

# Energy Performance Certificate

Northern Ireland

127a Agincourt Avenue,  
BELFAST, BT7 1QD

Date of assessment:  
Date of certificate:  
Reference number:  
Accreditation scheme:  
Assessor's name:  
Assessor's accreditation number:  
Employer/trading name:  
Employer/trading address:

24 March 2009  
30 March 2009  
2449-5067-0207-6461-0000  
Elmhurst Energy Systems Ltd  
Mr. Thomas Menaul  
EES/006091  
Menaul Energy Assessors  
Cathedral Quarter 18-22 Hill  
Street, Belfast, Antrim, BT1 2LA

Related party disclosure:

## Energy Efficiency Rating

	Current	Potential
<i>Very energy efficient - lower running costs</i>		
<b>A</b> 92 plus		
<b>B</b> 81-91		
<b>C</b> 69-80		73
<b>D</b> 55-68	61	
<b>E</b> 39-54		
<b>F</b> 21-38		
<b>G</b> 1-20		
<i>Not energy efficient - higher running costs</i>		

## Technical information

**Main heating type and fuel:** Boiler and radiators, mains gas  
**Total floor area:** 39 m<sup>2</sup>  
**Approximate energy use:** 433 kWh/m<sup>2</sup> per year  
**Approximate CO<sub>2</sub> emissions:** 72 kg/m<sup>2</sup> per year  
**Dwelling type:** Ground-floor flat

## Benchmark

Average for  
Northern Ireland

50

The approximate energy use and CO<sub>2</sub> emissions are per square metre of floor area based on fuel costs for the heating, ventilation, hot water and lighting systems. The rating can be compared to the benchmark of the average energy efficiency rating for the housing stock in Northern Ireland.

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

	Current	Potential
Energy use	433 kWh/m <sup>2</sup> per year	301 kWh/m <sup>2</sup> per year
Carbon dioxide emissions	2.8 tonnes per year	2.0 tonnes per year
Lighting	£34 per year	£18 per year
Heating	£422 per year	£320 per year
Hot water	£75 per year	£60 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.

### 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) Regulations (Northern Ireland) 2008. A copy of the certificate has been lodged on a national register.

### 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 preceding page. You can get contact details of the accreditation scheme from their website at [www.elmhurstenergy.co.uk](http://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 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 Northern Ireland 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 describe how close this building could get to 100 if all the cost effective recommended improvements were implemented.



Certification mark

The address and energy rating of the dwelling in this EPC may be given to EST to provide information on financial help for improving its 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](http://www.energysavingtrust.org.uk/myhome)

**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.

**Environmental Impact (CO2) Rating**

	Current	Potential
<i>Very environmentally friendly - lower CO2 emissions</i>		
<b>A</b> 92 plus		
<b>B</b> 81-91		
<b>C</b> 69-80		69
<b>D</b> 55-68	55	
<b>E</b> 39-54		
<b>F</b> 21-38		
<b>G</b> 1-20		
<i>Not environmentally friendly - higher CO2 emissions</i>		

- Visit the Government's 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
  - Learn more about energy efficiency and reducing energy consumption

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

127a Agincourt Avenue,  
BELFAST, BT7 1QD

Date of certificate: 30 March 2009  
Reference number: 2449-5067-0207-6461-0000

### 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	Solid brick, as built, no insulation (assumed) Cavity wall, as built, no insulation (assumed)	Very poor Poor	Very poor Poor
Roof	(another dwelling above)	-	-
Floor	Solid, no insulation (assumed)	-	-
Windows	Single glazed	Very poor	Very poor
Main heating	Boiler and radiators, mains gas	Good	Good
Main heating controls	Programmer and room thermostat	Poor	Poor
Secondary heating	None	-	-
Hot water	From main system	Good	Good
Lighting	Low energy lighting in 14% of fixed outlets	Poor	Poor
<b>Current energy efficiency rating</b>		<b>D 61</b>	
<b>Current environmental impact (CO<sub>2</sub>) rating</b>		<b>D 55</b>	

### 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	£50	D 66	D 60
2 Low energy lighting for all fixed outlets	£12	D 67	D 61
<b>Sub-total</b>	<b>£62</b>		
<b>Higher cost measures (over £500)</b>			
3 Replace boiler with Band A condensing boiler	£70	C 73	C 69
<b>Total</b>	<b>£132</b>		
Potential energy efficiency rating		C 73	
Potential environmental impact (CO <sub>2</sub> ) rating		C 69	

## 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. Some of these measures may be cost-effective when other building work is being carried out such as an alteration, extension or repair. Also they may become cost-effective in the future depending on changes in technology costs and fuel prices. However you should check the conditions in any covenants, planning conditions, warranties or sale contracts before undertaking any of these measures.

4 Replace single glazed windows with low-E double glazing	£28	C 75	C 72
5 50 mm internal or external wall insulation	£45	C 79	C 77
Enhanced energy efficiency rating		C 79	
Enhanced environmental impact (CO <sub>2</sub> ) rating		C 77	

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 energy ratings

Building regulations apply to most measures. Building regulations approval and planning consent may be required for some 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.

### 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](http://www.nationalinsulationassociation.org.uk)).

#### 2 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)

#### 3 Band A 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). It is best to obtain advice from a qualified heating engineer.

## 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.

Building regulations apply to most measures. Building regulations approval and planning consent may be required for some 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.

#### 4 Double glazing

Double glazing is the term given to a system where two panes of glass are made up into a sealed unit. Replacing existing single-glazed windows with double glazing will improve comfort in the home by reducing draughts and cold spots near windows. Double-glazed windows may also reduce noise, improve security and combat problems with condensation.

#### 5 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](http://www.nationalinsulationassociation.org.uk)).

## 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.
- 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.