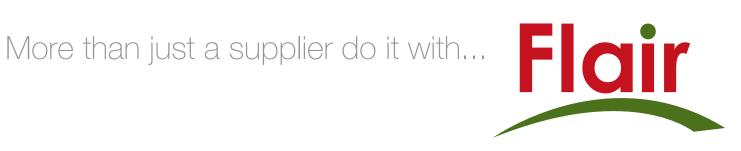


## WINDOWS & DOORS



## WINDOWS





#### **Profiles**

Our windows are made using the energy efficient Kommerling O70 & C70 5 chamber Gold Systems.

Both profiles offer a 70mm frame depth, extruded using a colourfast lead-free UPVC Greenline compound. The ovolo design of the O70 has a curved frame and opening sashes create a 'softer' appearance adding a little design flair to any installation. The C70 gives a modern look with its clean chamfered design.

Both profiles are combined with high security multi-point locking and internal beading for enhanced security.

The O70 & C70 systems can be complemented with a front/rear door, PremiLine patio, bi-fold, lift and slide or a conservatory.

Ovolo O70 System.



Chamfered C70 System.



- Kommerling O70 & C70 Profiles
- 5 Chamber Profiles
- Planibel A Glass
- · Warm Edge Spacer Bars
- Internally Beaded
- · High Security Locking System
- · Same Day Quotations
- 5 Day Turnaround
- Black gaskets and weatherseals, provide lasting performance and slimmer sightlines.
- Five chambered system is more energy efficient than the 3 chambered designs from many of our competitors.
- The full depth, central eurogroove helps make the windows and doors more secure.
- Steel reinforcement is used where needed, to add additional structural strength.
- The ovolo design of O70 Gold shows off soft sculptured lines in the frame, sash and glazing bead, while the C70 Chamfered design gives a modern and clean look through the frame sash and bead.
- 6 Single leg glazing bead is highly secure and easy to install on site.



### Astragal Bars

Astragal Bars can be fitted to any product enhancing the look of windows, doors & conservatories by giving them the traditional Georgian appearance of individual panes. They are available in white or woodgrain foils.

The Astragal Bars are securely fitted by the use of 'clips' wrapped around the sealed units and centre clips with adhesive pads specially developed to adhere to glass in all weathers. When 'grids' are specified, they will be factory fitted to save time 'on site'.



#### Run-Through Sash Horns

Run–thru sash horns are designed to appeal to homeowners looking to replace traditional sash box windows with a more cost effective and virtually maintenance free alternative. They are fabricated by milling the profile into shape as opposed to the less effective screw on method.

The system provides safe cleaning of both sashes from the inside, security, high performance and aesthetically pleasing designs. Where required profiles can be formed to provide arch heads to match existing building details.



## French Windows/Floating Mullion

French windows are designed for owners with small casements and also those looking for a traditional appearance.

The floating mullion allows both sides of the window to be opened and offers an unobstructed view, creating a feeling of space. They are also ideal as a 'fire escape' solution where normal casements may not comply.

Available in both O70 & C70 profiles.





#### Tilt & Turn

This popular window style offers all the benefits of a large glazed area with ease of cleaning and smart contemporary style. The sophisticated mechanism enables the window to be opened inwards from the top to allow for ventilation or from the side for ease of cleaning.

## WINDOWS

#### Glass



## Pilkington **Optiwhite**™

The use of glass in architecture and design is becoming more and more prevalent, and Pilkington Optiwhite  $^{TM}$  is at the very forefront of making it possible.

Pilkington Optiwhite™ offers a sheer variety of benefits, making it an excellent choice for a wide range of applications. Pilkington Optiwhite™ is a low iron extra clear float glass with very high light transmission. It is practically colourless, and the green cast inherent to other glasses is not present. It is therefore ideal for use where glass edges are visible or where a neutral colour is desired. As its light transmission is higher than clear float glass, it is perfect for applications where transparency and purity of colour are desired.

## **PLANIBEL A**

PLANIBEL A, is a revolutionary new energy efficient glass with a high performance, low-emissivity hard coating specially developed to perform to the highest ratings within the Window Energy Ratings scale from C to A, without the need for edge deletion.

- High solar factor, which maximizes the free solar heat gain (SF: 78% with external sheet PLANIBEL Clearvision).
- Low Ug-value that can further be improved by the use of gas filling (Argon) and/or the use of a Warm Edge spacer.
- Draws energy in from solar power and retains it, providing the best energy rating system, particularly when combined with the Swiss Spacer Bar.



### Spacer Bars



## sgg SWISSPACER®

Lower heating costs through better insulation: The thermally improved spacer SGG SWISSPACER V excels with an optimised heat transfer resistance. The result: The high tech spacer bar SGG SWISSPACER V enables heating costs to be reduced by up to 5%.

- Superior isolation characteristics mean higher temperatures are maintained at the edges of glass panes – significantly reducing the risk of condensation.
- Higher temperatures at the edge of the pane mean less cold radiation, ensuring more comfort inside and a healthy indoor climate.
- The high-quality plastic of SGG SWISSPACER in combination with a unique colour range means you can design each window and any façade to your specification.

#### Textured Glass



# PILKINGTON™

For privacy, pure style or to allow more light into internal rooms, decorative glass gives you a whole range of attractive options. In fact, our range from Pilkington gives you a choice of no fewer than 18 different textured glass designs, together with our premium range of etched glass from classic to contemporary, no one offers a bigger choice.

The advantages of Pilkington decorative glass are easy to see; it allows maximum light while maintaining privacy or obscuring unattractive views, and also forms an attractive decorative feature itself.

#### Window Locks

All opening windows are secured using the Twin-Cam Security (TSL) locking system that has revolutionised window fabrication and security. With exceptional levels of performance it offers the ultimate in casement window security and fabrication efficiency. TSL enables windows to comfortably meet, and exceed, the requirements of BS 7950 and has proved to be stronger than many shootbolts. A simple turn of the handle drives TSL's twincams into a double-sided strike to deliver significantly enhanced resistance to jemmying from all directions.

Side opening windows can be hung with egress hinges to allow for ease of cleaning from inside



#### Handles



White



Chrome



Gold



**Black** 

Colours shown are stock items we also have a wide range of handles and accessories in different colours, finishes or designs available to order.

Profile Colours

Besides white, windows are also available with a foil coating in different colours or wood grain patterns on one or both sides. We stock the following:









White







Light Oak

Chartwell Green

White Grain

Rosewood

## SLIDE FOLDING WINDOWS



### EASi-FOLD

The innovative and revolutionary Advance 70 EASi-FOLD window system is a slide and swing solution for the modern home.

Advance 70 EASi-FOLD windows are made up of a series of sashes that independently glide along a track, pivot and fold into place. This ingenious system allows for greater use of space and maximises ventilation whilst offering high security options.

Advance 70 EASi-FOLD windows are one of the most user friendly panoramic solutions on the market, revolutionising the way windows operate.

- EASi-FOLD windows are manufactured from the Advance 70 chamfered and sculpted system.
- No visible hardware or hinges.
- · Can incorporate both double and triple glazing.
- Capable of achieving large spans.
- · Single leg glazing for high security benefits.
- Independently gliding sashes with no mechanical rollers.
- Recycled Thermal Reinforcement (RTR Bar) for improved thermal efficiency or steel for additional structural strength.

## ALUMINIUM WINDOWS





### Alitherm 300

This window offers all you would expect from a quality system - greater comfort, better insulation, minimal maintenance, aesthetically pleasing appearance and enhanced security.

Designed to reduce heat loss by the use of a thermally broken aluminium frame with a polyamide bridge which provides a high resistance to heat transfer.

These windows offer elegant slim sightlines and a choice of profile shape and colour all while harnessing the strength and durability of aluminium.

- An enhanced system designed to comply with the revisions to the Building Regulations.
- · Document L compliant.
- · System can achieve Window Energy 'A' Rating.
- Profiles feature an extended polyamide thermal break to enhance thermal performance.
- · Ovolo, chamfered or square profiles.
- · British Standard Kitemarked system.

## SLIDE & SWING DOOR SYSTEM



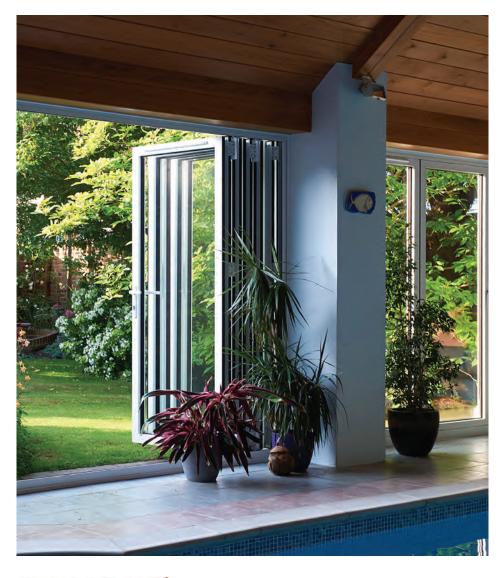
The revolutionary PremiFold door is a PAS 24 certified and Document Q compliant slide and swing door system solution for the modern home.

PremiFold is the latest in a long line of product innovations from Kömmerling. It's quite simply a revelation in the way in which you can open doors, helping to maximise ventilation, without compromising on security. This slide and swing door system is simple and easy to operate.

- PremiFold harness existing C70 and O70 Gold® profiles.
- No visible hinges and hardware.
- · Incorporates both double and triple glazing.
- Capable of achieving large spans.
- Single leg glazing bead is highly secure and easy to install on site.
- Steel reinforcement is used where needed, to add additional structural strength.
- PAS 24 certified and Document Q compliant door solution.



## ALUMINIUM FOLDING DOOR SYSTEM



#### Dimensions

Frame Width: 102.5mm
Frame Depth: 70mm

Typical Sight Line: 132mm Glass: 24, 28, 32, 34 or 36mm double or triple gazed units

Max o/a Height: 2500mm (per sash)

Max o/a Width: 1000mm (per sash)

Max Sash Weight: 100kg

## Technical Performance

**Finish:** Single or dual colour, marine quality polyester powder coat as

standard

U Value: 1.5 W/m<sup>2</sup>K using a 1.0

centre pane

Air: Class 4, 600Pa Water: Class E, 750Pa Wind: Class 4, 1800Pa Document L Compliant Security: PAS 24: 2012

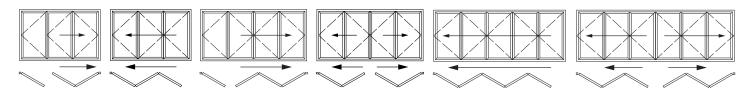


#### Visofold 1000

Our Aluminium slide folding doors are made using the Smart Visofold 1000 system. The aluminium sections utilise the latest polyamide thermal break technology which creates a thermal barrier between the cold outside and warm inside for optimal heat retention and reduced energy bills.

The Visofold series of slide-folding doors offer impressive opening apertures that can unite internal and external areas creating unique living and social areas. Slide sashes have the option of folding internally or externally with a wide choice of sash configurations. The aluminium profile is finished in polyester powder coated paint and is available in a huge range of colours.

## Configurations



## PATIO DOORS



#### Premil ine

Our PremiLine patio doors are made using Europe's number one profile Kommerling. They have a chamfered design and smooth quiet running and an aluminium reinforced centre section. This provides a high degree of stability, security and tightness. It also means the possibility for larger window areas and sliding elements than ever before. Our sliding door system is compatible with all 70mm systems.

The PremiLine sliding patio door is packed with technical features and is extruded using our Greenline lead-free PVCu compound. It's also the perfect match to our C70 and O70 systems and given the innovative design of the outer frame which is 70mm deep tapering out to 80mm to accommodate the sash.



- Can offer 2,3 or even 4 panel openings.
- 2 High quality stainless steel tracks guarantee the maximum possible service life.
- 3 Extremely smooth running sliding doors, moving at the slightest touch.
- Offers high security and large units are easily achieved.
- Striking design with a choice of low sightline gaskets in black or grey.
- 6 Outer frames can be welded or mechanically jointed. Low threshold option also available.
- Option of full length aluminium handle for further stability (not shown).

## Upgrade to PRO

PremiLine PRO is the result of considerable expertise in door systems and is the patented, high security version of the PremiLine door system. An intuitive and clever locking system is hidden at the interlock and only requires the turn of a door knob to fully engage the enhanced security locking mechanism.

With no unsightly plunge bolts, it's one of the first PAS 24 certified PVCu patio door systems to meet the Lifetime Homes standard and has been designed with new Document Q in mind.





## LIFT & SLIDE DOORS



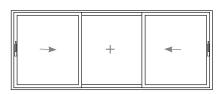
## PremiDoor 88 Lift & Slide - Extraordinary Measurements

The Lift and Slide door is a genuine alternative for a bi-folding door and with less PVCu sightlines, and more glass in which to see the world outside. The product is designed for large openings in the home or conservatory and is capable of openings of up to 6.5 metres with just two sashes.

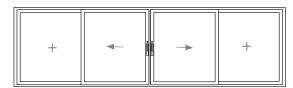
There's also the option of 2, 3 and 4 pane door systems which are capable of spanning over 10 metres. The running track has been specifically designed for lasting performance and ease of use. There's also a thermally broken frame that provides energy efficiency and the necessary structural integrity to carry a large sash with ease. Like all of our window and door systems, it's extruded with our lead-free Greenline compound.



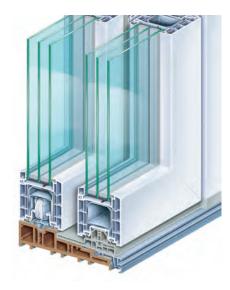
Double pane option with moving left hand and fixed right hand sash



3 pane option with moving left hand and right hand sash with fixed middle



4 pane option with moving centre sashes and fixed left and right hand sashes





### **KÖMMERLING®**

- High profile stability for floor to ceiling elements up to 2.90 m.
- Excellent heat transfer coefficient Uf =1.2–1.3 W/(m²K), an optional UD value of max 0.8 W/(m²K) is possible.
- Barrier free transition from inside to outside high insulation WPC threshold
- Reliable functionality, great handling ease, easy to open and close as if sliding on air.
- Three sealing levels ensure the optimal protection again wind, rain, and outside noise.
- Aluminium covers for virtually unlimited colour potential.

## **BI-FOLD DOORS**





#### Bi-Fold Doors

Our bi-fold and multi-fold door systems are made using Europe's number one profile Kommerling and feature a high security locking system. They offer smooth and simple operation and run on maintenance free stainless steel concealed rollers. Doors can be easily folded back to left or right and can be specified to open inwards or outwards.

This new system can facilitate 3, 4, 5, 6 or even 7 sashes and is capable of spanning 5.7metres with maximum sash sizes of 2.2m. The stunning aesthetics of the door are enhanced with the option of either bevelled or ovolo glazing beads and low lying gaskets for better sightlines.

These bi-folding doors harness 5 chambered profiles for better energy efficiency. All profiles are fully reinforced to add structural stability, while the powder coated aluminium tracks guarantee the maximum possible service life. Like all Kommerling systems, the bi-folding door is available in a wide range of colours and woodgrains.

- Option of 3, 4, 5, 6 or even 7 sashes.
- Capable of spanning 5.7m with sash sizes of 2.2m high x 0.8m wide.
- 3 Beautiful design with the option of bevelled or sculptured glazing beads with low lying gaskets.
- Five chambered profiles for improved energy efficiency.
- 5 Fully reinforced to add structural stability.
- 6 Powder coated aluminium tracks guarantee the maximum possible service life.
- 7 Impressive smooth sliding doors, folding with ease of movement at the hinge.
- 8 All PVCu profiles manufactured using our exclusive lead-free Greenline compound.

## UPVC DOORS









## Front, Back and French Doors

Our UPVC doors are made using Kommerling steel reinforced welded profiles. They feature low line gaskets and have a robust multi-point locking system and strong hinges which are available in different colours. We have a comprehensive range of styles available, or you can design your own using our panel and glass options. Choose leaded, stained glass, patterned glass or Georgian bar.

These high security doors are virtually maintenance free as they are made using colourfast UPVC. Available in a range of colours and a choice of handle colour these high performance doors combine looks with security and longevity.

### Handles







White

Gold

Chrome

## Security

Our single and double doors feature Yale Mantis 3 multi-point door locks. Yale Mantis 3 locks have been tested to the PAS24 security standard.

Yale Mantis 3's steel components are protected from the weather by the silver Triklad protective coating process and come with a 10 year security and mechanical & surface guarantee.

# 

- Kommerling profiles
- Low line gaskets
- Steel reinforced welded profiles
- Multi-point locking & shoot bolts
- · High security
- Internal beading
- Colourfast UPVC
- · 28mm sealed units
- · High impact profiles
- Choice of handle colours
- · Choice of hinge colours



## COMPOSITE DOORS



#### Solidor - Timber Core

Our Solidor range is an outstanding collection of unique solid laminate 48mm timber core composite doors that combine classical or modern styling with high security locking which provides a stunning, high quality and secure entrance to any home.

Each solid timber core is completely encapsulated within a highly durable plastic edge banding and two thermo plastic door skins, so you will never have to worry about painting or varnishing your Solidor.





## Security & Style

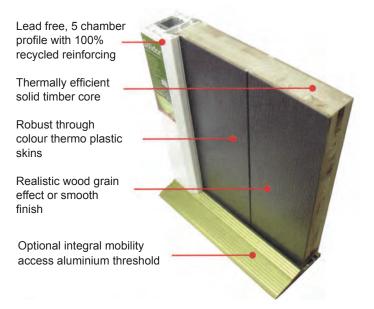
These exclusive doors are available in a wide range of styles and various low threshold options both UPVC and aluminium, making it the perfect solution for easy wheel or pushchair access. Each is fitted with an Ultion cylinder and a high security multi point lock

Ultion is the country's most secure locking system. It offers the ultimate in locking protection, capable of sensing an attack and subsequently engaging via a hidden lock to prevent intruders gaining entry, even when snapped twice.

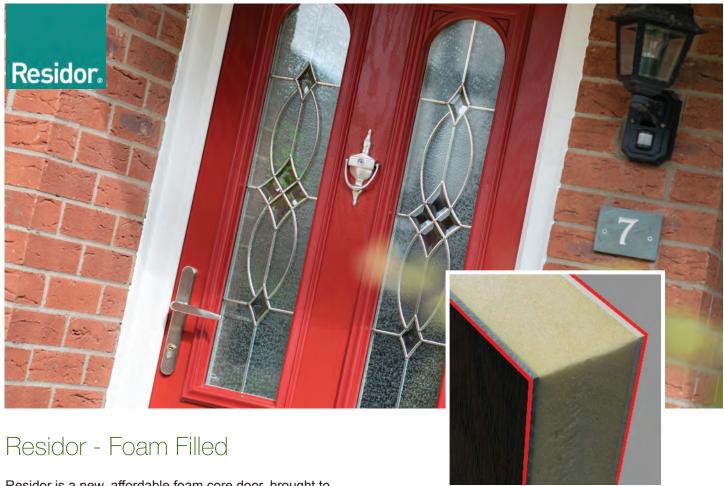
Our low e warm edge glass is available in a range of beautiful designs and have an extensive range of door furniture and accessories to suit all tastes.

#### Colours

Our colour range is by far the widest in the market and contains 20 colours inside and out, including a number of exclusive finishes such as walnut & duck egg blue. We can offer a range of 18 colour combinations for doors and frames. Our doors are 'through colour' not just a gel finish or surface stain.



## COMPOSITE DOORS



Residor is a new, affordable foam core door, brought to you by the people that make Solidor. Most foam filled doors on the market are coated with a 1.6mm plastic skin, which offers a low level of security and fails to pass the most recent security regulations.

Every Residor composite door has a 3.6mm skin that complies with the most up to date PAS24:2016 security test guidelines and makes them twice as thick as almost all other GRP composite doors available today.

### Security & Style



Residor is available in 16 different designs. Each is fitted with an Ultion cylinder and a high security multi point lock.

Our low e warm edge glass is available in a range of beautiful designs and have an extensive range of door furniture and accessories to suit all tastes.

## Colours

Residor comes in white, red, green, blue and black and anthracite grey as standard. Or if your looking for something a little different, Residor gives you the option to have ANY Ral colour, so you can have a door that's truly bespoke to you.











## **CONSERVATORIES**



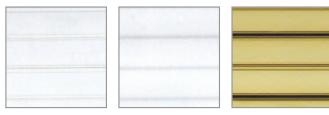
#### Conservatories

Our conservatories are made up using Europe's number one Kommerling profile in either the chamfered C70 or Ovolo design of the O70. We offer a range of styles; Edwardian, Victorian, P'Shaped, Orangeries, Gable end, Lean to or totally bespoke.

We use the Global roofing system and offer a choice of glass or polycarbonate roof. We offer a self cleaning glass option using Pilkington Activ.

Our sealed units use SWISSPACER bars for energy saving and the revolutionary energy efficient glass PLANIBEL A.

#### Polycarbonate Colours



Clear

Opal

**Bronze** 





- High strength rafters designed for increased loads so no compromise on design or weather performance.
- Woodgrain and painted top cappings are made from aluminium so will not distort under extreme heat or split under extreme cold.
- Bolts are fastened internally so do not penetrate the main aluminium rafter so no holes for water to ingress.
- Precision engineered security locking bolt eradicates movement for a strong and anti-slip joint connection.
- Low level concealed gaskets.
- The lead dresses into a built-in soaker for a watertight seal with no need to dress lead over the top cap.
- End caps have a shoulder around the visible face for a more attractive appearance and designed with built-in drainage to relieve any trapped water.
- Variable valley to suit varying pitches and angles, cloaked internally and externally for an attractive finish.

## CONSERVATORY ROOFS



### Guardian Warm Roof

The Guardian warm roof system has been designed to be installed as a retrofit for an existing conservatory or as an alternative to glass or polycarbonate roofs. It offers style and insulation to avoid temperature extremes.

For any people, a conservatory is either too hot or too cold, our warm roof system provides a fully insulated sound proof roof that looks great and performs brilliantly.

It is available for just about any shape and size of conservatory and in a range of colours to suit your home and can be fitted in just a few days.



- Full LABC and LABSS approval.
- Achieves an incredible thermal U-Value of 0.18W/m2K.
- Structurally sound conservatory, carrying full engineers report.
- Conservatory roof conversion in just a few days.
- Visually spectacular conservatory with sleek trims and cappings.
- · Contributes to improved SAP calculations.
- Extensive range of roof tile finishes and colours.
- Roof windows available in a wide range of sizes and styles.
- Available for any size and type of conservatory.
- Perfect for new-build or replacement conservatory roofs.
- · Conservatory roof Pitches as low as 15 degrees.
- · A patented, guaranteed product.

## ENVIRONMENT



#### Environment

We take environmental issues seriously and believe it our duty to protect the planet. We only select suppliers and materials that follow our ethos.

Kommerling have been sensitive to the environment for many years and that includes their unique Greenline, lead free compound, that's inherent in all of our window and door systems.

The Kommerling system has long-lasting plastic profiles that have been stabilised using environmentally friendly calcium-zinc and have an extremely low maintenance requirement. In contrast to wooden profiles, they never need painting.

We also operate Recycline, a process of collecting any





Greenline - our commitment to the use of lead free materials.

scrap UPVC materials from customers for recycling. This includes old first generation UPVC windows that we are replacing, right across the UK.

Products such as SWISSPACER and PLANIBEL A mean lower heat requirements through better insulation and maximising solar energy. This benefits the environment in several ways. There is no need to extract, transport, supply and process additional energy, this not only saves resources but also decreases the level of CO2 emissions in the environment.

Our composite doors from Solidor are 100% recyclable, all timber that is used is harvested from sustainable sources and complies with FSC regulations. These doors are manufactured in the UK minimising the carbon footprint. They are lead free and designed with a thermally efficient enforcing system.

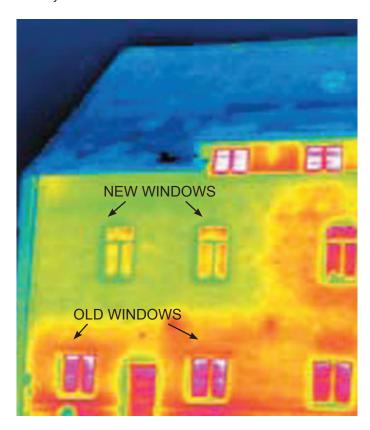




Recycline - our commitment to the recycling of waste UPVC materials.

## Energy Efficiency

The combination of carefully selected materials, expert process and careful waste disposal make our products among the most energy efficient and environmentally friendly on the market.



The thermal image of the house above, shows the green areas (top left) where old windows have been replaced with modern energy efficient ones, in contrast to the old existing windows shown in magenta, which let considerable heat out of the home.

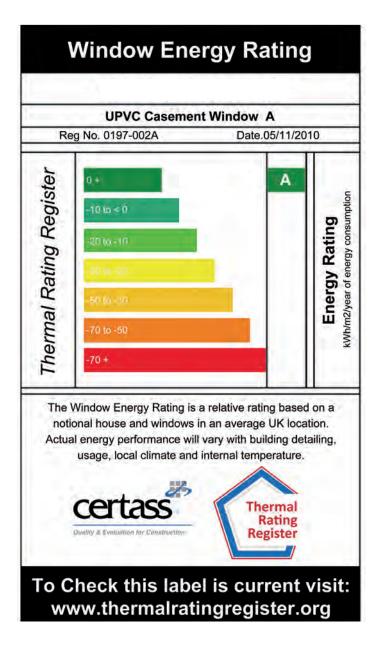
#### **EPC**

Flair provide you with an energy performance certificate (EPC)when we supply you with windows.

The document certifies that the windows have been manufactured to the WER specification required by the BRFC widow energy rating scale and that the widows have been produced using uPVC profiles extruded by Kommerling and fabricated by Flair.

## Pilkington Optiwhite

We use Pilkington Optiwhite as the outer pane of our sealed units to increase the solar energy transmissions (solar gain), enabling the unit to achieve a higher window energy rating (WER) and therefore a higher level of thermal efficiency.



#### Planibel A

We use Planibel A for the inner panes of our sealed units. This revolutionary new hard coated glass meets the highest glass performance expectations for Window Energy Ratings (WERs) without the need for edge deletion. Thanks to its unique "fasT" technology

#### Swisspacer

We use the ultimate warm edge spacer bar to create a linear thermal bridge of considerable length within the window component for optimum heat retention and reduced condensation.

#### Argon Gas

Our A rated sealed units are argon gas filled up to 90%.



# SUTTON COLDFIELD'S LARGEST WINDOW & DOOR SHOWROOM

#### Flair Plastic Products Ltd

Unit 36 Minworth Industrial Park Forge Lane Minworth West Midlands B76 1AH

0121 624 5001

sales@flairwindows.com www.flairwindows.com



