



Pilkington **K Glass**™ Range

Pilkington **K Glass**™ Pilkington **K Glass**™ A Pilkington **K Glass**™ S





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

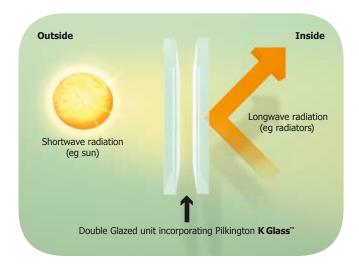
For over two decades the Pilkington brand has been the driving force behind the development of energy-efficient glazing. This expertise has been used to strengthen the Pilkington **K Glass**™ range, which now boasts more choice than ever. So you have even more ways to achieve the Window Energy Rating (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.

- · On-line coated
- When combined with Pilkington Optiwhite™ can easily achieve a minimum WER C in most frame types
- · Highly durable
- Easy to handle and process
- Doesn't have the shelf life limitations of an off-line coated product
- No edge deletion required



Pilkington **K Glass**™ A

The next generation of on-line coated glass that achieves a WER A rating. Developed from the original Pilkington **K Glass**™, available in a wide range of sizes and is easy to handle and process.

- · On-line coated
- Helps windows achieve WER Band 'A' (dependant on frame type)
- Can be toughened easily with the coating facing up or down for throughput benefits
- High light transmission maintains neutrality; avoids the 'grey' appearance of competitor hard coat low-e products
- Robust online coating, without shelf-life limitations of an off-line coated product
- No edge deletion required
- Single stock can be used in annealed or toughened versions
- Easy to handle and process; enables reduced cycle times versus clear float

Pilkington **K Glass**™ S

Pilkington **K Glass**™ S, is an off-line high performance, low-e coated option, designed 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
- Single stock can be used in annealed or toughened versions



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
- 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 CO₂ 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 and orangeries more comfortable than standard 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**™ or Pilkington **Optifloat**™ Clear (as outer pane) that will achieve a WER of at least band C in a given window framing system.

Visit **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 _g -value [W/m ² K] | Total Solar Heat transmittance (g value) % | Pilkington energiKare ™ Unit |
|----------------------------------|-------------------------|----------------------------------|-----------------------------|--------------------------------------|--|---|-------------------------------------|
| Pilkington Optifloat ™ | 16 mm argon | Pilkington K Glass ™ | 76 | 18 | 1.5 | 75 | Υ |
| Pilkington Optifloat ™ | 16 mm argon | Pilkington K Glass ™ A | 76 | 17 | 1.4 | 75 | Υ |
| Pilkington Optifloat ™ | 16 mm argon | Pilkington K Glass ™ S | 82 | 12 | 1.2 | 71 | Y |

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

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

| | Dimension | Substance (mm) | | | | | | | |
|-------------------------------|--------------------|----------------|-----|----|-----|-----|--|--|--|
| | (mm) | 4 | | 6 | 6.4 | 6.8 | | | |
| Pilkington K Glass ™ | | | | | | | | | |
| Standard Stock Sizes | 2440 × 1070 | 55 | | _ | 35 | _ | | | |
| Staridard Stock Sizes | 2440 × 1605 | 50 | | _ | _ | _ | | | |
| Lehr End Sizes | 3210×2250 | 39 | | 25 | 23 | _ | | | |
| Letti Etia Sizes | 3210×2550 | 35 | | 23 | 20 | 20 | | | |
| Jumbo | 6000×3210 | 15 | 34 | 10 | _ | _ | | | |
| Pilkington K Glass ™ A | | | | | | | | | |
| Standard Stock Sizes | 2440 × 1070 | 55 | | _ | _ | _ | | | |
| Standard Stock Sizes | 2440×1605 | 50 | | _ | _ | _ | | | |
| Lehr End Sizes | 3210×2250 | 39 | | _ | _ | _ | | | |
| Letii Etid Sizes | 3210×2550 | 35 | | _ | _ | _ | | | |
| Jumbo | 6000×3210 | 15 | | _ | _ | _ | | | |
| Pilkington K Glass ™ S | | | | | | | | | |
| Lehr End Sizes | 3210 × 2250 | 25 | 38 | _ | 22 | 19 | | | |
| Letii Etiu Sizes | 3210 × 2550 | 34 | | 22 | 19 | 19 | | | |
| Jumbo | 6000×3210 | 14 33 | 150 | 9 | _ | 9 | | | |

Numbers contained in the tables refer to plates per pack.

^{*}Varies with frame performance.

Pilkington **K Glass**™



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.

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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



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