

# Energy Performance Certificate

**Highfield House, Featherbed Lane, Felden, HEMEL HEMPSTEAD, HP3 0BT**

**Dwelling type:** Detached house

**Date of assessment:** 09 July 2012

**Date of certificate:** 10 July 2012

**Reference number:** 0518-4070-7293-0602-0970


**Type of assessment:** RdSAP, existing dwelling

**Total floor area:** 362 m<sup>2</sup>

## Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

<b>Estimated energy costs of dwelling for 3 years:</b>	<b>£10,140</b>
<b>Over 3 years you could save</b>	<b>£2,859</b>

Estimated energy costs of this home			
	Current costs	Potential costs	Potential future savings
Lighting	£693 over 3 years	£357 over 3 years	
Heating	£8,958 over 3 years	£6,525 over 3 years	
Hot Water	£489 over 3 years	£399 over 3 years	
<b>Totals</b>	<b>£10,140</b>	<b>£7,281</b>	

These figures show how much the average household would spend in this property for heating, lighting and hot water. This excludes energy use for running appliances like TVs, computers and cookers, and any electricity generated by microgeneration.



Energy Efficiency Rating					
<p>Very energy efficient - lower running costs</p> <p>(92 plus) <b>A</b></p> <p>(81-91) <b>B</b></p> <p>(69-80) <b>C</b></p> <p>(55-68) <b>D</b></p> <p>(39-54) <b>E</b></p> <p>(21-38) <b>F</b></p> <p>(1-20) <b>G</b></p> <p>Not energy efficient - higher running costs</p>	<table> <tr> <th>Current</th><th>Potential</th></tr> <tr> <td>49</td><td>67</td></tr> </table>	Current	Potential	49	67
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49	67				

The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 4.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

Top actions you can take to save money and make your home more efficient			
Recommended measures	Indicative cost	Typical savings over 3 years	Available with Green Deal
1 Cavity wall insulation	£500 - £1,500	£903	
2 Floor insulation	£800 - £1,200	£600	
3 Low energy lighting for all fixed outlets	£295	£273	

See page 4 for a full list of recommendations for this property.

To find out more about the recommended measures and other actions you could take today to save money, visit [www.direct.gov.uk/savingenergy](http://www.direct.gov.uk/savingenergy) or call **0300 123 1234** (standard national rate). When the Green Deal launches, it may allow you to make your home warmer and cheaper to run at no up-front cost.

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

Element	Description	Energy Efficiency
Walls	Cavity wall, as built, no insulation (assumed)	★ ★ ☆ ☆ ☆
	Cavity wall, as built, insulated (assumed)	★ ★ ★ ★ ☆
	Solid brick, as built, insulated (assumed)	★ ★ ★ ★ ☆
Roof	Pitched, no insulation (assumed)	★ ☆ ☆ ☆ ☆
	Pitched, insulated (assumed)	★ ★ ★ ☆ ☆
	Roof room(s), insulated (assumed)	★ ★ ★ ★ ☆
Floor	Suspended, no insulation (assumed)	—
	Solid, no insulation (assumed)	—
	To unheated space, limited insulation (assumed)	—
Windows	Fully double glazed	★ ★ ★ ☆ ☆
Main heating	Boiler and radiators, mains gas	★ ★ ★ ★ ☆
Main heating controls	Programmer, TRVs and bypass	★ ★ ★ ☆ ☆
Secondary heating	Room heaters, wood logs	—
Hot water	From main system	★ ★ ★ ★ ☆
Lighting	Low energy lighting in 6% of fixed outlets	★ ☆ ☆ ☆ ☆

Current primary energy use per square metre of floor area: 254 kWh/m<sup>2</sup> per year

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.

See addendum on the last page relating to items in the table above.

## Low and zero carbon energy sources

Low and zero carbon energy sources are sources of energy that release either very little or no carbon dioxide into the atmosphere when they are used. Installing these sources may help reduce energy bills as well as cutting carbon. The following low or zero carbon energy sources are provided for this home:

- Biomass secondary heating

### Opportunity to benefit from a Green Deal on this property

When the Green Deal launches, it may enable tenants or owners to improve the property they live in to make it more energy efficient, more comfortable and cheaper to run, without having to pay for the work upfront. To see which measures are recommended for this property, please turn to page 4. You can choose which measures you want and ask for a quote from an authorised Green Deal provider. They will organise installation by an authorised installer. You pay for the improvements over time through your electricity bill, at a level no greater than the estimated savings to energy bills. If you move home, the Green Deal charge stays with the property and the repayments pass to the new bill payer.

For householders in receipt of income-related benefits, additional help may be available.

To find out more, visit [www.direct.gov.uk/savingenergy](http://www.direct.gov.uk/savingenergy) or call 0300 123 1234.

**Authorised  
home energy  
assessment**

**Finance at  
no upfront  
cost**



**Choose from  
authorised  
installers**












**Pay from  
savings in  
energy bills**

**Repayments  
stay with the  
home**

## Recommendations

The measures below will improve the energy performance of your dwelling. The performance ratings after improvements listed below are cumulative; that is, they assume the improvements have been installed in the order that they appear in the table. Further information about the recommended measures and other simple actions you could take today to save money is available at [www.direct.gov.uk/savingenergy](http://www.direct.gov.uk/savingenergy). Before installing measures, you should make sure you have secured the appropriate permissions, where necessary. Such permissions might include permission from your landlord (if you are a tenant) or approval under Building Regulations for certain types of work.

Measures with a green tick  are likely to be fully financed through the Green Deal, when the scheme launches, since the cost of the measures should be covered by the energy they save. Additional support may be available for homes where solid wall insulation is recommended. If you want to take up measures with an orange tick , be aware you may need to contribute some payment up-front.

Recommended measures	Indicative cost	Typical savings per year	Rating after improvement	Green Deal finance
Cavity wall insulation	£500 - £1,500	£301	 E53	
Floor insulation	£800 - £1,200	£200	 D56	
Low energy lighting for all fixed outlets	£295	£91	 D58	
Heating controls (room thermostat)	£350 - £450	£130	 D60	
Replace boiler with new condensing boiler	£2,200 - £3,000	£231	 D63	
Solar photovoltaic panels, 2.5 kWp	£9,000 - £14,000	£241	 D67	

## Alternative measures

There are alternative measures below which you could also consider for your home.

- External insulation with cavity wall insulation
- Air or ground source heat pump
- Micro CHP

## Choosing the right package

Visit [www.epcadviser.direct.gov.uk](http://www.epcadviser.direct.gov.uk), our online tool which uses information from this EPC to show you how to save money on your fuel bills. You can use this tool to personalise your Green Deal package.

**Directgov**  
Public services all in one place

Green Deal package	Typical annual savings
Cavity wall insulation	Total savings of £630
Floor insulation	
Heating controls	
Electricity/gas/other fuel savings	£5 / £505 / £120

You could finance this package of measures under the Green Deal. It could **save you £630 a year** in energy costs, based on typical energy use. Some or all of this saving would be recouped through the charge on your bill.

## 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. You can get contact details of the accreditation scheme 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. A copy of the certificate has been lodged on a national register. It will be publicly available and some of the underlying data may be shared with others for the purposes of research, compliance and direct mailing of relevant energy efficiency information. The current property owner and/or tenant may opt out of having this information disclosed.

**Assessor's accreditation number:** EES/001002  
**Assessor's name:** Mr. Gian L Vetere  
**Phone number:** 07860 859837  
**E-mail address:** [gl.vetere@ntlworld.com](mailto:gl.vetere@ntlworld.com)  
**Related party disclosure:** No related party

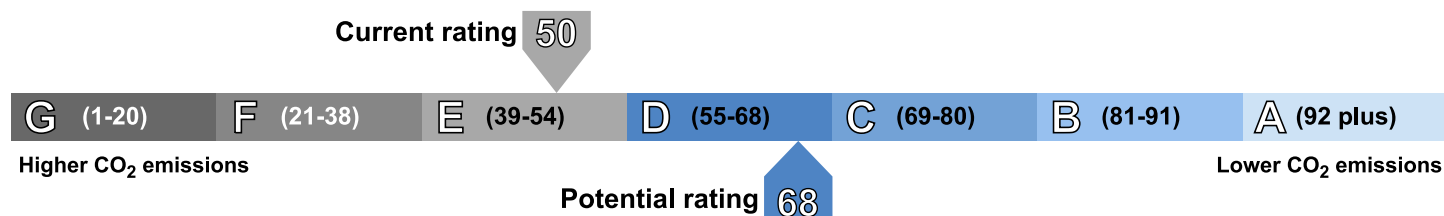
Further information about Energy Performance Certificates can be found under Frequently Asked Questions at [www.epcregister.com](http://www.epcregister.com).

## About the impact of buildings on the environment

One of the biggest contributors to global warming is carbon dioxide. The energy we use for heating, lighting and power in homes produces over a quarter of the UK's carbon dioxide emissions.

The average household causes about 6 tonnes of carbon dioxide every year. Based on this assessment, your home currently produces approximately 15 tonnes of carbon dioxide every year. Adopting the recommendations in this report can reduce emissions and protect the environment. If you were to install these recommendations you could reduce this amount by 6.0 tonnes per year. You could reduce emissions even more by switching to renewable energy sources.

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.



## Your home's heat demand

For most homes, the vast majority of energy costs derive from heating the home. Where applicable, this table shows the energy that could be saved in this property by insulating the loft and walls, based on typical energy use (shown within brackets as it is a reduction in energy use).

Heat demand	Existing dwelling	Impact of loft insulation	Impact of cavity wall insulation	Impact of solid wall insulation
Space heating (kWh per year)	52,056	(6,351)	(5,834)	N/A
Water heating (kWh per year)	3,359			