



A Guide To Energy Efficient Windows

It is important to make the right choices when investing in new windows. Windows can account for up to 30% of the heat lost within a domestic property. When replacing and upgrading the windows in your home it is worth installing high efficiency rated windows.

What are Energy Efficient Windows?

They are windows that help to contain and conserve heat within your home keeping out wind, rain and yet allowing natural 'free' energy to heat your home.

What is an Energy Rating?

An Energy rating is simply a scale which informs you of the energy efficiency of your window. The system is based on an A-G scale, the most energy efficient being an A-rating. The scheme is similar to the energy rating scale found on household appliances. This scheme provides a very good idea of how environmentally friendly your windows are.

U-Values Vs energy ratings:

The basic U value information does not fulfill the overall energy rating requirements because it only aims to give a value for the insulation properties of a window. It only focuses on the heat loss from the window and takes no account of the solar heat gain and how it can improve the overall energy efficiency of the house.

4 30% of heat is lost through windows

How much money can I save?

You can save money on your energy bills by installing Energy Efficient Windows. If your home is single glazed or your double-glazing was installed prior to April 2002 then you could be losing heat, and therefore money, literally out the window. However, by switching to Energy Efficient Windows you can save energy and reduce your household bills by as much as £461 per year.

Reduce your carbon footprint:

You can reduce your carbon footprint if you install Energy Efficient Windows. If you live in a single glazed house and install Energy Efficient Windows, you could reduce the amount of carbon your home produces by 0.30 tonnes or 18% - almost reaching the Government target of 23% reduction per household between 2008 and 2012.

How much do Energy Efficient Windows cost?

The cost varies not only between the various ratings (A to E) but is also dependent on the frame materials used and the size and style of window. 'A' rated windows will cost more than 'B','C','D' and 'E' rated windows, but this has to be set against the energy savings you will make as you go up the ratings scale.

The rule of thumb is that Energy Efficient Windows generally cost less than the heat lost through old windows, over a given period of time.

Save as much as £461 per year

The benefits of having A-rated windows:

- Reduced energy bills: Up to £461 per year can be saved on your energy bills.
- A warmer home: cold spots, draughts and heat loss can be greatly reduced with energy efficient glass.
- A contribution to the environment: Reduced fuel consumption will generate less carbon dioxide (CO2) that causes global warming typically, 680kg a year.

How Energy Efficient glazing works:

A double glazed unit is constructed with two sheets of glass and an air gap between each pane. The gap is usually around 16mm (sometimes filled with gas) which creates an insulating barrier that keeps heat in.

Windows that are Energy Efficient come in a variety of frame materials and styles. Other variables are:

- How well they stop heat from passing through the windows (U-Value)
- How much sunlight travels through the glass (Solar Gain)
- How little air can leak in or out around the window

Reduce your CO2 emissions

What to look for:

Glass:

The most energy-efficient glass for double glazing is low emissivity (Low-E) glass. This often has an unnoticeable coating of metal oxide, normally on one of the internal panes next to the gap. This lets in light and heat but cuts the amount of heat that can get out.

In between:

Very efficient windows might use gases such as argon, xenon or krypton in the gap between the sheets of glass.

Spacer Bars:

These are set around the inside edges of the glass to keep the two panes apart. For maximum efficiency, look for pane spacers containing little or no metal – often known as 'warm edge' spacers.

Look for 'warm edge' spacers.



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