


**SAP**  
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Dwelling type: Semi-detached house  
Date of assessment: 30 September 2008  
Date of certificate: 30 September 2008  
Reference number: 8028-6921-4280-7820-5072  
Total floor area: 161 m<sup>2</sup>

Energy Efficiency Rating		Current	Potential
<p><i>Very energy efficient - lower running costs</i></p> <p>(92 plus) <b>A</b></p> <p>(81 - 91) <b>B</b></p> <p>(69 - 80) <b>C</b></p> <p>(55 - 68) <b>D</b></p> <p>(39 - 54) <b>E</b></p> <p>(21 - 38) <b>F</b></p> <p>(1 - 20) <b>G</b></p> <p><i>Not energy efficient - higher running costs</i></p>		81	83
England & Wales		EU Directive 2002/91/EC	

Environmental Impact (CO <sub>2</sub> ) Rating		
	Current	Potential
<i>Very environmentally friendly - lower CO<sub>2</sub> emissions</i>		
(92 plus) <b>A</b>	<b>80</b>	<b>81</b>
(81 - 91) <b>B</b>		
(69 - 80) <b>C</b>		
(55 - 68) <b>D</b>		
(39 - 54) <b>E</b>		
(21 - 38) <b>F</b>		
(1 - 20) <b>G</b>		
<i>Not environmentally friendly - higher CO<sub>2</sub> emissions</i>		

England & Wales

EU Directive 2002/91/EC



### Estimated energy use, carbon dioxide (CO<sub>2</sub>) emissions and fuel costs of this home

	Current	Potential
Energy use	115 kWh/m <sup>2</sup> per year	109 kWh/m <sup>2</sup> per year
Carbon dioxide emissions	3.1 tonnes per year	2.9 tonnes per year
Lighting	£124 per year	£72 per year
Heating	£315 per year	£323 per year
Hot water	£112 per year	£112 per year

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



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](http://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 SAP 2005 assessment methodology and has been produced under the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 as amended. A copy of the certificate has been lodged on a national register.

Assessor's accreditation number: NHER003692  
Assessor's name: Mr Matt Tiller  
Company name/trading name: Thermal Economics Ltd  
Address: 8 Cardiff Road, Luton, Beds, LU1 1PP  
Phone number: 01582 450814  
Fax number:  
E-mail address: [epc@thermal-economics.co.uk](mailto:epc@thermal-economics.co.uk)

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

Details of the assessor and the relevant accreditation scheme are as above. You can get contact details of the accreditation scheme from their website at [www.nher.co.uk](http://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 home. Different methods of calculation are used for homes and for other buildings. Details can be found at [www.communities.gov.uk/epbd](http://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 everyday measures that will save money, improve comfort and reduce the impact on the environment. Some examples are given at the end of this report.

### Visit the Government's website at [www.communities.gov.uk/epbd](http://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

9 Mornington Mews  
COWES  
PO31 8AU

Date of certificate: 30 September 2008  
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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: Compliant / Average / Good / Very good.

Element	Description	Current performance	
		Energy Efficiency	Environmental
Walls	Average thermal transmittance 0.26 W/m²K	Very good	Very good
Roof	Average thermal transmittance 0.20 W/m²K	Good	Good
Floor	Average thermal transmittance 0.18 W/m²K	Very good	Very good
Windows	High performance glazing	Very good	Very good
Main heating	Boiler and underfloor heating, mains gas	Very good	Very good
Main heating controls	Time and temperature zone control	Good	Good
Secondary heating	None	-	-
Hot water	From main system	Very good	Very good
Lighting	Low energy lighting in 28% fixed outlets	Average	Average
Air tightness	Air permeability 6.9 m³/h.m² (assumed)	Good	Good
Current energy efficiency rating		B 81	
Current environmental impact (CO <sub>2</sub> ) rating		C 80	
Thermal transmittance is a measure of the rate of heat loss through a building element; the lower the value the better the energy performance. Air permeability is a measure of the air tightness of a building; the lower the value the better the air tightness.			

### Low and zero carbon energy sources

None

## 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 Low energy lighting for all fixed outlets	£44	B 83	B 81
Total	£44		
<b>Potential energy efficiency rating</b>		<b>B 83</b>	
<b>Potential environmental impact (CO<sub>2</sub>) rating</b>		<b>B 81</b>	

## 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. However you should check the conditions in any covenants, planning conditions, warranties or sale contracts.

2 Solar water heating	£25	B 84	B 83
3 Solar photovoltaic panels, 2.5 kWp	£150	B 90	B 89
<b>Enhanced energy efficiency rating</b>		<b>B 90</b>	
<b>Enhanced environmental impact (CO<sub>2</sub>) rating</b>		<b>B 89</b>	

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<sub>2</sub>) 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.

#### 1Low 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 fittings when redecorating; contact the Lighting Association for your nearest stockist of Domestic Energy Efficient Lighting Scheme fittings.

## About the further measures to achieve even higher standards

Further measures that could deliver even higher standards for this home. You should check the conditions in any covenants, planning conditions, warranties or sale contracts before undertaking any of these measures.

#### 2Solar water heating

A solar water heating panel, usually fixed to the roof, uses the sun to pre-heat the hot water supply. This will significantly reduce the demand on the heating system to provide hot water and hence save fuel and money. The Solar Trade Association has up-to-date information on local installers and any grant that may be available.

#### 3Solar photovoltaic (PV) panels

A solar PV system is one which converts light directly into electricity via panels placed on the roof with no waste and no emissions. This electricity is used throughout the home in the same way as the electricity purchased from an energy supplier. The British Photovoltaic Association has up-to-date information on local installers who are qualified electricians and any grant that may be available. Planning restrictions may apply in certain neighbourhoods and you should check this with the local authority. Building Regulations apply to this work, so your local authority building control department should be informed, unless the installer is appropriately qualified and registered as such with a competent persons scheme<sup>1</sup>, and can therefore self-certify the work for Building Regulation compliance.

## What can I do today?

Actions that will save money and reduce the impact of your home on the environment include:

- Ensure that you understand the dwelling and how its energy systems are intended to work so as to obtain the maximum benefit in terms of reducing energy use and CO<sub>2</sub> emissions. The papers you are given by the builder and the warranty provider will help you in this.
- The dwelling has an air conditioning system, which has not been taken into account in calculating the energy ratings. Use it to the minimum extent needed.
- 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 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.
- Close your curtains at night to reduce heat escaping through the windows.
- If you're not filling up the washing machine, tumble dryer or dishwasher, use the half-load or economy programme.

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<sup>1</sup> For information on approved 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.