

# Window Energy Ratings

Window Energy Ratings let you compare the energy efficiency of different window products. Find out how they can help you select the right windows for your home.



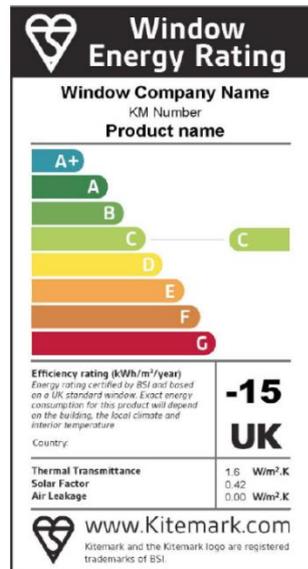
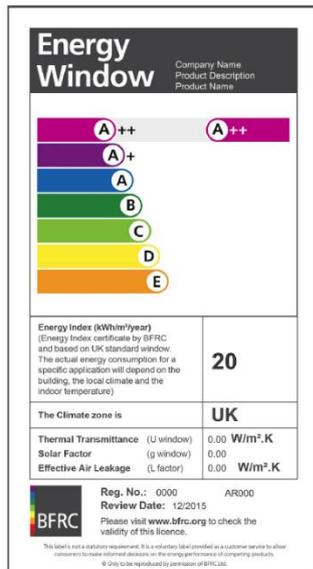
The windows you select for your home can help make a difference to the warmth and security of your living areas.

When [energy-efficient windows](#) are installed correctly, they can reduce heat loss from the living spaces in your home. Windows with superior thermal performance can even save you money in the long term, as a reduced dependence on fuel to heat or cool your home translates to savings on your energy bill.

However, windows that provide a poor level of energy efficiency can be a major source of heat loss, resulting in a higher spend on energy.

To find out how energy efficient a window product is, look for the **Window Energy Rating** label.

## Window Energy Rating labels



Colourful Window Energy Rating labels provide an easy way to see how different window products compare when it comes to their energy efficiency.

The rating labels have a similar 'rainbow' design as energy labels used on home appliances such as refrigerators and washing machines.

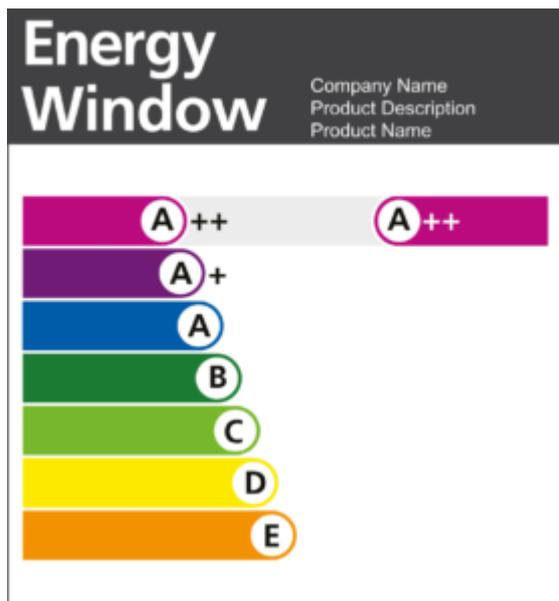
There are several energy rating schemes for windows, the most widespread being those operated by the [British Fenestration Rating Council](#) (above left), the [British Standards Institute](#) (above centre) and [CERTASS](#) (above right). Each, however, works in the same way.

Letter ratings are given to window products based on the energy performance of the whole window, including the frame material, frame design, glass type and other components. An A+ rated window is more energy-efficient than a C rated window.

The letter rating is calculated using a formula that takes into account the window product's overall thermal efficiency, air leakage and solar gain (how much heat from the sun passes through the window).

### Reading a Window Energy Rating label

The BFRFC Energy Window label utilises a traffic light A++ to E scale on the basis of total energy efficiency, where an A++ rated window is the most energy-efficient.



A window product's **rating** is listed at the top of the label using a letter and associated colour band.

This rating can be used to compare several window products on the basis of energy efficiency. A++ is the most energy-efficient.

<b>Energy Index (kWh/m<sup>2</sup>/year)</b> (Energy Index certificate by BFRC and based on UK standard window. The actual energy consumption for a specific application will depend on the building, the local climate and the indoor temperature)	<b>20</b>
<b>The Climate zone is</b>	<b>UK</b>
<b>Thermal Transmittance</b> (U window)	0.00 <b>W/m<sup>2</sup>.K</b>
<b>Solar Factor</b> (g window)	0.00
<b>Effective Air Leakage</b> (L factor)	0.00 <b>W/m<sup>2</sup>.K</b>

Further down the label is the window product's **Energy Index**, determined by a formula which takes into account available solar heat gains (window g-value) and subtracts the thermal losses (window U-value and air leakage).

The BFRC label also lists the window product's **Thermal Transmittance**, **Solar Factor** and **Effective Air Leakage**.



At the bottom of the BFRC label is further information related to the rating, including the date it was awarded and a link to the [BFRC website](http://www.bfrc.org) where it can be verified.

## **Energy-efficient windows and energy savings**

Window Energy Ratings only provide an indication of the level of efficiency offered by the window product itself.

The amount of potential energy saved once the window product is installed in a home will also depend on a number of other factors, including the location of the window, other installed insulation, the building's orientation and the efficiency of the heating system, amongst others.