

# Energy Performance Certificate



43, Pluto Way  
AYLESBURY  
HP19 9BH

Dwelling type: Mid-terrace house  
Date of assessment: 24 October 2011  
Date of certificate: 24 October 2011  
Reference number: 8579-6330-9999-9244-0922  
Type of assessment: SAP, new dwelling  
Total floor area: 73 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<sub>2</sub>) emissions.

## Energy Efficiency Rating

|                                                    | Current                    | Potential |
|----------------------------------------------------|----------------------------|-----------|
| <i>Very energy efficient - lower running costs</i> |                            |           |
| (92 plus) <b>A</b>                                 |                            |           |
| (81 - 91) <b>B</b>                                 | <b>81</b>                  | <b>81</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 energy efficient - higher running costs</i> |                            |           |
| <b>England &amp; Wales</b>                         | EU Directive<br>2002/91/EC |           |

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<sub>2</sub>) Rating

|                                                                       | Current                    | Potential |
|-----------------------------------------------------------------------|----------------------------|-----------|
| <i>Very environmentally friendly - lower CO<sub>2</sub> emissions</i> |                            |           |
| (92 plus) <b>A</b>                                                    |                            |           |
| (81 - 91) <b>B</b>                                                    | <b>84</b>                  | <b>84</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> |                            |           |
| <b>England &amp; Wales</b>                                            | EU Directive<br>2002/91/EC |           |

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) 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               | 102 kWh/m <sup>2</sup> per year | 102 kWh/m <sup>2</sup> per year |
| Carbon dioxide emissions | 1.4 tonnes per year             | 1.4 tonnes per year             |
| Lighting                 | £52 per year                    | £52 per year                    |
| Heating                  | £230 per year                   | £230 per year                   |
| Hot water                | £92 per year                    | £92 per year                    |

The figures in the table above have been provided to enable prospective buyers and tenants to compare the fuel costs and carbon emissions of one home with another. To enable this comparison the figures have been calculated using standardised running conditions (heating periods, room temperatures, etc.) that are the same for all homes, consequently they are unlikely to match an occupier's actual fuel bills and carbon emissions in practice. The figures do not include the impacts of the fuels used for cooking or running appliances, such as TV, fridge etc.; nor do they reflect the costs associated with service, maintenance or safety inspections. Always check the certificate date because fuel prices can change over time and energy saving recommendations will evolve.



Remember to look for the Energy Saving Trust 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](http://www.energysavingtrust.org.uk)

## 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 2009 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: NHER003488  
Assessor's name: Mrs Kathryn Derby  
Company name/trading name: Rickaby Thompson Associates Ltd  
Address: Witan Court, 296 Witan Gate West, Central Milton Keynes, Milton Keynes, Bucks, MK9 1EJ  
Phone number: 01908 679520  
Fax number:  
E-mail address: kathryn.derby@rickabythompson.com  
Related party disclosure: No related party

## 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.nesltd.co.uk](http://www.nesltd.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 50).

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 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 Department for Communities and Local Government website at [www.communities.gov.uk/epbd](http://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 Department is the controller of the data on the register for Data Protection Act 1998 purposes
- Learn more about energy efficiency and reducing energy consumption

## Recommendations

None.

## Further measures to achieve even higher standards

The 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. The indicative costs are representative for most properties but may not apply in a particular case.

|                                                              | Indicative cost   | Typical savings per year | Ratings after improvement |                      |
|--------------------------------------------------------------|-------------------|--------------------------|---------------------------|----------------------|
|                                                              |                   |                          | Energy efficiency         | Environmental impact |
| 1 Solar water heating                                        | £4,000 - £6,000   | £36                      | B 83                      | B 87                 |
| 2 Solar photovoltaic panels, 2.5 kWp                         | £11,000 - £20,000 | £214                     | A 93                      | A 97                 |
| <b>Enhanced energy efficiency rating</b>                     |                   |                          | <b>A 93</b>               |                      |
| <b>Enhanced environmental impact (CO<sub>2</sub>) rating</b> |                   |                          | <b>A 97</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.

### 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 by the national calculation methodology; 1 star means least efficient and 5 stars means most efficient.

| Element               | Description                                                              | Current performance |               |
|-----------------------|--------------------------------------------------------------------------|---------------------|---------------|
|                       |                                                                          | Energy Efficiency   | Environmental |
| Walls                 | Average thermal transmittance 0.32 W/m <sup>2</sup> K                    | ★★★★☆               | ★★★★☆         |
| Roof                  | Average thermal transmittance 0.14 W/m <sup>2</sup> K                    | ★★★★★               | ★★★★★         |
| Floor                 | Average thermal transmittance 0.17 W/m <sup>2</sup> K                    | ★★★★★               | ★★★★★         |
| Windows               | High performance glazing                                                 | ★★★★★               | ★★★★★         |
| Main heating          | Boiler and radiators, mains gas                                          | ★★★★☆               | ★★★★☆         |
| Main heating controls | Programmer, room thermostat and TRVs                                     | ★★★★☆               | ★★★★☆         |
| Secondary heating     | None                                                                     | -                   | -             |
| Hot water             | From main system                                                         | ★★★★☆               | ★★★★☆         |
| Lighting              | Low energy lighting in 80% of fixed outlets                              | ★★★★★               | ★★★★★         |
| Air tightness         | Air permeability 8.0 m <sup>3</sup> /h.m <sup>2</sup> (assessed average) | ★★★☆☆               | ★★★☆☆         |

**Current energy efficiency rating**

**B 81**

**Current environmental impact (CO<sub>2</sub>) rating**

**B 84**

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

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

Not applicable.

## 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. 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.

### 1 Solar water heating

A solar water heating panel uses the sun to pre-heat the hot water supply, significantly reducing demand on the heating system to provide hot water and hence save fuel and money. You could be eligible for Renewable Heat Incentive payments which could appreciably increase the savings beyond those shown on your EPC, provided that both the product and the installer are certified by the Microgeneration Certification Scheme (or equivalent). Details of local MCS installers are available at [www.microgenerationcertification.org](http://www.microgenerationcertification.org).

### 2 Solar photovoltaic (PV) panels

A solar PV system converts light directly into electricity via panels placed on the roof and can be used throughout the home. Building Regulations apply to this work and planning restrictions may apply. You could be eligible for a Feed-in Tariff which could appreciably increase the savings beyond those shown on your EPC, provided that both the product and the installer are certified by the Microgeneration Certification Scheme (or equivalent). Details of local MCS installers are available at [www.microgenerationcertification.org](http://www.microgenerationcertification.org).

## 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.
- 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.