

# **Low Emissivity Glass**

and the Conservation of Fuel and Power

### The Visual Quality of Low Emissivity Glass

#### **New thermal insulation regulations**

The new Part L (Conservation of Fuel and Power) of the Building Regulations came into force on 1 April 2002. For the first time, Part L covers replacement windows, which now have to meet more rigorous standards of thermal insulation. Without low-e glass in your windows, you have little prospect of meeting the new, compulsory requirements.



Better than merely meeting the Regulations, low-e glass is virtually essential to enable you to achieve the new targets.

## What is low emissivity glass?

Low-e glass is a vital component of energy efficient windows. It has virtually invisible surface coating. This coating operates as follows:

### Are there any drawbacks?

Given the substantial benefits of low-e, any "drawbacks" are insignificant. You may notice a slight darkening of net curtains when viewed from outside the house. However, remember that the primary function of a window is that it enables you to see the outside world from inside your home - it is for looking through, not for looking at.



### • It allows heat from the winter sun to enter your home through the glazing.

- This solar energy works with your domestic heating system to warm up your room, which then gives off long wavelength heat radiation.
- A large proportion of that long wave heat would vanish back out through windows made of ordinary glass. However, the low-e coating reflects that heat back into your home, i.e. the coating traps the heat in your home.

How is visual quality assessed?

The visual quality of a window is assessed by looking through it from the room side, at right angles to the glass, standing at a distance of not less than 3 metres from the glass, under natural daylight and not direct sunlight, with no visible moisture on the surface of the glass. Provided your vision through the glass is not impeded under these conditions, for example, by scratches, bubbles, or distortion of external objects, your windows are of good visual quality.



As a consequence, you will feel much warmer during the winter, and your pocket will feel the benefit of reduced heating costs.

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