## **Energy Performance Certificate**



8 Khartoum Road SHEFFIELD S11 8RD Dwelling type: Mid-terrace house
Date of assessment: 19 August 2010
Date of certificate: 19 August 2010

Reference number: 8970-6128-7150-6981-1996
Type of assessment: RdSAP, existing dwelling

Total floor area: 131 m<sup>2</sup>

**England & Wales** 

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** Very energy efficient - lower running costs (92 plus) В (81-91) $\mathbb{C}$ (69-80)(55-68) D 55 50 匡 (39-54)F (21-38)G Not energy efficient - higher running costs EU Directive 2002/91/EC **England & Wales**

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 Potential Very environmentally friendly - lower CO2 emissions (92 plus) B (81-91)C (69-80)D (55-68)48 匡 (39-54)43 厚 (21-38)G (1-20) Not environmentally friendly - higher CO<sub>2</sub> emissions

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.

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	360 kWh/m² per year	319 kWh/m² per year	
Carbon dioxide emissions	7.9 tonnes per year	7.0 tonnes per year	
Lighting	£76 per year	£76 per year	
Heating	£1223 per year	£1093 per year	
Hot Water	£140 per year £123 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.

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.

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

#### **About this document**

The Energy Performance Certificate for this dwelling was produced following an energy assessment undertaken by a qualified assessor, accredited by BRE Certification, 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: BREC400075 Assessor's name: BREC400075 Edward Gilpin

Company name/trading name: DomCom Energy Services Ltd Hill Top House, 302, Ringinglow

Road, Sheffield, S11 7PX

Phone number: 01142 303 840 Fax number: 01142 295 734

E-mail address: egilpin@domcomenergy.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.breassessor.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 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 Department for Communities and Local Government 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 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.

Further information about Energy Performance Certificates can be found under Frequently Asked Questions at www.epcregister.com

### Recommended measures to improve this home's energy performance

8 Khartoum Road Date of certificate: 19 August 2010

SHEFFIELD Reference number: 8970-6128-7150-6981-1996 S11 8RD

#### Summary of this home's energy performance related features

The table below gives an assessment of the key individual elements that have an impact on this home's energy and environmental performance. Each element is assessed by the national calculation methodology against the following scale: Very poor / Poor / Average / Good / Very good. The assessment does not take into consideration the physical condition of any element. 'Assumed' means that the insulation could not be inspected and an assumption has been made in the methodology based on age and type of construction.

Element	Description	Current Pe	Current Performance	
		Energy Efficiency	Environmental	
Walls	Solid brick, as built, no insulation (assumed)	Very poor	Very poor	
Roof	Roof room(s), no insulation (assumed)	Very poor	Very poor	
Floor	Suspended, no insulation (assumed)	-	-	
Windows	Fully double glazed	Average	Average	
Main heating	Boiler and radiators, mains gas	Good	Good	
Main heating controls	Programmer, room thermostat and TRVs	Good	Good	
Secondary heating	None	-	=	
Hot water	From main system	Good	Good	
Lighting	Low energy lighting in 92% of fixed outlets	Very good	Very good	
Current energy eff	iciency rating	E 50		
Current environme	ental impact (CO₂) rating		E 43	

#### 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.

Higher Cost Measures	Typical Savings Per Year	Performance Ratings After Improvement	
		Energy Efficiency	Environmental Impact
1 Replace boiler with new condensing boiler	£146	D 55	E 48
Total	£146		
Potential energy efficiency rating D 55			
Potential environmental impact (CO <sub>2</sub> ) rating			E 48

#### 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 50 mm internal or external wall insulation	£151	D 61	E 54
3 Solar photovoltaic panels, 2.5 kWp	£196	C 69	D 61
Enhanced energy efficiency rating		C 69	
Enhanced environmental impact (CO <sub>2</sub> ) rating			D 61

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

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.

#### Higher cost measures (typically over £500 each)

#### 1 New 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<sup>1</sup>, 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. 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.

#### 2 Internal or external wall insulation

Solid wall insulation involves adding a layer of insulation to either the inside or the outside surface of the external walls, which reduces heat loss and lowers fuel bills. As it is more expensive than cavity wall insulation it is only recommended for walls without a cavity, or where for technical reasons a cavity cannot be filled. Internal insulation, known as dry-lining, is where a layer of insulation is fixed to the inside surface of external walls; this type of insulation is best applied when rooms require redecorating and can be installed by a competent DIY enthusiast. External solid wall insulation is the application of an insulant and a weather-protective finish to the outside of the wall. This may improve the look of the home, particularly where existing brickwork or rendering is poor, and will provide long-lasting weather protection. Further information can be obtained from the National Insulation Association (www.nationalinsulationassociation.org.uk). It should be noted that planning permission might be required.

#### 3 Solar 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 on 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. The assessment does not include the effect of any feed-in tariff, which could appreciably increase the savings that are shown on this EPC for solar photovoltaic panels.

<sup>&</sup>lt;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.

#### 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.
- 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.
- 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.

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.

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