



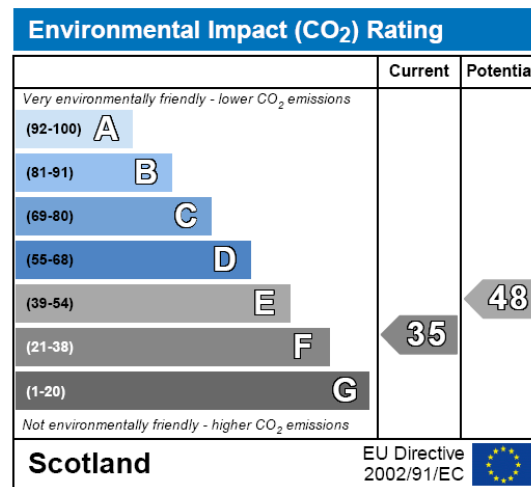
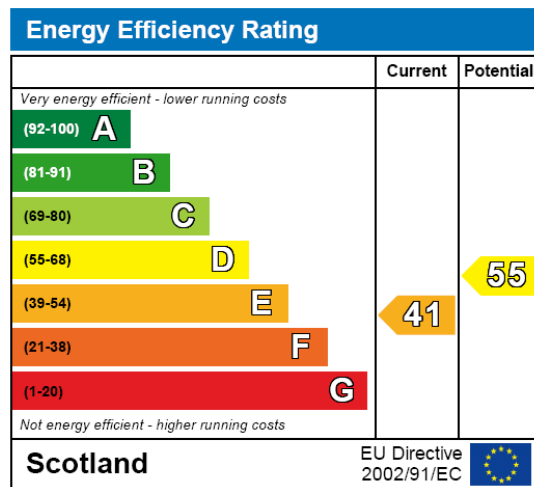
## EP09 - Information About Energy Performance Certificates (EPCs) in Scotland

### Energy Ratings

An EPC is a government approved document that displays a predicted energy cost rating and carbon dioxide emission rating for heating and lighting your property. There are different EPC formats for New Build Dwellings, Existing Dwellings and Commercial Buildings, but all have similar features.

The energy rating of dwellings uses software derived from the Standard Assessment Procedure (SAP), a government approved methodology. Existing dwellings are rated using Reduced Data SAP (RdSAP) which is based on a property inspection, rather than consulting a building plan and specification.

The ratings are expressed on a scale of 1 to 100, the higher the better, and are grouped into seven bands from A to G, where A is the highest efficiency. This is a similar system to the energy rating of electrical "white goods" and new motor vehicles.



The current average energy efficiency rating for a dwelling in the UK is Band D, whereas a dwelling built to the latest Building Regulations might achieve Band B.

The Environmental Impact Rating is based on the predicted carbon emissions (CO<sub>2</sub>) resulting from using fuel to heat, light and provide domestic hot water in the property.

The energy efficiency rating and the environmental impact rating are linked, but different fuels give off differing amounts of carbon dioxide, so the relationship between the two ratings will vary depending on which fuels are being consumed in the property.

## **Extent of the Inspection**

To undertake an RdSAP survey, the energy assessor measures and visually inspects the dwelling, recording various factors, such as: room layouts, construction methods, amounts of insulation, glazing, lighting, plus heating and hot water systems and their controls. The assessor will also try to determine the date of construction of the building and any extensions or alterations.

The survey is not destructive and no testing or sampling is undertaken. All heating, hot water and lighting systems will be assumed to be working correctly.

When a factor cannot be accurately determined from inspection, the assessor will make appropriate assumptions and may rely on written documentary evidence, such as receipts and guarantees, but the assessor is not permitted to accept hearsay evidence unless backed up with some form of written proof.

## **Access Difficulties**

The energy assessor will try to inspect all parts of the dwelling both internally and externally, but health and safety considerations may restrict the inspection, particularly in areas such as cellars and roof spaces where the size and location of access hatches and the lack of light or headroom may render such areas unsafe.

If an assessor is unable to access all parts of the dwelling, appropriate assumptions are made based on the property's age, construction and type.

## **Heating and Lighting Costs**

In addition to the energy cost and environmental impact ratings, the EPC also states the predicted costs for heating, domestic hot water and lighting of the dwelling. It should be noted that the cost of energy for other purposes, such as cooking and using other electrical appliances is not assessed.

The predicted costs are not based on the current household's actual use of the dwelling - they are based on standardised assumptions as to heating, hot water and lighting use. In this way a prospective purchaser or tenant can use the EPC as an objective comparison between one dwelling and another.

The actual energy use of different households in similar dwellings can vary dramatically. For example, one dwelling may be occupied by a single person who heats only a few rooms for a limited part of the day, whereas the neighbours may be a large family heating all of the dwelling for long periods to high temperatures.

The heating cost predictions displayed are very sensitive to the type of fuel used by the heating system. Some fuels are much more expensive than others and are likely to result in a lower energy rating for the property.

## **Summary of the Dwellings Energy Performance Features**

The EPC contains a table giving a description of the energy performance of certain features, such as walls, roof, windows and heating/lighting systems. The descriptions used come from a table written into the SAP methodology and currently run from "Very Poor" to "Very Good". They are generated automatically by the data entry and are not chosen directly by the assessor.

Elements	Description	Current performance	
		Energy Efficiency	Environmental
Walls	Cavity wall, as built, no insulation (assumed)	Poor	Poor
Roof	Pitched, 100 mm loft insulation	Average	Average
Floor	Solid, no insulation (assumed)	-	-
Windows	Fully double glazed	Average	Average
Main heating	Boiler and radiators, mains gas	Average	Good
Main heating controls	Programmer and room thermostat	Poor	Poor
Secondary heating	Room heaters, mains gas	-	-
Hot water	From main system	Average	Good
Lighting	Low energy lighting in 50% of fixed outlets	Good	Good
Current energy efficiency rating		E 50	
Current environmental impact (CO <sub>2</sub> ) rating		E 43	

The descriptions are set against a high standard of energy performance with “Good” or “Very Good” being difficult to achieve without low or zero carbon technologies being utilised in the dwelling. For example, a well controlled conventional heating system might have a programmer, room thermostat and thermostatic radiator valves (TRVs), but this will only generate a description of “Average”.

## Recommendations

The EPC may include a table of recommended energy saving improvements. These are standard text and also driven by the data entry, rather than being written and chosen by the energy assessor.

Recommendations will only be included if the software predicts that they will be worthwhile and make a significant improvement to the energy rating of the dwelling.

Occupiers must ensure that they take appropriate professional advice from reputable contractors before proceeding with the suggested improvements and must understand that there is no guarantee that the predicted savings listed in the EPC will be achieved. Much will depend on the individual circumstances and energy use of the household.

## Complaints

If the recipients of an EPC are unhappy about the content of the document or the assessor’s conduct, they should initially try to resolve matters with the energy assessor, whose name and contact details are provided within the document. If the assessor is unable to satisfy the complainants, they may then contact the assessor’s accreditation scheme - the name and contact details of the accreditation scheme is also provided within the EPC.

## Note:

**In Scotland EPC production is controlled by Protocols approved by the Scottish Government, rather than accreditation schemes. Most Chartered Surveyors in Scotland produce EPCs under a Protocol held by the Royal Institution of Chartered Surveyors (RICS) who can be contacted by telephone on 0870 3331600 For more detail go to [www.rics.org/regulation](http://www.rics.org/regulation).**