.63	0.25	0	False	N/A
wall to common area	18.38	1.89	16.49	0.25	0.82	False	N/A
flat roof	57.3	4.2	53.1	0.18	0		N/A
<u>Internal Elements</u>							
<u>Party Elements</u>							
party wall	37.14						N/A

Thermal bridges:

SAP Input

Thermal bridges:	User-defined (individual PSI-values) Y-Value = 0.0538		
	Length	PSI-value	
Approved source	15.5	0.214	Other lintels (including other steel lintels)
Approved source	43.8	0.02	Jamb
Approved source	88	0	Intermediate floor between dwellings
Approved source	33.9	0.04	Flat roof
Approved source	19	0.042	Corner (normal)
Approved source	23.8	0.076	Party wall between dwellings
Approved source	14.1	0	Intermediate floor between dwellings (in blocks of flats)
Approved source	2.4	0.12	Roof (insulation at ceiling level)

Ventilation:

Pressure test:	Yes (As designed)
Ventilation:	Natural ventilation (extract fans)
Number of chimneys:	0
Number of open flues:	0
Number of fans:	3
Number of sides sheltered:	2
Pressure test:	4

Main heating system:

Main heating system:	Central heating systems with radiators or underfloor heating
	Heat pumps
	Fuel: Electricity
	Info Source: SAP Tables
	SAP Table: 204
	Air-to-water heat pump (electric)
	Systems with radiators
	Pump in heat space: Yes

Main heating Control:

Main heating Control:	Time and temperature zone control
	Control code: 2207
	Boiler interlock: Yes

Secondary heating system:

Secondary heating system:	None
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Water heating:

Water heating:	From main heating system
	Water code: 901
	Fuel :Electricity
	Hot water cylinder
	Cylinder volume: 110 litres
	Cylinder insulation: Factory 80 mm
	Primary pipework insulation: True
	Cylinderstat: True
	Cylinder in heated space: True
	Solar panel: False

Others:

Electricity tariff:	standard tariff
In Smoke Control Area:	Unknown
Conservatory:	No conservatory
Low energy lights:	100%
Terrain type:	Dense urban
EPC language:	English
Wind turbine:	No
Photovoltaics:	None
Assess Zero Carbon Home:	No

SAP Input

Predicted Energy Assessment



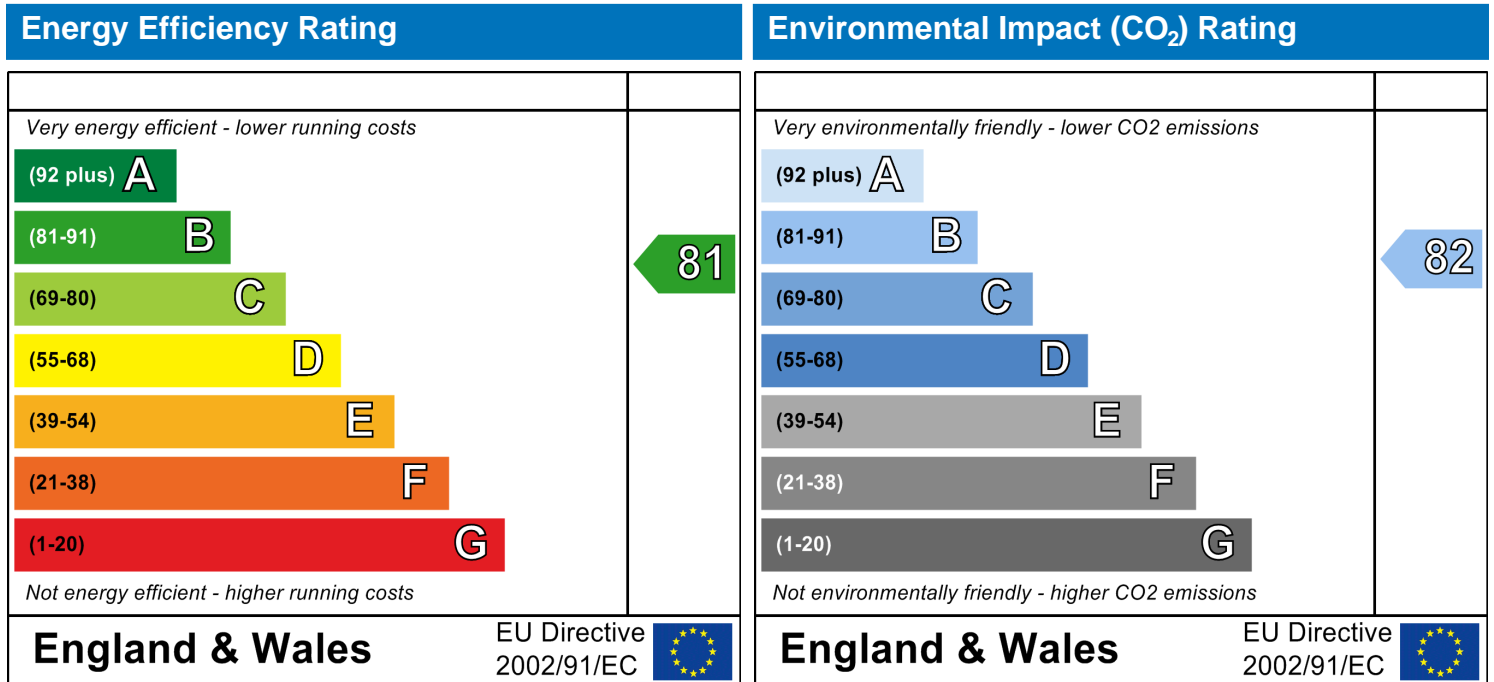
Flat 2 - new build
40-42 Parker Street
London
unknown

Dwelling type:
Date of assessment:
Produced by:
Total floor area:

Top floor Flat
24 March 2014
Gary Nicholls
88 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 2009 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.