



## Why low-emissivity glass is good for your comfort, fuel bills and the environment

Through its Climate Change Act, the UK Government has set itself a long term target of reducing the country's greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels.

As a large proportion of carbon dioxide emissions in the UK can be attributed to buildings, effort has focused on making significant improvements to the energy efficiency of new and existing buildings. Furthermore, with poorly insulating windows accounting for up to 20% of heat loss in the average home, Building Regulations have progressively tightened the minimum performance requirements for energy efficient windows.

'Low-emissivity' (low-e) glass such as Pilkington **K Glass™** is designed to reflect heat back into a building, greatly improving its thermal efficiency and also maximising the use of the available heat from the sun, thereby helping to meet these new regulations.

Thanks to its effectiveness, Pilkington **K Glass™** is the leading low E glass in the UK and Ireland.

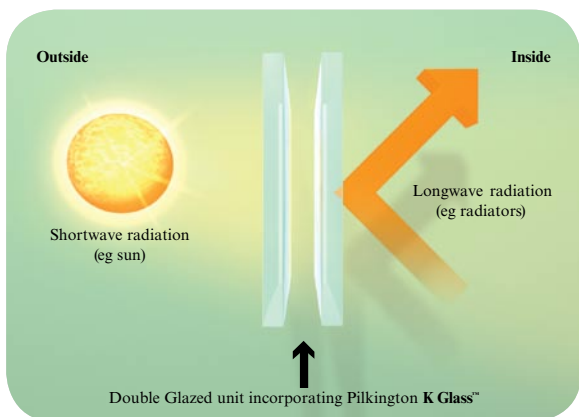




## What makes Pilkington K Glass™ the ideal solution?

Basically, by using less heat to keep your home warm, less energy needs to be produced – thus lowering the overall levels of greenhouse gases.

Pilkington **K Glass™** usually forms the inner pane of a double glazing unit, and has a special ‘low-emissivity’ (low-e) coating which is a good reflector of long wave radiation (heat). This allows less heat to escape through your windows, because it reflects heat from fires and radiators back into your home. At the same time Pilkington **K Glass™** lets the sun’s heat through your window contributing to its energy efficiency. This free heat from the sun is known as passive solar gain, so whilst offering positive benefits for the environment, this also has great benefits for you.



Windows incorporating Pilkington **K Glass™** allow heat from the sun through and reflect heat from fires and radiators back inside, making it easier to keep houses warm.

## How will this make a difference in my home?

### **Save on your heating bills**

Pilkington **K Glass™** not only saves energy and vital natural resources, but also saves you money over the long term.

Its unique properties and superior insulation keep your home warmer, which means you can run your heating system for a shorter period and still remain just as comfortable – thus saving on your heating bill.

So make sure you ask for Pilkington **K Glass™** or Pilkington **energiKare™** in your windows when you buy them. It's the easy way to stamp out wasted energy.

### **Eliminates cold spots and condensation**

Whereas ordinary glass offers poor insulation, with uncomfortable cold spots close to windows, glazing that incorporates Pilkington **K Glass™** offers a total solution.

By making the inner pane of your window much warmer, cold spots are reduced – giving you more usable floor space.

And because it's warmer, the glass reduces the internal condensation, which is normally produced when warm, moist air comes into contact with a cold surface, such as conventional glass.

### **Ideal for conservatories**

Pilkington **K Glass™** is a great choice for a conservatory too – as thousands of satisfied customers can testify.

Better insulation and fewer cold spots mean it will typically keep an unheated conservatory comfortable for a greater part of the year than ordinary double glazing. This allows you to make the most of your conservatory all year round – especially if it's North facing.

The glass can also be toughened to provide impact safety (accidental damage), laminated for additional security, and combined in an insulating glass unit with other products such as Pilkington **Activ™** self-cleaning glass.

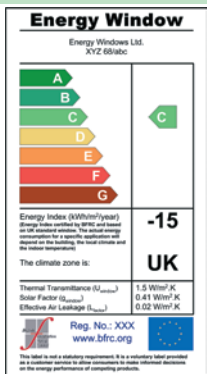
### A neutral appearance

Pilkington **K Glass™** has high light transmission and appears virtually the same as clear float glass. In certain circumstances, all low emissivity coatings may produce transient visual effects. In oblique lighting the coating may look like a transparent film or produce a haze, i.e. a cloudy look to the surface. When lightcoloured objects such as net curtains are placed close to the glazing they will look slightly darker. To maintain consistency of appearance we recommend that replacement windows containing Pilkington **K Glass™** are not placed next to windows containing clear glass. Pilkington **K Glass™** should not be used as single glazing. Ask your window installer for more details.

### External condensation

Note: All low-e glass types retain more heat in the home. As a result of the improved thermal efficiency the outer pane of glass will be cooler and there may be more occurrences of external condensation than with inefficient glazing. Don't forget to look out for the Pilkington **K Glass™** sticker to check for authenticity.

## Window energy ratings



The new Window Energy Rating (WER) system measures the energy efficiency of the complete window and frame to produce a single number (this corresponds to a grade in the range A-G). It makes it easy for you to compare the energy efficiency of windows at a glance, in much the same way as with washing machines and fridges. Pilkington **K Glass™** can help windows achieve higher ratings – up to an A rating in suitable framing systems.



Proud supporters of



**energy saving trust**<sup>®</sup>

Incorporating low-emissivity glass, such as Pilkington **K Glass**<sup>™</sup> in windows, is recognised by the Energy Saving Trust as a means of reducing heat loss. It can help windows achieve the WER level A-C making it eligible for Energy Saving Recommended status – an Energy Saving Trust Initiative backed by the Government.

## Benefits of Pilkington **K Glass**<sup>™</sup>

- Improves energy efficiency
- The ideal choice to reduce energy consumption
- Proven to meet the latest Building Regulations when combined in an insulating glass unit with a suitable window frame
- Saves you money on heating bills as less energy is required to maintain a comfortable temperature
- Reduces unsightly internal condensation
- Allows you to extend the glazed area of a building without increasing heat loss
- Helps windows achieve the highest Window Energy Ratings possible



Pilkington **K Glass**<sup>™</sup> is now available as part of the Pilkington **energiKare**<sup>™</sup> glazing system.

Pilkington **K Glass**<sup>™</sup> is used in glazing which has extra passive solar gain making it even more efficient

than standard low emissivity glazing. This helps you to save money on your heating bills as well as help the environment. Look out for Pilkington **energiKare**<sup>™</sup> at your local window supplier.



To find out more about Pilkington **K Glass™** including prices and available framing systems, contact your local window or conservatory installer.

YOUR LOCAL INSTALLER

To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it.



**PILKINGTON**  
NSG Group Flat Glass Business

**Building Products - UK**

Prescot Road St Helens England WA10 3TT

Telephone 01744 692000 Fax 01744 692880

E-mail: [pilkington@respond.uk.com](mailto:pilkington@respond.uk.com)

[www.pilkington.co.uk](http://www.pilkington.co.uk)