



**Camden eCare**  
*energy rated windows*



# *Information Pack*

**Manufactured by: Camden Group**

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# Camden eCare Energy Rated Windows

**Camden eCare Energy Rated Windows have been designed to minimise heat loss, retain natural heat from the sun and eliminate air leakage... all without compromising the security and quality of the windows.**

## Camden eCare Energy Rated Windows Range:

Energy Rating	Product Name	Outer Glass	Gas Fill	Inner Glass	Spacer Bar	Frame	U-value (whole window)
<b>A</b>	<b>eCare Select+</b>	Low Iron	Argon	Low E So Coat	Warm Edge Super Spacer	60C, 70C & 70S	1.40
<b>B</b>	eCare Advantage+	Float	Argon	Low E So Coat	Warm Edge Super Spacer	60C & 60S	1.42 - 1.45

**eCare Vertical Sliders available with "A" and "B" ratings when fitted with Select+ glass & thermal reinforcement**

### Low Iron Glass:

- ☒ Clear appearance
- ☒ Excellent heat transmission
- ☒ Achieves an "A" rating when combined with Low E So Coat

### Low E Soft Coat Glass:

- ☒ Excellent thermal insulation
- ☒ Maximum light transmission
- ☒ So Coat achieves an "A" rating when combined with Low Iron



### Warm Edge Super Spacer:

- ☒ Foam-based spacer bar
- ☒ Less conductive than standard metal bars
- ☒ Heat loss reduced by up to 94%
- ☒ Fitted as standard to all our energy efficient windows

### Argon Gas:

- ☒ Reduces convection
- ☒ Raises the overall glass unit temperature which helps to eliminate condensation

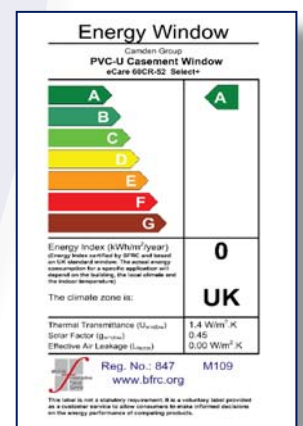
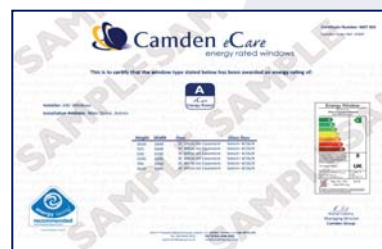


## Energy Rated Windows - benefits for home owners.....

**1) Save money on your home heating bills...** your heating bills could be reduced by up to 20% per year.

**2) Energy Rated Certificates...** supplied with energy rated orders. These conform to current building regulations which requires 'Energy Performance Certificates' and if you are selling your home this certificate could help add thousands of pounds to its value.

**3) The Environment...** energy efficient windows will ensure you do "your bit" for the environment and will reduce your CO2 emissions by up to 2 tonnes.



**Camden eCare Energy Rated Windows...100% energy efficient... 100% cost effective**

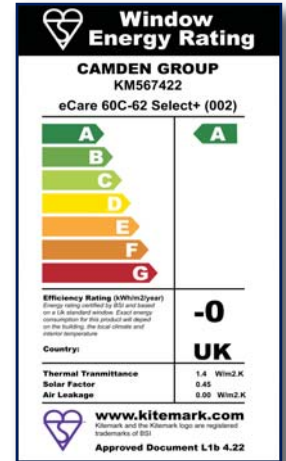
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# What are Window Energy Ratings (WERs)?

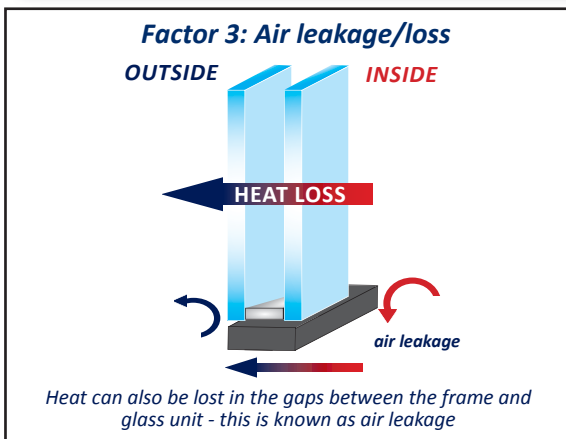
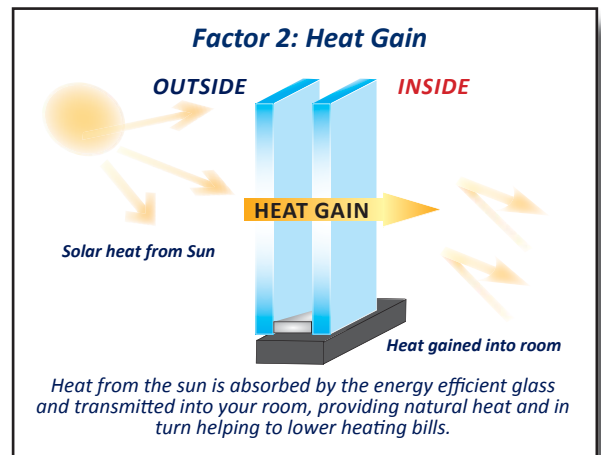
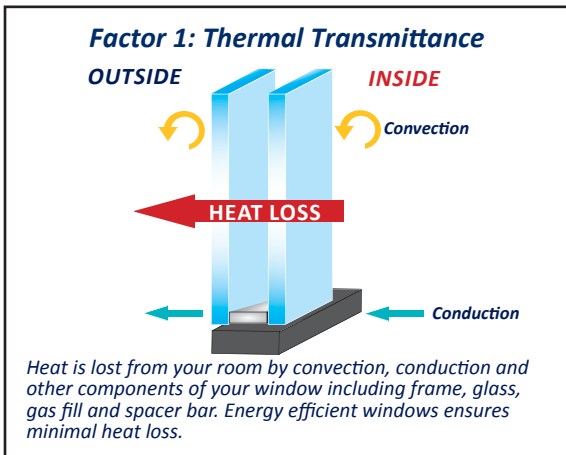
The energy efficiency of windows are measured by Window Energy Ratings. WER's take into account the performance of both frame and glass known as a whole window ratings, and are determined by three main factors:

- 1) Thermal Transmittance (U-window):** measures heat that is lost through the overall window - energy efficient windows reduce heat loss, therefore a lower u-window value means better energy efficiency.
- 2) Heat Gain (G-window):** measures the amount of heat that is absorbed from the sun - energy efficient windows transmit solar heat back into the room (helping to lower home-heating usage).
- 3) Air Leakage/Loss (L-factor):** measures heat loss that occurs as a result of general air leakage - an energy efficient frame and glass will help reduce air leakage.



Camden Group's range of Energy Rated Windows has been designed to minimise heat loss, absorb heat from the sun and eliminate air leakage... the result is savings on home heating bills and reduced energy waste.

Camden Energy Rated Windows are tested and certified by the British Standards Institute and approved by the Energy Saving Trust scheme.

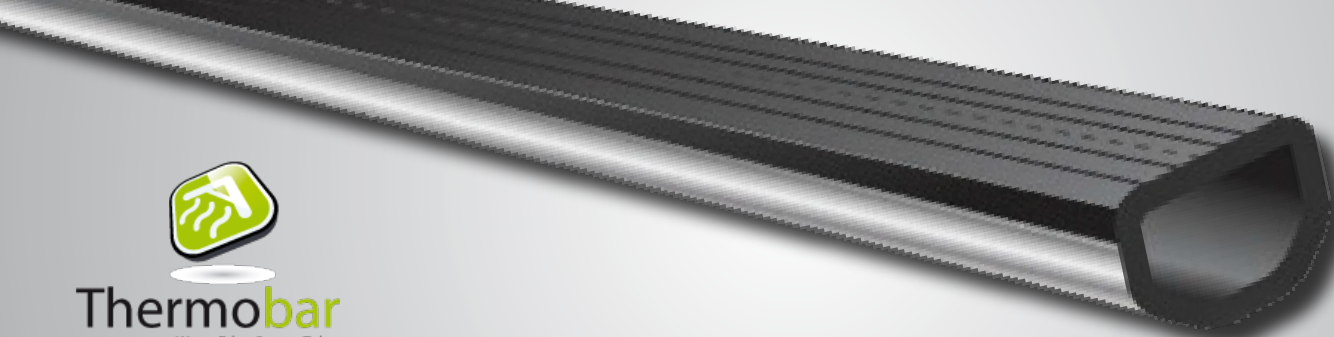


Once all three factors have been calculated they are combined to produce a **Window Energy Ratings Index** which is banded into A-G categories as shown below:

Window Energy Rating Points* (kWh/m <sup>2</sup> /Year)	A - G Rating
0 and greater than zero	A
-10 to 0	B
-20 to 0	C
-30 to -20	D
-50 to -30	E
-70 to -50	F
Below -70	G

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# Thermobar Spacer

**Glazed units manufactured by Camden Group, feature Thermobar as standard, a superior quality warm-edge spacer that provides maximum energy efficiency for both your home and the environment...**

All double and triple glazed units today require a spacer bar, however did you know that choosing the correct spacer bar could be the different between an "A" and "G" rated window?

Spacer bar is a continuous bar which separates the panes of glass in a glazed unit. The spacer bar is bonded to the panes with sealant, creating an airtight cavity which is then usually filled with gas, such as Argon or Krypton. The spacer bar then acts as a barrier between the panes to absorb any moisture, air leakage and enhance solar gain.

Within the industry, spacer bars fitted in glass units are either aluminium or warm-edge. Aluminium spacers, although most commonly used, are actually highly conductive. This results in major heat loss through the glass unit, and ultimately overall heat loss from your home.

Warm-edge spacers, however, replace the aluminium with a low heat-conductive material, therefore reducing heat loss. Warm-edge spacer when used in a Low E glass unit, ensures optimal thermal efficiency.

"Warm-edge" refers to the **edge construction** of a glazed unit; the edge is where the most overall heat is lost (up to 80%), so using a 'warmer' material ensures better insulation.

Warm-edge spacer bars are an important factor in terms of overall window energy ratings; helping to reduce air loss from inside the house and absorb heat from the sun. Warm-edge spacer bars also absorb any moisture within the cavity, in turn reducing condensation.

The diagram below demonstrates the differences in heat loss:



Camden Group's range of energy rated windows now feature **Thermobar** as standard, to ensure optimal thermal efficiency.

Thermobar is a high-performance spacer bar that has been specifically developed to minimise heat loss through the use of modern warm-edge technology. Thermobar is considered to be one of the **most superior spacer bars on the market** due to its low thermal conductivity and "user-friendly" properties.

In fact Thermobar has gone beyond the current specification of other warm edge spacers on the market, and features the following selling points:



## Benefits of Warm-Edge Thermobar:

Heat loss at **external edge** is reduced by up to **94%**, in turn reducing home heating bills and waste energy emissions

Ensures a warmer **internal edge** temperature of up to **65%**

Condensation is reduced by up to **70%**, helping to eliminate mould/bacteria and increase the longevity of your windows

"User-Friendly" - designed for hassle-free use by fabricators and suppliers, and also compatible with all sealant types

Using Thermobar in a Low E glass unit ensures you achieve top-performance **energy rated windows**



# Camden Group - Energy Rated Windows Chart

## 60mm System

Rating	Name	Outer Frame	Glass Unit Spec	Unit Size	Reinforcement	Label No	Whole Window U-value (Uw)	Solar Gain	Air Leakage	Energy Index
A	60C Select+	52	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Full/Par al Steel	001	1.5	0.46	0.00	0
A	60C Select+	62	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Thermal Steel	002	1.4	0.45	0.00	0
B	60C Select+	75	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Full/Par al Steel	004	1.5	0.43	0.00	-7
B	60C Advantage+	62	Float/Argon/So Coat - Warm Edge Spacer	4/16/4	Thermal Steel	006	1.4	0.40	0.00	-10
B	60S Advantage+	62	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Thermal Steel	009	1.4	0.40	0.00	-9

## 70mm System

Rating	Profile Name	Outer Frame	Glass Unit Spec	Unit Size	Reinforcement	Label No	Whole Window U-value (Uw)	Solar Gain	Air Leakage	Energy Index
A	70C Select+	52	Low Iron/Argon/So Coat - Warm Edge Spacer	4/20/4	Full/Par al Steel	010	1.4	0.45	0.00	0
A	70C Select+	62	Low Iron/Argon/So Coat - Warm Edge Spacer	4/20/4	Thermal Steel	011	1.4	0.45	0.00	0
C	70C Choice+	52	Float/Argon/So Coat - Aluminium Spacer	4/20/4	Full/Par al Steel	012	1.6	0.45	0.00	-15
C	70C Choice+	62	Float/Argon/So Coat - Aluminium Spacer	4/20/4	Full/Par al Steel	013	1.6	0.43	0.00	-18
C	70C Choice	52	Float/Argon/Hard Coat - Warm Edge Spacer	4/20/4	Full/Par al Steel	014	1.7	0.45	0.00	-17
A	70S Select+	52	Low Iron/Argon/So Coat - Warm Edge Spacer	4/20/4	Full/Par al Steel	015	1.4	0.45	0.00	+1

## Tilt N Turn & Vertical Slider

Rating	Profile Name	Outer Frame	Glass Unit Spec	Unit Size	Reinforcement	Label No	Whole Window U-value (Uw)	Solar Gain	Air Leakage	Energy Index
C	60C Tilt & Turn Select+	75	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Full/Par al Steel	016	1.5	0.39	0.01	-17
A	70S Tilt & Turn Select+	62	Low Iron/Argon/So Coat - Warm Edge Spacer	4/20/4	Full/Par al Steel	017	1.4	0.44	0.00	0
B	Ver cal Slider Select+	Std	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Full Steel	018	1.5	0.43	0.05	-10
A	Ver cal Slider Select+	Std	Low Iron/Argon/So Coat - Warm Edge Spacer	4/16/4	Thermal Sleeve*	019	1.4	0.45	0.02	0

## Triple Glazed

Profile Name	Glass Unit Spec	Gas	Unit Size	Reinforcement	Colours	Centre Pane U-value (ucp)	Whole Window U-value (Uw)
60C Triple Glazed	Float/So Coat/So Coat	Argon	32mm	Thermal Steel	White, Cream, Oak, Mahogany & Black <sup>1</sup>	0.9	1.2
70C 1.0 Triple Glazed	Float/So Coat/So Coat	Argon	40mm	Thermal Sleeve*	White, Oak, Rosewood <sup>2</sup>	0.7	1.0
70C 0.8 Triple Glazed	Float/So Coat/So Coat	Krypton	40mm	Thermal Sleeve*	White, Oak, Rosewood <sup>2</sup>	0.4	0.8

<sup>1</sup> Includes colour on colour/white. Bead for 60C-TG, white/grey, cream/grey, white/black, mahogany/black, black/black, oak/acorn, bead size: 18.5mm. No brown gasket available with mahogany bead. Uw calcula ons based on standard casement with 62mm outer frame & 76mm sash. Frames reinforced with steel & Rehterm.

<sup>2</sup> Includes colour on colour/white. Bead for 70C-TG, white/black, rosewood/black, oak/black. Bead: 6.5mm. Uw calcula ons based on standard casement with 52mm outerframe & 75mm sash. Frames par- ally or fully reinforced with thermally sleeved steel.

\* Please note that Thermal Sleeve Reinforcement (used in Vertical Slider 'A' rated & 70mm triple glazed) will incur additional costs/charges