

LOW E

Why Low E

The ever-increasing emphasis on energy efficiency & in particular, changes to Building Regulations has resulted in an increase in demand for Low Emissivity glass types. Low E glass is an essential contributor to energy conservation & comfort ; minimising condensation & heat loss.

Types of Low E glass

There are different types of Low e glass that are defined as hard-coat and soft-coat.

Hard-coat – the coating is applied during the molten stages of flat glass production. The coating is durable and the glass may be handled like standard annealed glass.

Soft-coat – the coating is applied to the glass surface as a secondary process. This type of coating is less durable and requires careful handling throughout sealed unit manufacturing.

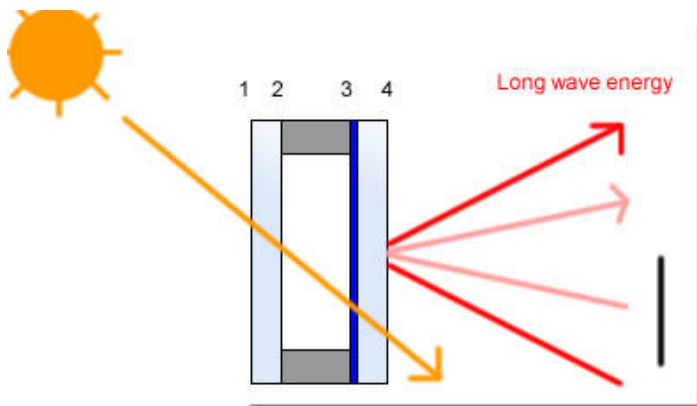
Soft-coat glass offers better insulation properties over hard-coat glass. Soft-coat has a clearer optical transparency than hard-coat, minimising any haziness or discolouring effects that hard-coat displays.

Many sealed unit companies do not have the technical equipment to process soft coat glass and may only offer hard-coat as their only energy saving glass.

Regency Glass can process both types and therefore offer both.

How Low E works

Diagram



Low E glass usually forms the inner pane of a double glazing unit (side 3). The energy saving coating lets the sun rays through but reflects heat from fires & radiators back into the property, heat that ordinary double glazing allows to escape. The thermal properties of Low E means you can turn down the thermostat & still remain comfortable resulting in saving on energy bills .



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Appearance of Low E

Low E glass has high light transmission and appears virtually the same as clear float glass. However, in rare instances of strong oblique lighting, the coating may be seen as a transparent film. This is simply a transient visual effect, which can be considered positive evidence of the coated surface being present.

Further evidence of the coating's presence is through the very minor effect it has on white light transmission. This effect is so small as to be generally unnoticeable. However, when a light coloured object or material is in close proximity to the glazing, dependant on local circumstances and conditions, a slight darkening can be noticed.

Every genuine piece of Low E glass carries the 'LOW E' sticker, but its presence can also be confirmed by the use of a coating detector.

In certain extreme environmental conditions, low emissivity glass might increase external condensation.

Low e glass should not be used as single glazed

