# **Energy Performance Certificate**

## Address of dwelling and other details

105

**Bellfield Street** 

Dundee DD1 5HA Dwelling type:

Name of approved organisation: Membership number:

Date of certificate: Reference number:

Type of assessment:

Total floor area:

Main type of heating and fuel:

Mid-floor flat

Elmhurst Energy Systems Ltd

4516-0001

08 August 2012

N/A

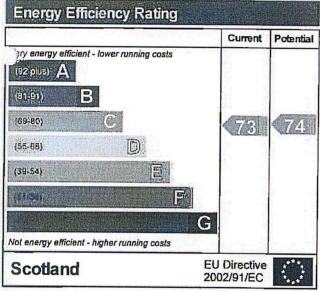
SAP, new dwelling

64.8 m<sup>2</sup>

Room heaters, electric

#### This dwelling's performance ratings

This dwelling has been assessed using the SAP 2009 methodology. Its 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 (CO2) emissions. CO2 is a greenhouse gas that contributes to climate change.



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 e fuel bills are likely to be.

	Current	Potential
Very environmentally friendly - lower CO <sub>2</sub> emissions (92 plus)		
(67.90) B		
····· <b>©</b>	<b>₹</b> 75	<b>(76</b> )
<u>take</u> D		
(39-54)		
(21-38)		8
/(3:20), G		3
Not environmentally friendly - higher CO2emissions		

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO2) emissions. The higher the rating the less impact it has on the environment.

Approximate current energy use per square metre of floor area: 177 kWh/m² per year Approximate current CO<sub>2</sub> emissions: 31 kg CO<sub>2</sub>/m<sup>2</sup> per year

## Cost effective improvements

Below is a list of lower cost measures that will raise the energy performance of the dwelling to the potential indicated in the tables above.

1 Low energy lighting

A full energy report is appended to this certificate



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

## **Energy Report**



The Energy Performance Certificate and Energy Report for this dwelling were produced following an energy assessment undertaken by a member of Elmhurst Energy Systems Ltd. This is an organisation which has been approved by the Scottish Ministers. The certificate has been produced under the Building (Scotland) Amendment Regulations 2006.

Assessor's name: Company name/trading name:

Alastair McNaughton

Address:

Alba Thermals Ltd

Address:

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Related party disclosure:

No related party

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

	Current	Potential	
Energy use	177 kWh/m²per year	173 kWh/m²per year 2.0 tonnes per year	
Carbon dioxide emissions	2.0 tonnes per year		
Lighting	£60 per year	£40 per year	
Heating	£235 per year	£244 per year	
Hot water	£212 per year	£212 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.

### About the building's performance ratings

The ratings on the certificate provide a measure of the buildings 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.

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.

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.

## 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 0.24 W/m²	****	****	
Roof	(other premises above)	_		
Floor	(other premises below)	_		
Windows	High performance glazing	****	****	
Main heating	Room heaters, electric			
Main heating controls	Programmer and appliance thermostats	****	****	
Secondary heating	None	<u> </u>	-	
Hot water	Electric immersion, standard tariff	_	Name of the last o	
Lighting	Low energy lighting in 50% of fixed outlets	****	***	
Air Tightness	Air permeability 10.0 m³/h.m²(assumed)	***	*****	

Current energy efficiency rating

Current environmental impact (CO2) rating

C 75

C 73

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

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

Lower cost measures	Indicative Cost	Typical savings per year	Ratings after improvement	
			Energy Efficiency	Environmental Impact
1 Low energy lighting for all fixed outlets	£10	£11	C 74	C 76
Total		£11		

Further measures to achieve even higher standards

None

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

#### Lower cost measures

These measures are relatively inexpensive to install and are worth tackling first. The indicative costs of measures included earlier in this EPC include the costs of professional installation in most cases. 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 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.

## About the further measures to achieve even higher standards

Not applicable

## What can I do today?

btions 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.
- 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. Minimise the use of tumble dryers and dry clothes outdoors where possible.