



Advice

Window Energy Ratings



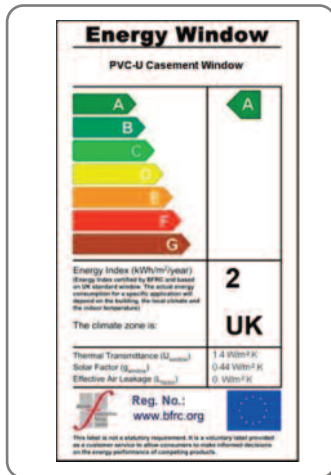
window energy ratings



Advice

Window Energy Ratings

Window Energy Ratings (WER)



Windows can now carry an energy rating similar to that given to electrical goods.

Any window with a 'C' rating or higher is deemed to be energy efficient.

A window with an 'A' rating should allow more free heat in from the sun than it loses from your home, over the course of a year.

Building Energy Ratings (BER)

The introduction of Energy Ratings for Buildings and Energy Performance Certificates has received widespread coverage in the news. These will be required when a property is placed on the market, for sale or rent.

Certified energy assessors will calculate ratings based on the insulation properties of the walls, roof, windows, ventilation, heating and lighting.

Window Energy Ratings are not directly related to this scheme and are not required for BER certification, although having energy efficient windows will help to achieve a better BER rating.

Building Regulations

In general, compliance with building regulations can be demonstrated by installing:

- windows with an overall U value of 1.8W/m²K (or lower)
- windows with a WER rating of D (or above)
- glass centre pane U value of 1.2W/m²K (or lower)

Less efficient windows are permissible in some circumstances. When considering an extension to an existing dwelling, the energy efficiency of the extension may need to exceed current minimums in order to bring the overall energy efficiency of the extended building in line with current Building Regulations - please consult with your local Building Control and/or a qualified architect.





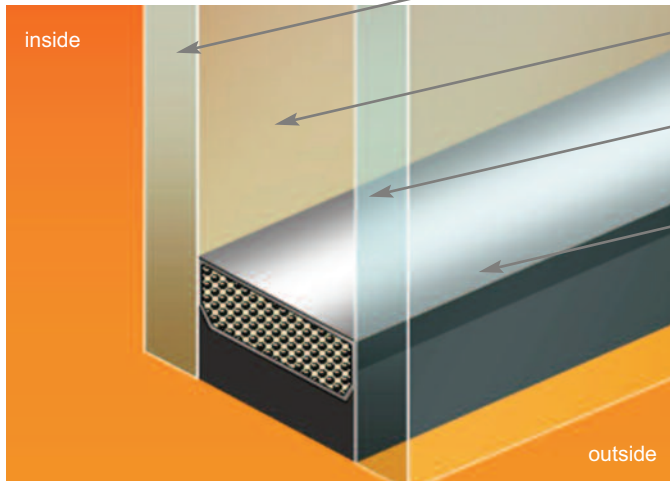
Advice

Window Energy Ratings

Glass for Energy Rated Windows

Traditionally, when comparing the performance of glass, we only consider the amount of heat lost through the middle of the pane. This measure is the U value – the lower the U value the less heat is lost through the glass.

When comparing the overall performance of window systems, the insulation properties of the edge materials of the double glazing unit and the window frame itself also need to be considered.



For Window Energy Ratings, a third factor is also compared – the amount of solar gain through the glass, i.e. the amount of free heat from the sun allowed to pass through the glass into your home.

At GlasSeal, we have developed a range of double glazing and triple glazing units to meet the special requirements of Window Energy Ratings.

Typical features of an energy rated unit are shown below – the exact combination will vary depending on the window frame type and the energy rating required.

Low-Emmissivity glass reflects heat back into your home

Argon gas is used to replace the air between the panes to further reduce heat loss

Extra clear **low-iron glass** allows more free heat from the sun through the window

Warm-edge spacer bar minimises heat loss through the perimeter of the glass unit and reduces condensation

- **EN1279 part 2 and 3** accreditation is required by the British Fenestration Rating Council (BFRC), who award Window Energy Ratings



Glas-Seal NI Ltd, 80 Belfast Road, Ballynahinch, Co. Down. BT24 8EB
T. 028 9756 2932 F. 028 9756 1096 W. www.glasseal.co.uk E. info@glasseal.co.uk



Advice

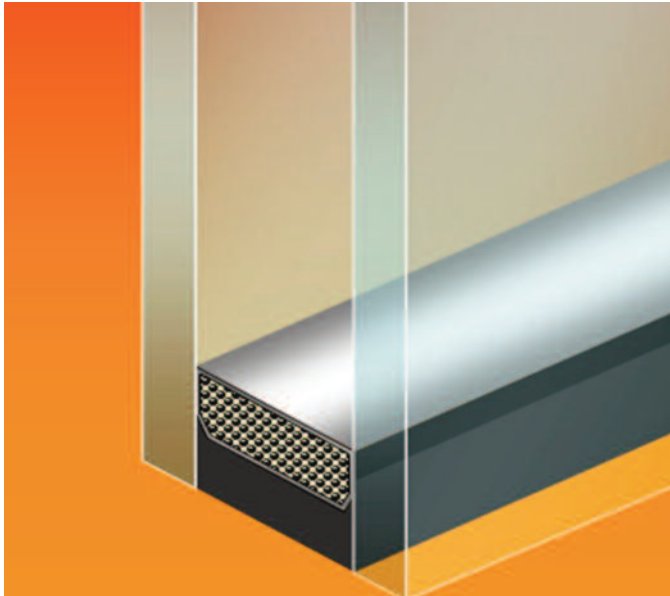
Window Energy Ratings

Glass for Energy Rated Windows

GlasSeal is one of a small number of leading sealed unit manufacturers with EN1279 Part 2 & 3 Kitemark certification.

Within the scope of our Kitemark, we can offer units tailored to provide the highest BFRC ratings in all frame types.

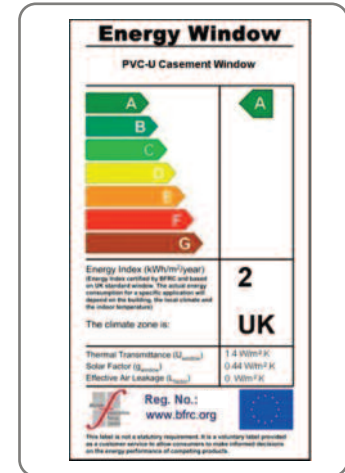
The following components are available from GlasSeal:



BFRC

British
Fenestration
Rating
Council

www.bfrc.org



Low-Emmissivity Glass

- Guardian Climaguard NL/NLT (soft-coat)
- Pilkington K Glass (hard-coat)
- Saint-Gobain Planitherm Total (soft-coat)

Low-Iron Glass

- Pilkington Optiwhite
- Saint-Gobain Diamant

Warm-Edge Spacer Bar

- SGG Swisspacer V
- Thermix TX-N

Inert Gas

- Argon
- Krypton



Glas-Seal NI Ltd, 80 Belfast Road, Ballynahinch, Co. Down. BT24 8EB
T. 028 9756 2932 F. 028 9756 1096 W. www.glasseal.co.uk E. info@glasseal.co.uk