

cut wasted
home energy by up to
20%

produce less
CO₂

- Reduce your energy bills
- Conserve the heat in your home
- Use the free energy of the sun to heat your home
- Lower your carbon footprint
- Enhance the appeal of your home to potential buyers
- Recommended by the Energy Saving Trust
- Approved by the British Fenestration Rating Council



energy efficient windows



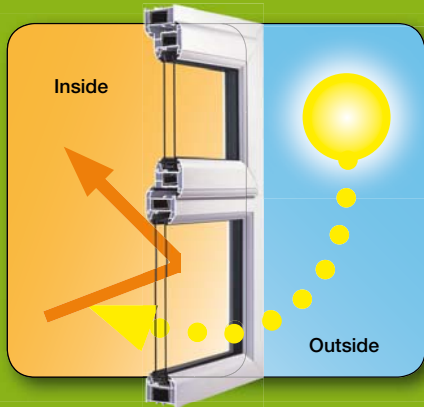
Make your windows work for you... ...and do your bit for the environment

What benefits can energy-rated windows give me?

According to the Energy Saving Trust, around a fifth of all heat loss from an uninsulated home is through its windows. Consider your own energy bills and this could be a significant drain on your resources.

Energy-rated windows can help to conserve the heat in your home and depending upon your choice of rating, can even use the solar effect of direct sunlight to help make further savings on your energy bills.

In addition to energy savings, you'll be helping the environment by reducing your carbon footprint and it could enhance the appeal of your home should you decide to move on.



How do energy-rated windows work?

Energy-rated windows work through a combination of the window frame and the type of glass surface and gasses used in the sealed glass unit. Heat is not only lost through glass, but also through the window frame. In-fact, the most energy efficient windows will probably lose more heat through the window frame than the glass itself!

- Energy-rated windows use a slim or medium depth window frame to minimise the effect of heat loss through the frame (this can give you the benefit of even more glass area).
- Double-glazed glass units use a low-emissivity (or Low-E) glass for the inner pane that has a thin coating on the inside which reflects heat back into the property.
- Higher-rated windows allow the sun's natural solar energy to pass through.
- A thermally efficient spacer bar is used to separate the two panes of glass.
- The cavity between the two panes of glass on A and B rated windows will be filled with argon gas, a natural insulator.

What does the Energy Rating Certificate tell me?

Each energy rated window will be supplied with a unique certificate that displays energy performance information for the window (see opposite). The certificate will display:

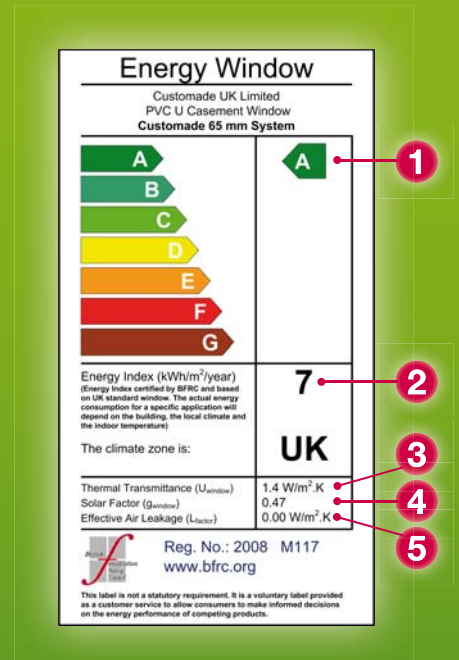
- 1 The rating of the window (A, B, C, etc.) where 'A' is the most efficient. (Also known as the Window Energy Rating (WER)).
- 2 The Energy Index (how much energy will be lost or gained per square metre per year).
- 3 The 'U' value or the rate at which heat can flow through the window. The lower the better!
- 4 The solar heat gain - the amount of free solar energy transmittance through the window.
- 5 The amount of heat lost due to air leakage such as draughts.

Certification of all energy rated windows is carried out independently by the British Fenestration Rating Council (BFRC). More details can be found at www.bfrc.org.

How else can energy rated windows help me?

Changes to Building Regulations Document 'L' from 1st October 2010 will require all new and replacement windows to achieve a WER of at least a 'C' rating or have a 'U' value of 1.6 W/m²K or lower. While these are minimum standards, choosing 'A' or 'B' rated windows will provide you with significantly more energy savings and warmth benefits.

Your home may also look more attractive to potential buyers in the future and energy-rated windows will help to improve the overall energy rating of your home as required in Home Information Packs (HIPs).



How much could energy rated windows save me?

Rating	Type of Property	Approximate Glass Area	Energy Saving Per Year	Carbon Saving Per Year	Energy Saving Over 15 Years	Carbon Saving Over 15 Years
A	Detached	23.7m ²	£223.22	0.31 tonnes	£4,151.67	4.68 tonnes
	Semi / Bungalow	16.9m ²	£159.17	0.22 tonnes	£2,960.47	3.34 tonnes
B	Detached	23.7m ²	£209.73	0.29 tonnes	£3,900.66	4.39 tonnes
	Semi / Bungalow	16.9m ²	£149.55	0.21 tonnes	£2,781.48	3.13 tonnes
C	Detached	23.7m ²	£196.23	0.27 tonnes	£3,649.65	4.11 tonnes
	Semi / Bungalow	16.9m ²	£139.93	0.20 tonnes	£2,602.50	2.93 tonnes

Source: GGF Energy Savings Calculator, March 2010

Variables: Calculation assumes existing windows are single glazed and savings are calculated over a 15-year payback period, 3% inflation and gas energy use at 4p per kWh

Certification marks apply to the window manufacturer only