# Energy Performance Certificate

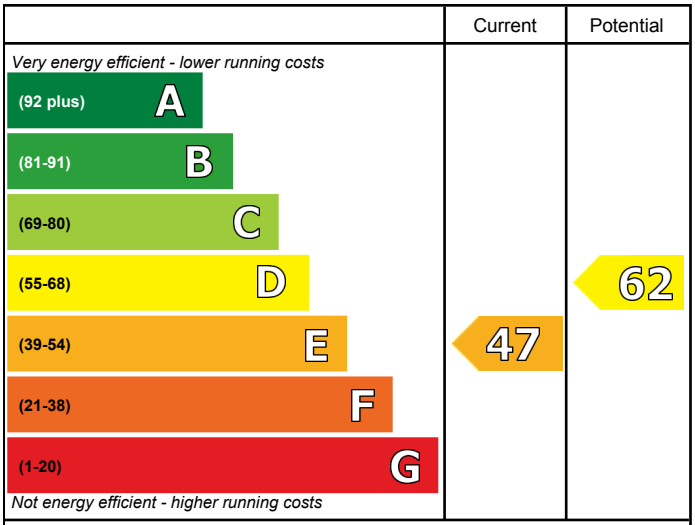
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13 Avondale Court,
Rectory Road,
NEWCASTLE UPON TYNE,
NE3 1XQ

| | |
|---|---|
| Dwelling type: | Top-floor flat |
| Date of assessment: | 13 July 2009 |
| Date of certificate: | 13 July 2009 |
| Reference number: | 8661-6723-6910-1437-7092 |
| Total floor area: | 61 m² |

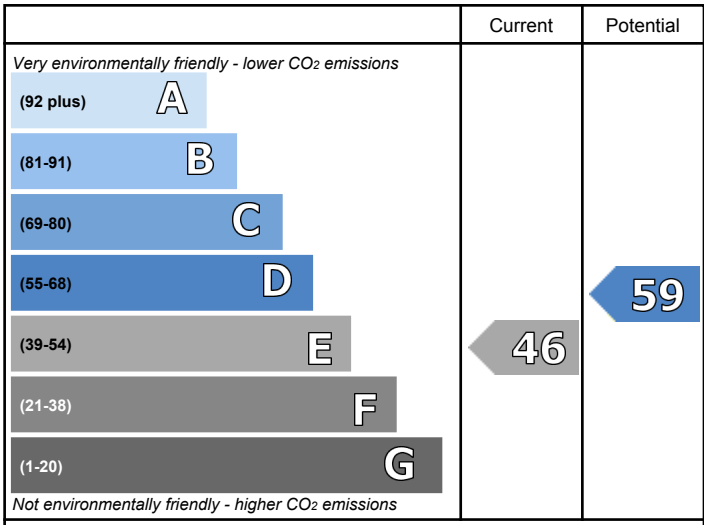
This home's performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide ($CO_2$) emissions.

## 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 are likely to be.

## Environmental Impact ($CO_2$) Rating




The environmental impact rating is a measure of this 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 | 479 kWh/m² per year | 356 kWh/m² per year |
| Carbon dioxide emissions | 4.4 tonnes per year | 3.3 tonnes per year |
| Lighting | £60 per year | £35 per year |
| Heating | £441 per year | £312 per year |
| Hot water | £260 per year | £205 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

This EPC and recommendations report may be given to the Energy Saving Trust to provide you with information on improving your dwellings's energy performance.

For advice on how to take action and to find out about offers available to 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 Elmhurst Energy Systems Ltd, 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 as amended. A copy of the certificate has been lodged on a national register.

| | |
|---|---|
| Assessor's accreditation number: | EES/003551 |
| Assessor's name: | Mr. Thomas Jeffrey Pattison |
| Company name/trading name: | Pepaco Process Management |
| Address: | DCS House, Silverbirch Mylord Crescent, Camperdown Industrial Estate, Newcastle Upon Tyne, NE12 5UJ |
| Phone number: | 0191 256 0021 |
| Fax number: | 0191 256 0020 |
| E-mail address: | jeff@pepaco.com |
| Related party disclosure: | |

## 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.elmhurstenergy.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.

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 on 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 to:**

- Find 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 - the Government is the controller of the data on the register
- Learn more about energy efficiency and reducing energy consumption

# Recommended measures to improve this home's energy performance

13 Avondale Court,
Rectory Road,
NEWCASTLE UPON TYNE, NE3 1XQ

Date of certificate: 13 July 2009
Reference number: 8661-6723-6910-1437-7092

## 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.

| Elements | Description | Current performance | |
|---|---|---|---|
| | | Energy Efficiency | Environmental |
| Walls | Cavity wall, as built, partial insulation (assumed) | Average | Average |
| Roof | Flat, limited insulation (assumed) | Poor | Poor |
| Floor | (other premises below) | - | - |
| Windows | Fully double glazed | Good | Good |
| Main heating | Electric storage heaters | Poor | Very poor |
| Main heating controls | Manual charge control | Poor | Poor |
| Secondary heating | Room heaters, electric | - | - |
| Hot water | Electric immersion, off-peak | Very poor | Poor |
| Lighting | Low energy lighting in 30% of fixed outlets | Average | Average |
| Current energy efficiency rating | | E 47 | |
| Current environmental impact ($CO_2$) rating | | | E 46 |

## 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 improvement | |
|---|---|---|---|
| | | Energy efficiency | Environmental impact |
| 1 Cavity wall insulation | £103 | E 54 | E 54 |
| 2 Increase hot water cylinder insulation | £41 | D 57 | D 56 |
| 3 Low energy lighting for all fixed outlets | £16 | D 59 | D 56 |
| **Sub-total** | **£160** | | |
| **Higher cost measures (over £500)** | | | |
| 4 Fan assisted storage heaters and dual immersion cylinder | £49 | D 62 | D 59 |
| **Total** | **£209** | | |
| Potential energy efficiency rating | | D 62 | |
| Potential environmental impact ($CO_2$) rating | | | D 59 |

## Further measures to achieve even higher standards

None

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 energy ratings

If you are a tenant, before undertaking any work you should check the terms of your lease and obtain approval from your landlord if the lease either requires it, or makes no express provision for such work.

### 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; this will improve levels of comfort, reduce energy use and lower fuel bills. 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 ensure that this type of insulation is suitable for this home. They should also provide a guarantee for the work and handle any building control issues. Further information about cavity wall insulation and details of local installers can be obtained from the National Insulation Association (www.nationalinsulationassociation.org.uk).

#### 2 Hot water cylinder insulation

Increasing the thickness of existing insulation around the hot water cylinder will help to maintain the water at the required temperature; this will reduce the amount of energy used and lower fuel bills. An additional cylinder jacket or other suitable insulation layer can be used. The insulation should be fitted 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)

#### 4 Fan assisted storage heaters

Modern storage heaters are smaller and easier to control than the older type in the property. Ask for a quotation for new, fan-assisted heaters with automatic charge control. A dual-immersion cylinder, which can be installed at the same time, will provide cheaper hot water than the system currently installed. As installations should be in accordance with the current regulations covering electrical wiring, only a qualified electrician should carry out the installation. 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 electrical heating engineer to explain the options, which might also include switching to other forms of electric heating.

## About the further measures to achieve even higher standards

Not applicable

## 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 CO2 emissions.
- 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.

[1] 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.