

Operation & Maintenance Guide

At Priviglaze, our aim is to manufacture and supply the latest generation of switchable glass and film. We offer this at affordable prices in order to bring this product into the mainstream. Our glass products are manufactured in the UK and all glass bear the **British Standard Kite Mark**.

Priviglaze switchable glass or film switches between frosted and clear. It can be operated by a remote control and standard light switch. It can also be integrated into smart automation including Alexa, Crestron, Lutron & Control4 and more.

In its frosted state, it provides instant privacy and security by acting as an electronic blind for all kinds of applications. It can also act as a high-definition rear projection screen, allowing the display of presentations, images, and video.

Priviglaze is a truly innovative product, and we want to ensure smart glass technology is accessible to everyone, to give their home or business the real WOW factor!

Product Sectors & Application

Office Solutions Application

Board Rooms | Meeting Rooms | Office Partition | Breakout Zones | Commercial Spaces |

Hospitality Solutions Application

Hotel en-suite Divide | Meeting Areas | Foyer | Gyms | Conference Rooms | Medical Consultation Rooms | MRI/CT Scanning Facilities | Healthcare Providers | Retail Space Frontage | Appointment Rooms | Banking Customer Advisor Areas | Religious Facilities | Museum | Galleries | Exhibit Displays | Education Institutions | Libraries |

Residential Solutions Application

Balustrades | Bathroom Partition | Conservatories | Orangeries | Sunrooms | Doors | Facades | Gable End | Home Office | Roof Glazing | Roof Lights | Skylights | Windows | Atriums | Garage Partition | Overhead Glazing |

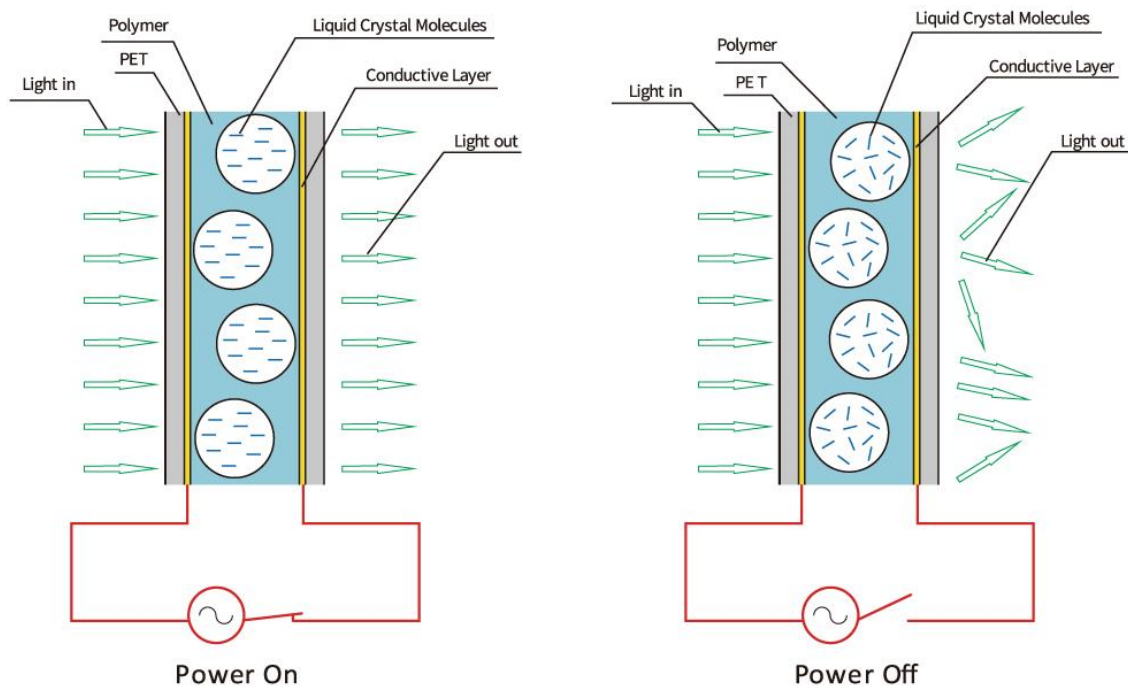
Product Construction

Switchable Film

Priviglaze Switchable Film is crafted with five layers of advanced materials, including two high-quality clear PET outer layers, two conductive layers, and liquid crystal technology at its core.

When powered on, the liquid crystals align, making the glass fully transparent. When the power is switched off, the liquid crystals scatter, shifting the glass from clear to opaque. In simple terms, the glass appears frosted when inactive and turns clear when activated.

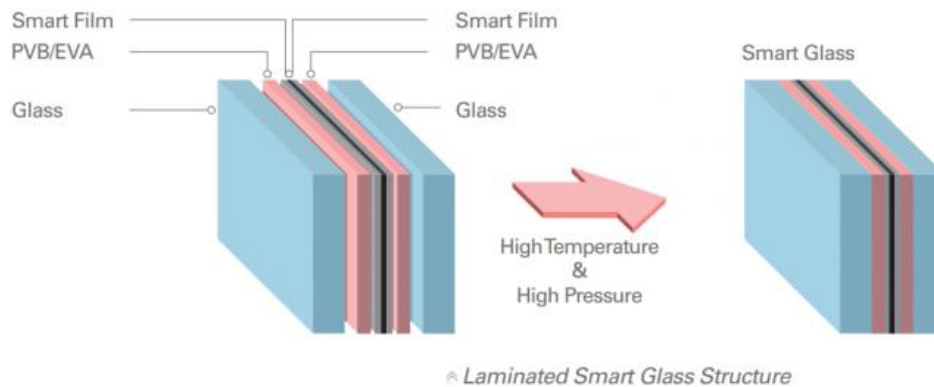
The switchable film consists of electrically conductive coatings, a polymer matrix, and liquid crystal technology. It requires an electrical connection to a transformer, which supplies power to enable its on/off functionality.



Switchable Privacy Glass

The switchable film is laminated with an interlayer to secure and hold the privacy film between the 2 pieces of glass, normally between 4-6mm toughened each side.

Designed with safety in mind, Priviglaze Switchable Glass is toughened and laminated to minimise the risk of breakage. In the unlikely event of damage, it is specially treated to reduce the chances of injury, ensuring enhanced protection in any environment.



Warranty

Electronics accessories - 1 year
 Laminated Glass - 5 years
 Retrofit Film - 2 years
 Sealed Glass Unit - 5 years

Warranty Warning:

Smart Glass/Film are sensitive products with electronic components that require dry location application. Should these products be installed in damp areas such as wet rooms, shower rooms or heavy water splash areas to the extent of causing damage, it is at the user and installer's risk. Product warranty does not extend to water damage.

TECHNICAL DATA

		Retrofit Switchable Film	Switchable Glass
SIZE	Max width	1800mm	2000mm
	Max height	3000mm	3000mm
GLASS TYPES	Heat strengthened		√
	Low iron		√
	Toughened		√
	Tempered		√
	SunGuard® SN Glass 70/35		
THICKNESS	Interior		10-30mm laminated/ toughened
	Glass Door		10-14mm laminated
	Bi-Fold Door		28-50mm insulated sealed unit
	Toughened		28-50mm sealed unit
SHAPE	Any shape	√	
	Including cut outs	√	
ENVIRONMENTAL	Storage	-20°C to 70°C	
	Operation	-10°C to 60°C	
ELECTRICAL	Driving voltage	48 - 60 +/- 5 volts AC	
	Current	less than 20 mA/ft2 (215 mA/m2)	
	Power	less than 0.5 W/ft2 (10W/m2)	
SWITCHING TIME		Approx. 100 milliseconds at room temperature	
OPTICAL	Transmission (visible)	approx. 87%	
	View angle	approx. 130°	
	Haze	Official 5% /On; 80% /OFF	
	UV Filtering	Approx. 99%	
POWER SUPPLY		For all installations, a separate power supply shall be provided for 6w per sqm.	
POWER CONTROL	Remote control	Included	
	Manual switch	Optional	
	Motion sensor control	Optional	
	App or voice control	Optional	
LIFE EXPECTANCY		Greater than 10 years	

HAZE

Whilst a 5% to 10% haze is expected on smart glass materials; on sunny days, the glass can appear more hazy than usual. This also could be the angle from which we are viewing the glass from. If it is a double glazed product, it can appear slight more hazy compared to single glazed. It should be noted that Priviglaze Glass/Film is not optically as clear as normal float glass. Due to the nature of the product, a haze in the form of clouding in the glass is considered normal and is unavoidable. In certain conditions, the haze will be less apparent. For example, ambient LED lighting and light coloured walls.



PRIVIGLAZE SWITCHABLE SMART GLASS

1. Where used, all tempered glass complies with BS6206A.
2. Glass will be provided in the type and thickness shown on the project drawings or specified by the client.
3. Where glass type is not specified on drawings or specified by the client, type and thickness will be supplied as directed by the architect, main contractor, or designer.
4. Where applicable, Priviglaze Glass panels will receive a permanently etched safety certification label.
5. Each Priviglaze glass panel will contain an identifying label.
6. Float glass-clear: Type 1, Class 1.
7. Laminated Safety Glass.
8. Specialist glass can be requested for use in specific applications.

SPECIFICATION & INSTALLATION NOTES

1. Top and bottom connections will be applied if glass is more than 3m in height.
2. The transformer should be located in an accessible area.
3. A 240VAC 50/60Hz fused plug socket, near to the transformer location, to be provided by the customer. A draw cable will also be required, details will be given by the installation team.
4. A wall mounted switch, 240VAC 50/60 Hz to be provided by the customer if required as an additional feature to remote control operation.
5. Smart Glass or film panels may be connected in parallel up to 50 square meters total area per single power control system.
6. Before installation, inspect bus bars, electrode leads and wires to assure insulation. No exposed busbars, electrode leads, or wires should contact any metal frames, as this could cause damage to the transformer and Smart Glass/Film

Smart Glass/Film Care

- Priviglaze glass/film is a very sensitive product, and every care and attention should be given to maintenance procedures as stated in this document.
- Only use the neutral silicone provided by Priviglaze.
- Other silicone will cause a chemical reaction damaging the product

CLEANING GUIDELINES

PRIVIGLAZE SMARGLASS

- Always power off the glass when cleaning. Do not power on until 100% dry.
 - Be careful not to disturb any electrical connections & avoid any liquid from entering framework.
 - Use only a damp clean, lint free, microfibre cloth or towel.
 - The use of chemicals and excessive water should be avoided at all costs.
 - For stubborn marks clean the film surface with a small amount of isopropyl alcohol, following the instructions below.
 - Do not use any abrasive cleaners, industrial strength glass cleaners and/or any other window cleaning tools that may scratch the glass.
 - Please ensure no water will enter the edges. **Water damage invalidates the warranty.**
1. Sparingly spray the surface with a small amount of water.
 2. Wipe the surface clean with a clean, soft cloth.
 3. Continue wiping until all the dirt has been removed.
 4. Ensure that any water does not enter the frame as this will damage the material.

PRIVIGLAZE RETROFIT SMART FILM

- Always power off the glass when cleaning Do not power on until 100% dry.
 - Be careful not to disturb any electrical connections & avoid any liquid from entering framework.
 - Use only a damp, clean, lint free microfibre cloth or towel.
 - The use of chemicals and excessive water should be avoided at all costs.
 - For stubborn marks clean the film surface with a small amount of isopropyl alcohol, following the instructions below.
 - Do not use any abrasive cleaners, industrial strength glass cleaners and/or any other window cleaning tools that may scratch the window film. Please ensure no water will enter the edges. **Water damage invalidates the warranty.**
1. Sparingly spray a microfibre cloth with a small amount of water.
 2. Wipe the surface clean with the damp microfibre cloth.
 3. Continue wiping until all the dirt has been removed.
 4. Ensure that water does not enter the frame as this will damage the material.

PLEASE

- ï **Do not** clean the glass or film when it is hot or in direct sunlight.
- ï **Do not** allow cleaning solutions to come into contact with the edges of the glass or film.
- ï **Do not** use cleaners which contain Hydrofluoric or Phosphoric acid as they are corrosive to the glass surface.
- ï **Do not** use abrasive cleaners, powder-based cleaners, scouring pads or other harsh materials.
- ï **Do not** lean or place things against the smart glass or film.
- ï **Do not** use tapes or adhesives as these can stain or damage glass or film surfaces. Avoid using any such materials unless they are known to be easily removed.
- ï **Do not** use other silicone not provided by Priviglaze/ LT Smart

We recommend switching the Priviglaze Smart Glass/Film to OFF-state for at least 4 hours every day for a longer life expectancy.

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ANNUAL CHECKS

Check that all wiring is in good condition, framing materials are free of any damage and that the transformer and switch are in good visible order.

The areas adjoining the Smart Glass including walls, ceilings and floors should be checked for structural integrity and excess humidity.

For further information call 0845 388 6618.