Energy Performance Certificate

SAP
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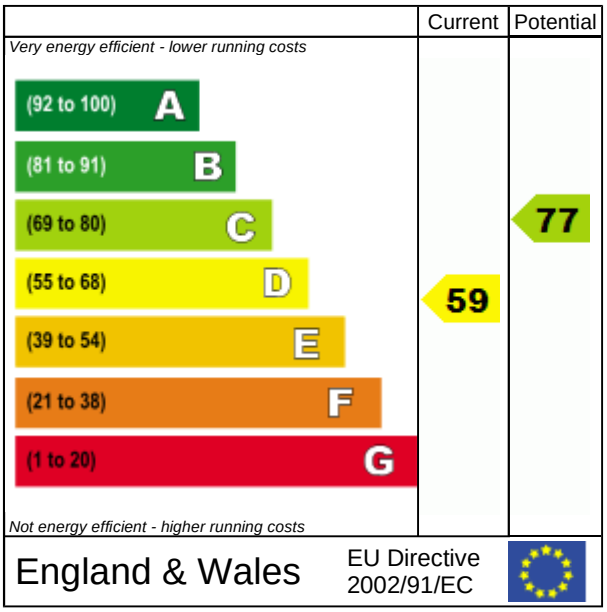
11, Carden Hill
BRIGHTON
BN1 8AA

Dwelling type: Top floor flat
Date of assessment: 22 July 2008
Date of certificate: 22 July 2008
Reference number: 0748-2892-6336-0328-1825
Total floor area: 69 m²

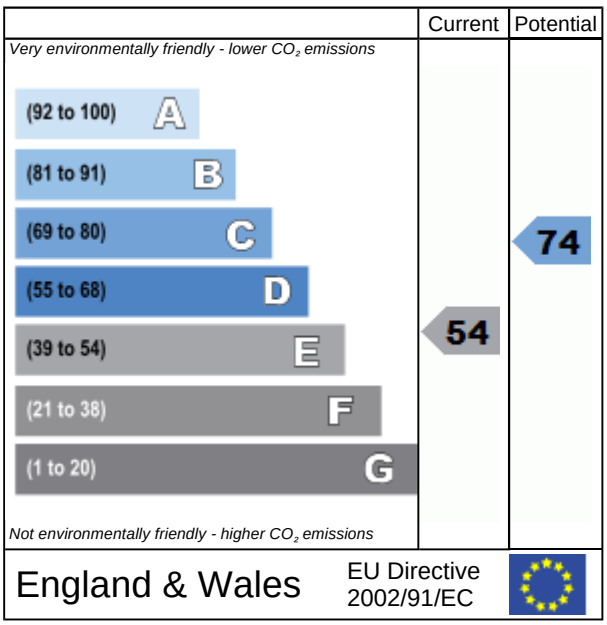
This home's performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO_2) emissions.

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 will 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.

Estimated energy use, carbon dioxide (CO_2) emissions and fuel costs of this home

	Current	Potential
Energy use	341 kWh/m² per year	189 kWh/m² per year
Carbon dioxide emissions	3.9 tonnes per year	2.2 tonnes per year
Lighting	£70 per year	£35 per year
Heating	£455 per year	£268 per year
Hot water	£121 per year	£96 per year

Based on standardised assumptions about occupancy, heating patterns and geographical location, the above table provides an indication of how much it will cost to provide lighting, heating and hot water to this home. The fuel costs only take into account the cost of fuel and not any associated service, maintenance or safety inspection. This certificate has been provided for comparative purposes only and enables one home to be compared with another. Always check the date the certificate was issued, because fuel prices can increase over time and energy saving recommendations will evolve.

To see how this home can achieve its potential rating please see the recommended measures.

energy saving recommended Certification mark

Remember to look for the energy saving recommended logo when buying energy efficient products. It's a quick and easy way to identify the most energy efficient products on the market.

For advice on how to take action and to find out about offers available to help make your home more energy efficient call **0800 512 012** or **visit www.energysavingtrust.org.uk/myhome**

About this document

The Energy Performance Certificate for this dwelling was produced following an energy assessment undertaken by a qualified assessor, accredited by the NHER Accreditation Scheme, to a scheme authorised by the Government. This certificate was produced using the RdSAP 2005 assessment methodology and has been produced under the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007. A copy of the certificate has been lodged on a national register.

Assessor's accreditation number:	NHER002616
Assessor's name:	Mr Jerry Phillipps
Company name/trading name:	Arun Estates
Address:	St Leonard's House, North Street, Horsham, West Sussex, RH12 1RJ
Phone number:	01634 735622
Fax number:	
E-mail address:	dea@arunestates.co.uk
Related party disclosure:	The assessor is an employee of Arun Estate Agencies Ltd

If you have a complaint or wish to confirm that the certificate is genuine

Details of the assessor and the relevant accreditation scheme are on the certificate. You can get contact details of the accreditation scheme from our website at www.nher.co.uk together with details of their procedures for confirming authenticity of a certificate and for making a complaint.

About the building's performance ratings

The ratings on the certificate provide a measure of the building's overall energy efficiency and its environmental impact, calculated in accordance with a national methodology that takes into account factors such as insulation, heating and hot water systems, ventilation and fuels used. The average energy efficiency rating for a dwelling in England and Wales is band E (rating 46).

Not all buildings are used in the same way, so energy ratings use 'standard occupancy' assumptions which may be different from the specific way you use your building. Different methods of calculation are used for homes and for other buildings. Details can be found at www.communities.gov.uk/epbd

Buildings that are more energy efficient use less energy, save money and help protect the environment. A building with a rating of 100 would cost almost nothing to heat and light and would cause almost no carbon emissions. The potential ratings in the certificate describe how close this building could get to 100 if all the cost effective recommended improvements were implemented.

About the impact of buildings on the environment

One of the biggest contributors to global warming is carbon dioxide. The way we use energy in buildings causes emissions of carbon. The energy we use for heating, lighting and power in homes produces over a quarter of the UK's carbon dioxide emissions and other buildings produce a further one-sixth.

The average household causes about 6 tonnes of carbon dioxide every year. Adopting the recommendations in this report can reduce emissions and protect the environment. You could reduce emissions even more by switching to renewable energy sources. In addition there are many simple every day measures that will save money, improve comfort and reduce the impact on the environment, such as:

- Check that your heating system thermostat is not set too high (in a home, 21°C in the living room is suggested) and use the timer to ensure that you only heat the building when necessary.
- Make sure your hot water is not too hot - a cylinder thermostat need not normally be higher than 60°C
- Turn off lights when not needed and do not leave appliances on standby. Remember not to leave chargers (e.g. for mobile phones) turned on when you are not using them.

Visit the Government's website at www.communities.gov.uk/epbd to:

- Find out how to confirm the authenticity of an energy performance certificate
- Find how to make a complaint about a certificate or the assessor who produced it
- Learn more about the national register where this certificate has been lodged
- Learn more about energy efficiency and reducing energy consumption.

Recommended measures to improve this home's energy performance

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Summary of this home's energy performance related features

The following is an assessment of the key individual elements that have an impact on this home's performance rating. Each element is assessed against the following scale: Very poor / Poor / Average / Good / Very good.

Element	Description	Current performance	
		Energy Efficiency	Environmental
Walls	Cavity wall, as built, no insulation (assumed)	Poor	Poor
Roofs	Pitched, 150mm loft insulation	Good	Good
Floor	(other premises below)	-	-
Windows	Fully double glazed	Average	Average
Main heating	Boiler and radiators, mains gas	Good	Good
Main heating controls	Programmer and room thermostat	Poor	Poor
Secondary heating	Room heaters, mains gas	-	-
Hot water	From main system	Good	Good
Lighting	No low energy lighting	Very poor	Very poor
Current energy efficiency rating		**D 59**	
Current environmental impact (CO_2) rating			**E 54**

Recommendations

The measures below are cost effective. The performance ratings after improvement listed below are cumulative, that is they assume the improvements have been installed in the order that they appear in the table.

Lower cost measures (up to £500)	Typical savings per year	Performance ratings after improvements	
		Energy efficiency	Environmental impact
1 Increase loft insulation to 250mm	£21	D 61	D 56
2 Cavity wall insulation	£129	C 70	D 67
3 Low energy lighting for all fixed outlets	£28	C 72	D 68
Sub-total	£178		
Higher cost measures			
4 Upgrade heating controls	£17	C 74	C 70
5 Replace boiler with Band A condensing boiler	£51	C 77	C 74
Total	£246		
Potential energy efficiency rating		**C 77**	
Potential environmental impact (CO_2) rating			**C 74**

Further measures to achieve even higher standards

The further measures listed below should be considered in addition to those already specified if aiming for the highest possible standards for this home.

Higher cost measures			
None			
Enhanced energy efficiency rating		**C 77**	
Enhanced environmental impact (CO_2) rating			**C 74**

Improvements to the energy efficiency and environmental impact ratings will usually be in step with each other. However, they can sometimes diverge because reduced energy costs are not always accompanied by a reduction in carbon dioxide (CO_2) emissions.

About the cost effective measures to improve this home's performance ratings

Lower cost measures (typically up to £500 each)

These measures are relatively inexpensive to install and are worth tackling first. Some of them may be installed as DIY projects. DIY is not always straightforward and sometimes there are health and safety risks, so take advice before carrying out DIY improvements.

1 Loft insulation
Loft Insulation laid in the loft space or between roof rafters to a depth of at least 250 mm will significantly reduce heat loss through the roof; this will improve the levels of comfort, reduce energy use and lower fuel bills. Insulation should not be placed below any cold water storage tank, any such tank should also be insulated on its sides and top, and there should be boarding on battens over the insulation to provide safe access between the loft hatch and the cold water tank. The insulation can be installed by professional contractors but also by a capable DIY enthusiast. Loose granules may be used instead of insulation quilt; this form of loft insulation can be blown into place and can be useful where access is difficult. The loft space must have adequate ventilation to prevent dampness; seek advice about this if unsure.

2 Cavity wall insulation
Cavity wall insulation, to fill the gap between the inner and outer layers of external walls with an insulating material, reduces heat loss. The insulation material is pumped into the gap through small holes that are drilled into the outer walls, and the holes are made good afterwards. As specialist machinery is used to fill the cavity, a professional installation company should carry out this work, and they should carry out a thorough survey before commencing work to be sure that this type of insulation is right for this home. They should also provide a guarantee for the work and handle any building control issues. Further information can be obtained from National Cavity Insulation Association (http://dubois.vital.co.uk/database/ceed/cavity.html)

3 Low energy lighting
Replacement of traditional light bulbs with energy saving recommended ones will reduce lighting costs over the lifetime of the bulb, and they last up to 12 times longer than ordinary light bulbs. Also consider selecting low energy light fittings when redecorating; contact the Lighting Association for your nearest stockist of Domestic Energy Efficient Lighting Scheme fittings.

Higher cost measures (typically over £500 each)

4 Heating controls (thermostatic radiator valves)
Thermostatic radiator valves allow the temperature of each room to be controlled to suit individual needs, adding to comfort and reducing heating bills provided internal doors are kept closed. For example, they can be set to be warmer in the living room and bathroom than in the bedrooms. Ask a competent heating engineer to install thermostatic radiator valves. Thermostatic radiator valves should be fitted to every radiator except the radiator in the same room as the room thermostat. Remember the room thermostat is needed as well as the thermostatic radiator valves, to enable the boiler to switch off when no heat is required.

5 Band A condensing boiler
A condensing boiler is capable of much higher efficiencies than other types of boiler, meaning it will burn less fuel to heat this property. This improvement is most appropriate when the existing central heating boiler needs repair or replacement, but there may be exceptional circumstances making this impractical. Condensing boilers need a drain for the condensate which limits their location; remember this when considering remodelling the room containing the existing boiler even if the latter is to be retained for the time being (for example a kitchen makeover). Building Regulations apply to this work, so your local authority building control department should be informed, unless the installer is registered with a competent persons scheme[1], and can therefore self-certify the work for Building Regulation compliance. Ask a qualified heating engineer to explain the options.

About the further measures to achieve even higher standards

Further measures that could deliver even higher standards for this home.

None

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[1] For information on competent persons schemes enter "existing competent person schemes" into an internet search engine or contact your local Energy Saving Trust advice centre on 0800 512 012.