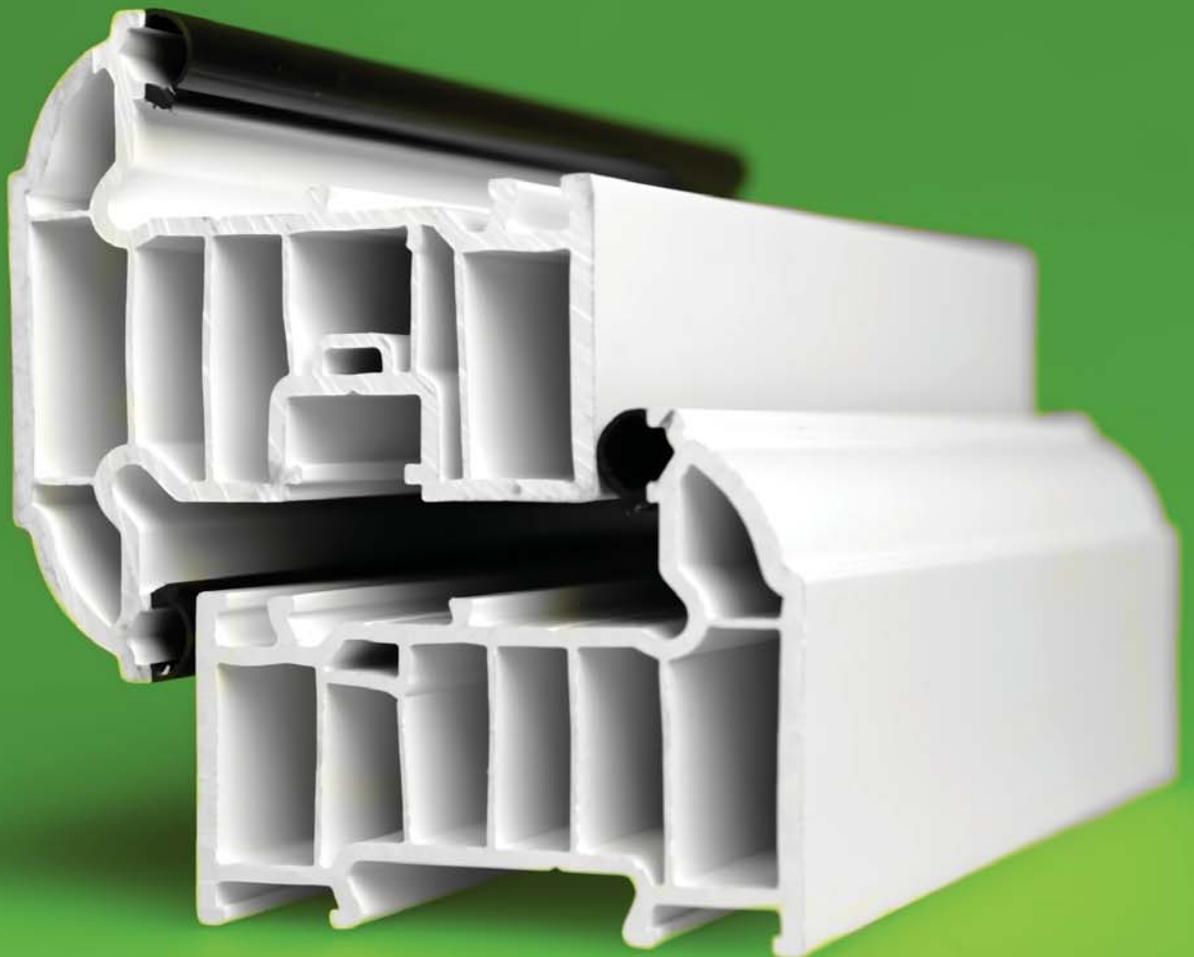


# eco energy <sup>PLUS</sup>

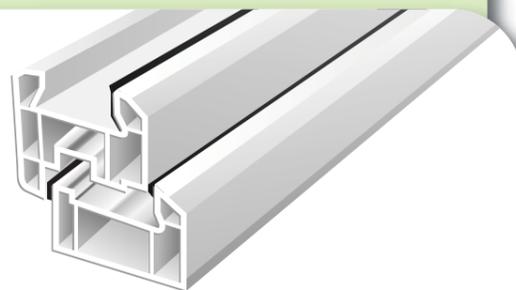
- ✓ A++ Rated
- ✓ 6 Chamber System
- ✓ 100% Lead Free
- ✓ £5000 Security Guarantee
- ✓ Neighbourhood Watch Approved
- ✓ Made in Britain



# The benefits to you of the eco energy plus 6 chamber system



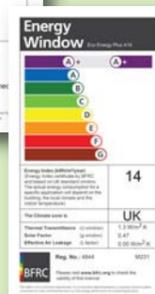
eco energy plus 6 chamber system



Industry standard 3 chamber system

The difference is plain to see...

# 'A' rated for energy efficiency

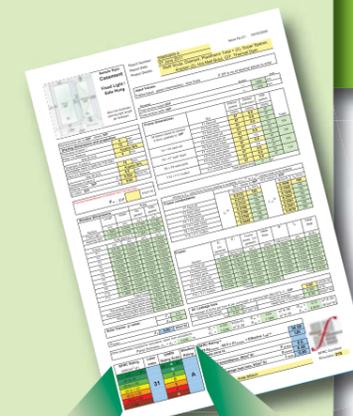


The **eco energy plus** window system has achieved a BFRC (British Fenestration Rating Council) Window Energy Rating of "A", the highest achievable.

The introduction of Window Energy Ratings (WERs) allows homeowners to shrink their carbon footprint and lower their fuel bills, by choosing a more energy efficient window system that reduces heat loss.

The **eco energy plus** window system uses its multiple chambers to lock in the heat, and high performing bubble gasket seals to ensure there are no gaps for heat to escape.

The standard rating for the **eco energy plus** double glazed window is A7. You can easily upgrade this to achieve a rating of A+14 just by changing the external pane of clear float glass to low iron instead.



BFRC Rating	Label Index	EWER Rating Scale	Window Rating
<math>0.10 \text{ to } <0.20</math>	A	A	A
<math>0.20 \text{ to } <0.30</math>	B	B	B
<math>0.30 \text{ to } <0.40</math>	C	C	C
<math>0.40 \text{ to } <0.50</math>	D	D	D
<math>0.50 \text{ to } <0.60</math>	E	E	E
<math>0.60 \text{ to } <0.70</math>	F	F	F
<math>0.70 \text{ to } <0.80</math>	G	G	G

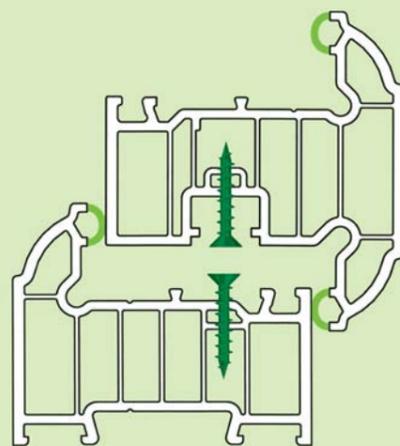
Up to A31 is possible!

## The eco energy plus 6 chamber system provides better insulation, strength and acoustic performance

Profile construction made from 100% lead free PVCu.

Bubble gaskets give an enhanced weatherseal - less chance of warmth escaping and no noisy drafts.

Hinge screws located through two walls of thick PVCu for added security and strength, unlike other systems.



The **eco energy plus** system is highly energy efficient and environmentally friendly

## Unique glazing support packer

The **eco energy plus** system even has a unique designed glazing support packer to ensure the sealed unit is correctly positioned within the opening. This guarantees long term operational benefits as opening vents will not drop, and reduces the likelihood of a sealed unit breaking down as glass cannot slip (because all panes are supported) when the sealant warms up in hotter temperatures, plus enabling rainwater to correctly drain away.



## Double glazed unit detail

**Argon gas**  
Reduces conductive and convective heat transfers.

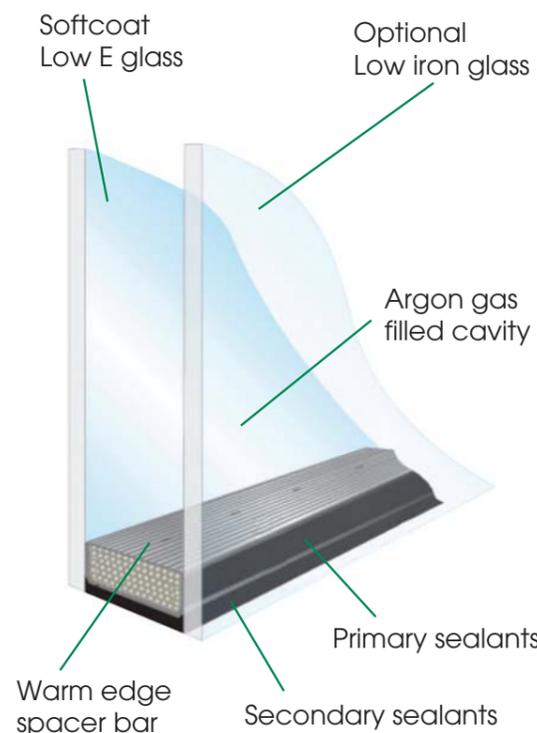
**Warm edge bar**  
Up to 80% of energy loss through a window can occur at the edge. Conventional aluminium spacer bars conduct heat out and cold in, and have exceptionally high thermal energy loss.

Using a warm edge spacer bar will reduce heat loss at the edge of the window by up to 94%.

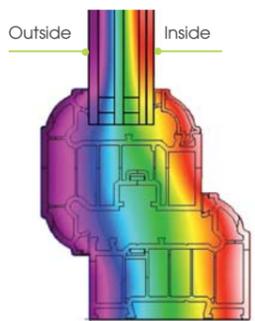
Double glazed windows fitted with warm edge spacer have an internal temperature of up to 65% warmer, reducing condensation on your sealed unit by up to 70%. This reduction in moisture virtually eliminates the chance of mould growth and potentially harmful bacteria.

**Softcoat Low E glass**  
A transparent metallic coating reflects heat back into the room. The coating also allows heat and light from the sun to pass through the glass, warming the room, adding to the efficiency of your windows.

**Low iron glass**  
The low iron content produces a higher light and energy transmittance.



A greener future...



## Cross section

The cross section to the left shows how Liniar's multi-chambered profile prevents the transfer of heat from the inside to the outside.

## 100% lead free PVCu - helping the environment

The dangers of lead are well known - however the **eco energy plus** window and door system is 100% lead free - better for the environment, and better for you, unlike many other systems in the market place.

### Did you know?

- Leaded 4 star petrol was withdrawn from sale in 2000 because of concerns over air and soil pollution and the accumulative neurotoxicity of lead.
- In 1992, European Union legislation was implemented within the UK by the Environmental Protection, and lead based paint was banned from sale to the general public, apart from specialist uses (historic buildings, arts).



## Options and fine detail



### Three styles to choose from (All internally glazed for added security)



### Handles - colours and styles



Tear drop handle, monkey tail handle, and dummy peg stays available in the following finishes: Graphite (brushed), chrome, gold, antique black



Colours shown, from left to right: Antique black, satin silver, gold, chrome, bright bronze, graphite (brushed), white, black. Also available (not shown) is anthracite grey. NB. All handles are cranked, in-line no longer available

### Triple glazing

The **eco energy plus** system can also be triple glazed for further sound insulation and energy efficiency. The sealed unit thickness is 36mm overall.

The standard triple glazed energy rating is A+16. You can improve this further to A+20 by changing the external pane of clear float glass to low iron.

For further information, please refer to our triple glazed literature.



The **eco energy plus** external window cill is 35mm deep at the front, looking more like a traditional thick timber cill. This is nearly twice the thickness of an industry standard PVCu cill.



The **eco energy plus** bay assembly is much slimmer than other conventional bay joints. This provides you with more glass area, instead of a "bulk" of PVCu.



### Optional hinge upgrade

The **Mega Hinge** has superior integral strength, and has been tested to over 25,000 cycles under 40kg operational load. It will therefore comfortably accommodate an opening sash weighing 40kg.

The **Mega Hinge** provides fire escape as well as an easy clean facility.

Ideal to be used with larger side hung casements



### Sash horn

Optional "run thru sash horns" for top hung sashes only. An excellent replica of a timber sash horn.



# Security Guarantee

**ERA**  
Total Security  
Guarantee

## The only security guarantee recognised by the Neighbourhood Watch

Your new windows and doors are so secure, if a break-in happens ERA will:

- ✓ Fully replace the damaged window or door
- ✓ Give you a £5,000 cheque as compensation



Door and window security is complicated. It takes the right package of hardware, expertly fitted to bring total security to your home.

### ERA Securing Britain's homes since 1838



ERA have been designing and manufacturing the door and window hardware that secures Britain's homes for over 175 years. With all that knowledge and experience built into their innovative products, ERA have become the experts choice for high quality, reliable security solutions.

**The UK's most comprehensive home security guarantee, from a company you can trust**

Anti-pick

Anti-drill

Anti-snap

Anti-bump



Invincible 3 star high security cylinder

The ERA "INVINCIBLE" door cylinder has **85% more metal** than a standard cylinder!

Standard euro cylinders are notoriously weak – they need a central fixing hole to secure them in place, and there's 50% less metal in this area than at the front or back section of the cylinder – it's this lack of material that makes cylinder snapping so easy.

The ERA Invincible cylinder addresses that area of weakness head on. The Invincible has a newly designed robust "squared" off platform that significantly strengthens the mechanism against attack. The patented protected design completely removes the ability to break into a cylinder.

Manufactured from solid brass, it has 85% more metal than a standard euro cylinder – this unique design is the powerhouse of the lock world.

The Invincible cylinder is fully Kitemarked and certified to TS007:2014 and BS EN 1303:2005.



Standard Euro cylinder

\* doors covered are single doors, french doors and composite doors fitted with an ERA lever/lever or lever/pad lock

## ERA locking system



### Windows

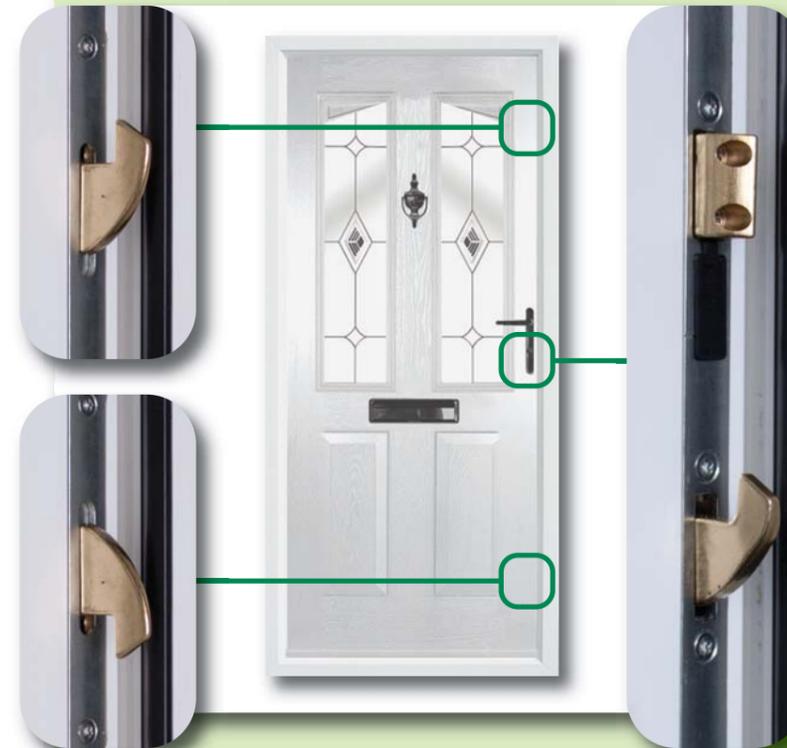
**Heavy duty shootbolt** has 300% of contact area compared to competitor products – this is the **most secure shootbolt** on the market

Central rugged steel deadbolt for **optimum security**

**Two steel cams** either side of central deadbolt for **additional security**

**High security hinge guards** fitted as standard

Centre "pull in wedge" to aid hinge side compression



### Doors

**3 high security hooks** with 10mm engagement into one piece high security keep

Bi-directional throw of locking features provides secure **anti-jemmy feature**

High security hooks are **deadlocked** in fully thrown position

Precision adjustable rollers for **smooth locking operation** and enhanced weather sealing

**Shootbolt** top and bottom on French doors

Covered by the **ERA Security Guarantee for 10 years\***

**10**  
YEAR  
Guarantee

**ERA**  
★★★★★  
Five Star Guarantee



TS007: 2014

**PAS**  
024



# The perfect finish

Our standard white is a high gloss finish, making it easier to keep your new windows and doors bright and white for years to come.

Many other systems have a matt, grainy finish, which the dirt will cling to, making it much harder to keep clean.

If white isn't what you're looking for, we have a wide range of colours and wood finishes. What about smooth cream or white woodgrain? **The choice is yours...**

## Solid Colours



## Greys - Woodgrain



## Greys - Smooth



## Woods



Actual colours may vary due to the printing process. For accurate colour selection please refer to foil swatches from your installer.

## System accreditations

The Linar system is BSi registered, BBA accredited and is designed for high security and energy efficiency. Their Secured By Design accreditation illustrates their commitment to quality and security.



BS EN 12608:2003  
KM522037



BS EN 7590:1997  
KM522039



PAS 23-1:1999  
KM522040



PAS 24-1:2007  
KM522040

