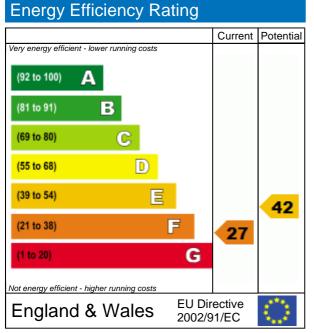
# **Energy Performance Certificate**



103, Golden Vale Churchdown GLOUCESTER GL3 2LX Dwelling type: Ground floor flat Date of assessment: 17 September 2008 Date of certificate: 17 September 2008 Reference number: 0059-2803-6718-0898-1685 Total floor area: 47 m<sup>2</sup>

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.



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.

#### Current Potential Very environmentally friendly - lower CO2 emissions (92 to 100) A B (81 to 91) (69 to 80) C D (55 to 68) 60 (39 to 54) Ξ 48 (21 to 38) F (1 to 20) G Not environmentally friendly - higher CO<sub>2</sub> emissions EU Directive England & Wales 2002/91/EC

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<sub>2</sub>) emissions and fuel costs of this home

	Current	Potential	
Energy use	519 kWh/m² per year	388 kWh/m² per year	
Carbon dioxide emissions	3.7 tonnes per year	2.8 tonnes per year	
Lighting	£41 per year	£20 per year	
Heating	£585 per year	£413 per year	
Hot water	£215 per year	£194 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.



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** 

## Environmental Impact (CO<sub>2</sub>) Rating

## 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:	NHER002418
Assessor's name:	Mr Peter Rogers
Company name/trading name:	Earth UK
Address:	23 Stockdale Close, Hardwicke, Gloucester, GL2 4JN
Phone number:	07921 160296
Fax number:	
E-mail address:	petejrogers@earthuk.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 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.

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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 pe	Current performance	
Liement	Description	Energy Efficiency	Environmental	
Walls	Cavity wall, as built, no insulation (assumed)	Poor	Poor	
Roofs	(another dwelling above)	-	-	
Floor	Solid, no insulation (assumed)	-	-	
Windows	Fully double glazed	Average	Average	
Main heating	Electric underfloor heating	Very poor	Poor	
Main heating controls	Room thermostat only	Poor	Poor	
Secondary heating	None	-	-	
Hot water	Electric immersion, standard tariff	Very poor	Poor	
Lighting	No low energy lighting	Very poor	Very poor	
Current energy efficient	ncy rating	F 27		
Current environmenta	l impact (CO <sub>2</sub> ) rating		E 48	

## 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	Typical savings	Performance ratings after improvements	
(up to £500)	per year	Energy efficiency	Environmental impact
1 Cavity wall insulation	£190	E 40	D 58
2 Add additional 80mm jacket to hot water cylinder	£14	E 41	D 59
3 Low energy lighting for all fixed outlets	£9	E 42	D 60
Sub-total	£213		
Higher cost measures			<u>.</u>
None			
Total	£213		
Potential energy efficiency rating		E 42	
Potential environmental impact (CO <sub>2</sub> ) rating			D 60

#### 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		E 42		
Enhanced environmental impact (CO <sub>2</sub> ) rating			D 60	

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 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)

#### 2 Hot water cylinder insulation

Increasing the thickness of existing insulation by adding an 80 mm cylinder jacket around the hot water cylinder will help maintain the water at the required temperature; this will reduce the amount of energy used and lower fuel bills. The jacket should be fitted over the top of the existing foam insulation and over any thermostat clamped to the cylinder. Hot water pipes from the hot water cylinder should also be insulated, using pre-formed pipe insulation of up to 50 mm thickness, or to suit the space available, for as far as they can be accessed to reduce losses in summer. All these materials can be purchased from DIY stores and installed by a competent DIY enthusiast.

#### 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)

None

About the further measures to achieve even higher standards

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

None