



## Pilkington **K Glass™** Range

Pilkington **K Glass™**

Pilkington **K Glass™** OW

Pilkington **K Glass™** OW on Surface 4

Pilkington **K Glass™** S



Upstairs windows using energy-efficient glazing.

Downstairs windows using original single glazing.

## A warm welcome to Pilkington **K Glass**™

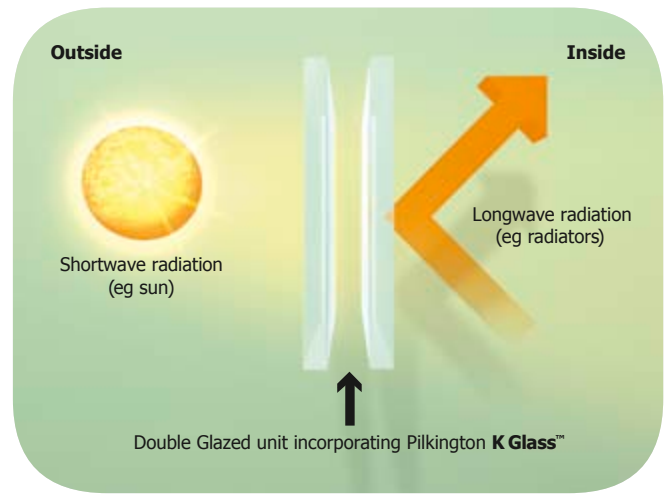
For over two decades the Pilkington brand has been the driving force behind the development of energy-efficient glazing. This expertise has been used to strengthen the Pilkington **K Glass**™ range, which now boasts more choice than ever. So you have even more ways to achieve the Window Energy Rating (WER) you want and to comply with Part L of the Building Regulations, now and in the future.

## Don't waste energy looking around - the ideal solution is right here

Each product from the Pilkington **K Glass**™ range usually forms the inner pane of an Insulating Glass Unit (IGU), and has a special low-emissivity (low-e) coating which is a good reflector of heat (long wave radiation). This allows less heat to escape through windows, as it reflects heat from within the room back into the building. At the same time, low-e glass lets the sun's heat pass through the windows, thus also contributing to its energy efficiency. This free heat from the sun is known as passive solar gain or g-value. A higher g-value can be achieved when a glass from the Pilkington **K Glass**™ range is combined with a low-iron glass such as Pilkington **Optiwhite**™ as the outer pane of an IGU.

## Thermal efficiency made clear

The Window Energy Rating (WER) is the Government-backed method of assessing and ranking the energy efficiency of a complete window. Taking into account its U-value, g-value and air infiltration, the scheme allows easy comparison of the energy efficiency of competing windows on a scale of A++ to E with A++ being the best. The energy performance of an IGU or the window itself can be improved in a series of steps to gradually improve the WER band achieved; firstly argon filling improves the U-value, then a low-iron glass such as Pilkington **Optiwhite**™ as the outer pane improves g-value. The addition of a warm edge spacer bar improves the U-value of the whole window.





## A closer look at the range

### Pilkington **K Glass™**

The original hard coated low-emissivity glass, Pilkington **K Glass™** is designed to reflect heat back into a building, greatly improving its thermal efficiency and maximising the use of free heat. Pilkington **K Glass™** remains the UK's best known and most recognisable brand name in both trade and consumer markets.

- Hard-coat
- Highly durable
- Easy to handle and process
- Cost effective
- When combined with Pilkington **Optiwhite™** can easily achieve a minimum WER C in most frame types
- Readily available from stock
- Doesn't have the shelf life limitations of an off-line coated product
- No edge deletion required

### Pilkington **K Glass™ OW**

For A-rated windows with unrivalled levels of clarity, Pilkington **K Glass™ OW** is the clear choice. An advanced form of the original Pilkington **K Glass™**, it allows better light transmission, improves g-value and helps achieve a WER band A in the greatest range of window profiles when used within Pilkington **energiKare™** IGUs.

- Hard-coat
- When combined with other products from our range within a Pilkington **energiKare™** IGU, it's even easier to achieve a WER of A
- Improved clarity compared to standard low-e glazing options

- Readily available from stock
- Doesn't have the shelf limitations of an off-line coated product
- No edge deletion required

### Pilkington **K Glass™ OW on Surface 4**

For the ultimate in thermal insulation Pilkington **K Glass™ OW** can be used on Surface 4 (the exterior surface of the inner pane) of an IGU to provide the performance of a triple glazed unit with double glazing.

### Pilkington **K Glass™ S**

The latest product in our low-e range is Pilkington **K Glass™ S**, an off-line high performance, low-e coated option, for outstanding energy-efficient glazing. Offering excellent thermal insulation when incorporated within Pilkington **energiKare™** IGU, Pilkington **K Glass™ S** has a highly neutral appearance with optimal g-value, thermal insulation and light transmission to provide the highest WER performance.

- Off-line coated
- The ultimate high performance low-e product
- A highly neutral appearance with optimal solar heat gain
- Helps windows exceed Part L regulations both now or in the future
- Single Stock product

#### Did you know?

Pilkington **K Glass™ OW** can be used as the inner pane (Surface 4) of an IGU to achieve a Ug-value as low as 0.9 when combined with Pilkington **Optitherm™ S1 Plus** (Surface 2).



## The benefits of using glass from the Pilkington **K Glass™** range are easy to see

- The Pilkington brand is trusted and well recognised by consumers
- Combining Pilkington **K Glass™** or Pilkington **K Glass™** OW in a Pilkington **energiKare™** unit can help windows to achieve at least a WER band C (depending upon frame type)
- When Pilkington **K Glass™** S is combined with Pilkington **Optiwhite™** in a Pilkington **energiKare™** IGU, A-rated windows are easily achievable
- Increased light transmission reduces the need for artificial lighting
- Suitable for use in PVC-U, timber and aluminium profiles in both new and replacement windows
- Enables householders to reduce energy usage and save money on heating bills
- Helps Governmental targets of reducing CO<sub>2</sub> emissions from homes
- Helps to reduce window drafts, making rooms more usable
- Enables glazed areas of a building to be extended without increasing heat loss
- Reduces unsightly internal condensation
- Keeps conservatories more comfortable than ordinary double glazing
- Single stocked product which is available in annealed form and can be toughened or laminated for safety and greater security
- All products manufactured in St Helens, England

### Note:

Pilkington **energiKare™** is the brand name given to double glazed units containing any product from the Pilkington **K Glass™** or Pilkington **Optitherm™** range when combined with Pilkington **Optiwhite™** (as outer pane) that will achieve a WER of at least band C in a given window framing system.

Visit [pilkington.co.uk/kglass](https://www.pilkington.co.uk/kglass) for further information on our product range.

## Pilkington **K Glass™** Range - Comparative Performance in Glazing

Outer Pane (4 mm)	Cavity (mm) Gas Fill	Inner Pane (4 mm)	Light Transmittance %	Light Reflectance (external) %	Centre Pane U <sub>g</sub> -value [W/m <sup>2</sup> K]	Total Solar Heat transmittance (g value) %	Pilkington <b>energiKare™</b> Unit
Pilkington <b>Optiwhite™</b>	16 mm argon	Pilkington <b>K Glass™</b>	77	18	1.5	79	Y
Pilkington <b>Optiwhite™</b>	16 mm argon	Pilkington <b>K Glass™</b> OW	78	18	1.5	79	Y
Pilkington <b>Optifloat™</b> Clear	16 mm argon	Pilkington <b>K Glass™</b> S	82	12	1.2	71	N
Pilkington <b>Optiwhite™</b>	16 mm argon	Pilkington <b>K Glass™</b> S	83	12	1.2	74	Y

Above determined in accordance with EN410 and EN673. Assuming 90% argon gas fill.

\*Varies with frame performance.

## Pilkington **K Glass™** OW for use on Surface 4 - Optimised for U<sub>g</sub>-value (WER not applicable)

Outer Pane (4 mm)	Cavity (mm) Gas Fill	Inner Pane (4 mm)	Light Transmittance %	Light Reflectance (external) %	Centre Pane U <sub>g</sub> -value [W/m <sup>2</sup> K]	Total Solar Heat transmittance (g value) %
Pilkington <b>Optitherm™</b> S1 Plus	16 mm argon	Pilkington <b>K Glass™</b> OW	66	26	0.9	44
Pilkington <b>K Glass™</b> S	16 mm argon	Pilkington <b>K Glass™</b> OW	77	15	1.1	62
Pilkington <b>K Glass™</b> OW	16 mm argon	Pilkington <b>K Glass™</b> OW	73	20	1.3	69

Above determined in accordance with EN410 and EN673. Assuming 90% argon gas fill.

## Pilkington **K Glass™** Range - a selection of available sizes

Thickness	Maximum Sizes	Thickness	Maximum Sizes
<b>Pilkington <b>K Glass™</b></b>			
4 mm	3210 × 2250 mm	6 mm	3210 × 2250 mm
4 mm	3210 × 2550 mm	6 mm	3210 × 2550 mm
4 mm	6000 × 3210 mm	6 mm	6000 × 3210 mm
4 mm	2400 × 1605 mm	—	—
4 mm	2400 × 1070 mm	—	—
<b>Pilkington <b>K Glass™</b> OW</b>			
4 mm	3210 × 2250 mm	6 mm	3210 × 2250 mm
4 mm	3210 × 2550 mm	6 mm	3210 × 2550 mm
4 mm	6000 × 3210 mm	6 mm	6000 × 3210 mm
4 mm	2400 × 1605 mm	—	—
4 mm	2400 × 1070 mm	—	—
<b>Pilkington <b>K Glass™</b> S</b>			
4 mm	3210 × 2250 mm	6 mm	3210 × 2250 mm
4 mm	3210 × 2550 mm	6 mm	3210 × 2550 mm
4 mm	6000 × 3210 mm	6.4 mm and 6.8 mm laminated	6000 × 3210 mm

## Pilkington **K Glass**<sup>™</sup>



*energy-efficient glass*

This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. 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, "K Glass", "Optiwhite", "energikare", "Optifloat" and "Optitherm" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.



CE marking confirms that a product complies with its relevant harmonised European Norm.

The Declaration of Performance for each product, including declared values, can be found at [www.pilkington.com/CE](http://www.pilkington.com/CE)



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