Regulations Compliance Report

Approved Document L1A 2010 edition assessed by Stroma FSAP 2009 program, Version: 1.5.0.11
Printed on 20 November 2012 at 16:19:54

Project Information:

Assessed By: Gary Nicholls (STRO003305) **Building Type:** Mid-terrace Flat

Dwelling Details:

NEW DWELLING DESIGN STAGE

Site Reference : Flat 1 - 33 Wicklow Street **Plot Reference:** BEC/STUDIOV/WICKLOW/0003

Address : Flat 1 - 33 Wicklow Street, 33 Wicklow Street, Kings Cross, London, N1

Client Details:

Name: Studio V Architects

Address : 224 West Hendon Broadway, Hendon, London, NW9 7ED

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: Natural gas
Fuel factor: 1.00 (natural gas)

Target Carbon Dioxide Emission Rate (TER)	19.78 kg/m²	
Dwelling Carbon Dioxide Emission Rate (DER)	14.70 kg/m²	**OK**

2 Fabric U-values

Element	Average	Highest	
External wall	0.20 (max. 0.30)	0.23 (max. 0.70)	**OK**
Party wall	0.00 (max. 0.20)	-	**OK**
Floor	(no floor)		
Roof	0.00 (max. 0.20)	0.00 (max. 0.35)	**OK**
Openings	1.36 (max. 2.00)	1.50 (max. 3.30)	**OK**

3 Air permeability

Air permeability at 50 pascals	3.00	
Maximum	10.0	**OK**

4 Heating efficiency

Main Heating system: Database: (rev 331, product index 016661):
Boiler system with radiators or underfloor - mains gas
Brand name: Alpha
Model: InTec 34C
Model qualifier:
(Combi boiler)
Efficiency 88.8 % SEDBUK2009
Minimum 88.0 % **OK**

Secondary heating system: None

5 Cylinder insulation

Hot water Storage: No cylinder

N/A

Solar water heating
Dedicated solar storage volume: 90 litres

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Minimum:	54 litres	**OK**

6 Controls

Space heating controls	Time and temperature zone control	**OK**
Hot water controls:	No cylinder	
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

Not applicable

9 Summertime temperature

Overheating risk (South East England):	Slight	**OK**

Based on:

Overshading:	Average or unknown
Windows facing: North West	4.74m², Overhang twice as wide as window, ratio NaN
Ventilation rate:	4.00
Blinds/curtains:	None
	shutter closed 100% of daylight hours

10 Key features

Air permeablility	3.0 m³/m²h
Windows U-value	1.3 W/m²K
External Walls U-value	0.19 W/m²K
Solar water heating	

SAP Input

Property Details: Flat 1 - 33 Wicklow Street

Address:	Flat 1 - 33 Wicklow Street, 33 Wicklow Street, Kings Cross, London, N1
Located in:	England
Region:	South East England
UPRN:	na
Date of assessment:	20 November 2012
Date of certificate:	20 November 2012
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:	Mid-terrace
Year Completed:	2012

Floor Location:	Floor area:	Storey height:
Floor 0	39 m²	2.8 m

Living area:	19.74 m² (fraction 0.506)
Front of dwelling faces:	North West

Opening types:

Name:	Source:	Type:	Glazing:	Argon:	Frame:
front door	Manufacturer	Solid			Wood
windows front	Manufacturer	Windows	double-glazed	Yes	PVC-U

Name:	**Gap:**	**Frame Factor:**	**g-value:**	**U-value:**	**Area:**	**No. of Openings:**
front door	mm	0.7	0	1.5	1.92	1
windows front	16mm or more	0.7	0.76	1.3	4.74	1

Name:	Type-Name:	Location:	Orient:	Width:	Height:
front door		wall to common area	South East	0	0
windows front		corium steel wall	North West	0	0

Overshading:	Average or unknown

Opaque Elements:

Type:	Gross area:	Openings:	Net area:	U-value:	Ru value:	Curtain wall:	Kappa:
External Elements							
corium steel wall	24.64	4.74	19.9	0.19	0	False	N/A
wall to common area	5.74	1.92	3.82	0.28	0.82	False	N/A
Internal Elements							
Party Elements							
party wall	43.96						N/A

Thermal bridges:

Thermal bridges:	User-defined y-value y =0.04 Reference: apa details

Ventilation:

Pressure test:	Yes (As designed)

SAP Input

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

Main heating system:

Main heating system:	Central heating systems with radiators or underfloor heating Gas boilers and oil boilers Fuel: mains gas Info Source: Boiler Database Database: (rev 331, product index 016661) SEDBUK2009 88.8% Brand name: Alpha Model: InTec 34C Model qualifier: (Combi boiler) Systems with radiators Pump in heat space: Yes Delayed start

Main heating Control:

Main heating Control:	Time and temperature zone control Control code: 2110 Boiler interlock: Yes

Secondary heating system:

Secondary heating system:	None

Water heating:

Water heating:	From main heating system Water code: 901 Fuel :mains gas No hot water cylinder Flue Gas Heat Recovery System: Database (rev 331, product index 060001) Brand name: Zenex Model: GasSaver Model qualifier: GS-1 Solar panel: True aperture area: 2.5 Flat plate, glazed default values: False collector zero-loss efficiency: 0.8 collector heat loss coefficient: 3.175 orientation: SE/SW, 30° pitch overshading: None or Very Little (<20%) dedicated solar store volume: 90 litres (seperate store) solar powered pump: False

Others:

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

SAP Input

Predicted Energy Assessment

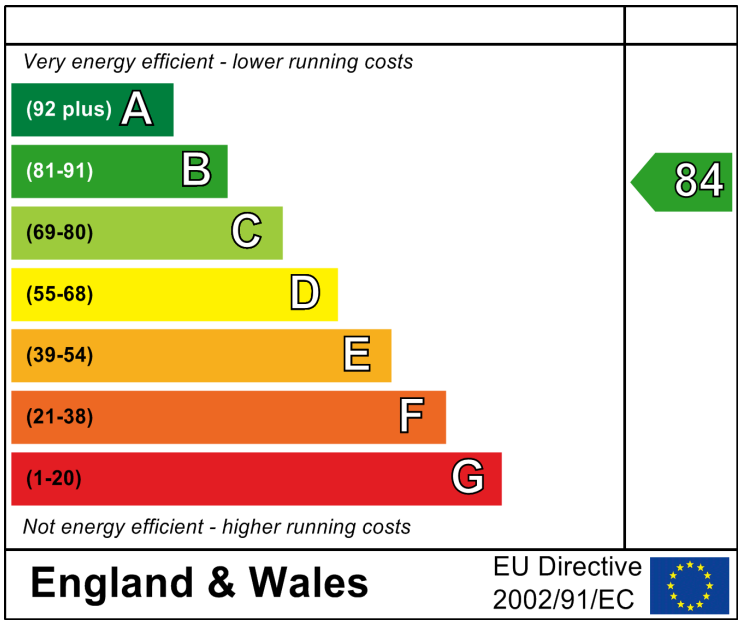
Flat 1 - 33 Wicklow Street
33 Wicklow Street
Kings Cross
London
N1

Dwelling type: Mid-terrace Mid floor Flat
Date of assessment: 20 November 2012
Produced by: Gary Nicholls
Total floor area: 39 m²

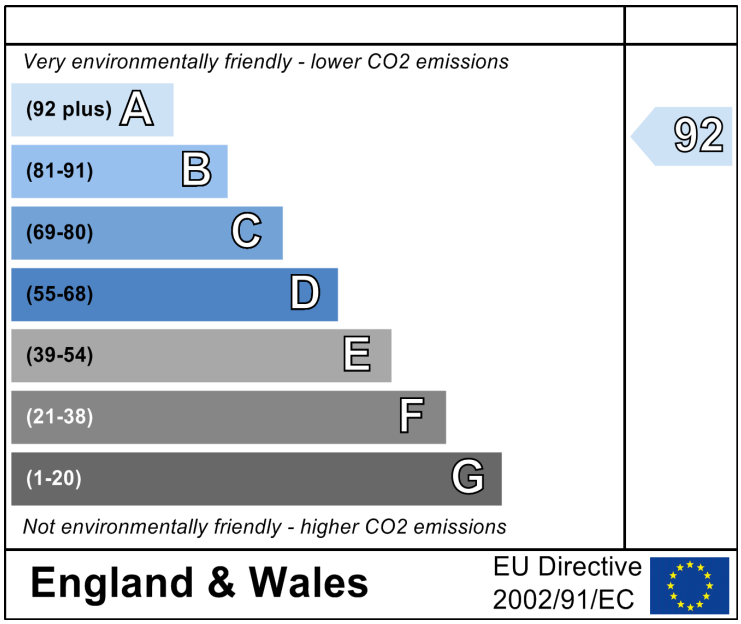
This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about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