Regulations Compliance Report

Approved Document L1A 2010 edition assessed by Stroma FSAP 2009 program, Version: 1.5.0.63
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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 3 - new build

Address : Flat 3 - 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)	33.09 kg/m²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.41 kg/m²	**OK**

2 Fabric U-values

Element	Average	Highest	
External wall	0.25 (max. 0.30)	0.25 (max. 0.70)	**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	5.00	
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):	Slight	**OK**

Based on:

Overshading:	Average or unknown
Windows facing: North West	12.2m², Overhang twice as wide as window, ratio NaN
Windows facing: South East	16.08m², Overhang twice as wide as window, ratio NaN
Roof windows facing: Horizontal	4.1m²
Ventilation rate:	9.00
Blinds/curtains:	None
	shutter closed 0% of daylight hours

10 Key features

Roof window U-value	1.3 W/m²K

SAP Input

Property Details: Flat 3 - new build

Address:	Flat 3 - 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	37 m²	2.8 m

Living area:	37 m² (fraction 0.446)
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	0.76	1.5	12.2	1
windows rear	16mm or more	0.8	0.76	1.5	16.08	1
rooflight	16mm or more	0.8	0.8	1.3	4.1	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		green roof	Horizontal	0	0

Overshading:	Average or unknown

Opaque Elements:

Type:	Gross area:	Openings:	Net area:	U-value:	Ru value:	Curtain wall:	Kappa:
External Elements							
external wall	93.37	28.28	65.09	0.25	0	False	N/A
wall to common area	32.05	1.89	30.16	0.3	0.82	False	N/A
green roof	51.41	4.1	47.31	0.18	0		N/A
Internal Elements							
Party Elements							

Thermal bridges:

SAP Input

Thermal bridges: User-defined (individual PSI-values) Y-Value = 0.0472

	Length	PSI-value	
Approved source	22	0.214	Other lintels (including other steel lintels)
Approved source	35	0.02	Jamb
Approved source	38.8	0	Intermediate floor between dwellings
Approved source	31.8	0.04	Flat roof
Approved source	16.2	0.042	Corner (normal)
Approved source	5.4	-0.09	Corner (inverted)
Approved source	15.6	0.076	Party wall between dwellings
Approved source	10.5	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: 5

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

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

SAP Input

Assess Zero Carbon Home:	No

Predicted Energy Assessment

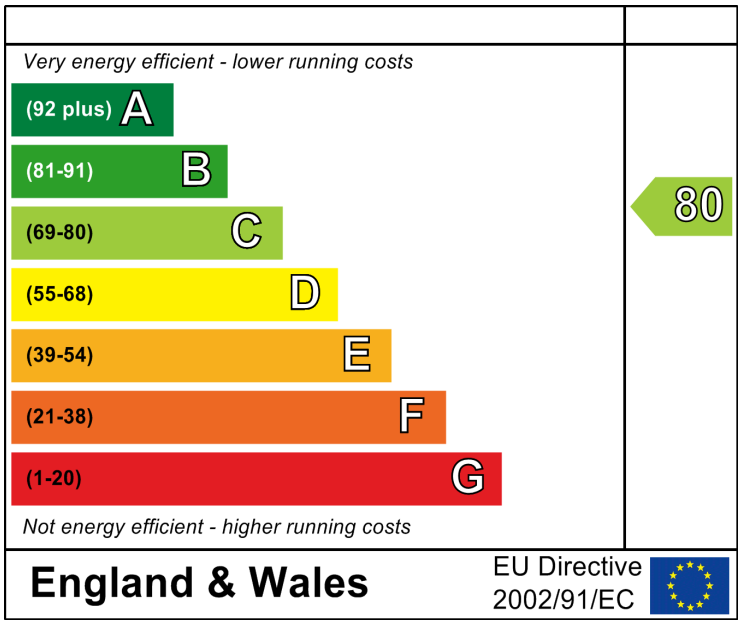
Flat 3 - new build
40-42 Parker Street
London
unknown

Dwelling type: Top floor Flat
Date of assessment: 24 March 2014
Produced by: Gary Nicholls
Total floor area: 83 m²

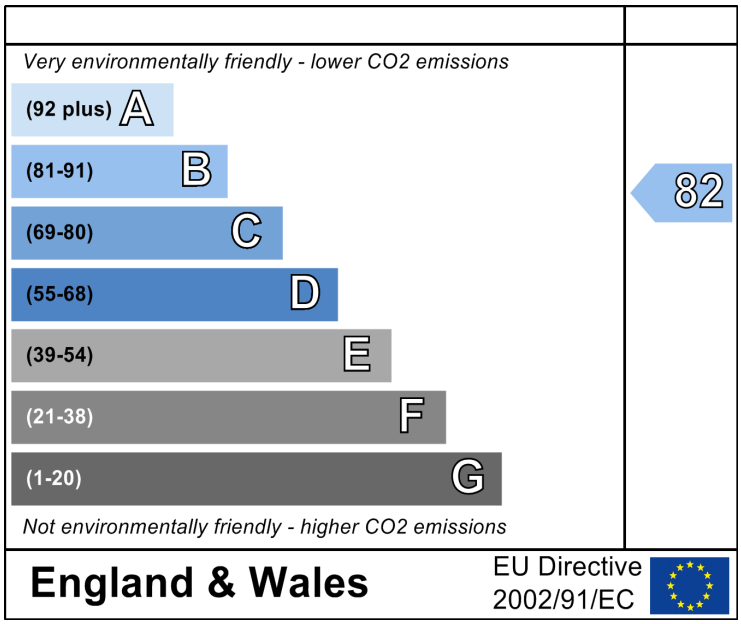
This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about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

Energy Efficiency Rating



Environmental Impact (CO_2) 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.

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