



Just Imagine...

Switchable Glass

Glass units that switch from
opaque to **clear** in
less than a second for
privacy and solar control.

 **Smart-Tint**TM
- Switchable smart glass technology -

The future is here...
be in control

www.reflexglass.co.uk/smart-tint

Smart-Tint™ units are the next generation in architectural glass.



Smart-Tint™ glass units can be switched from opaque to clear to control privacy, solar heat gain and glare. This switchable glass unit may be used in both windows and roofs and has a variety of uses replacing out dated mechanical shades and blinds with modern technology.

Reflex® Glass are market leaders in manufacturing super high performance glass units. Units are shipped internationally all over the world from the landmark Leicester factory.

We can supply Smart-Tint™ in many formats from single laminated glass to double glazed units.

Innovative high-tech fabrication unit in Leicester



Smart-Tint™ glass is the next generation in architectural glass. The ultimate in privacy and glare control whilst still providing healthy light.

The glass units are powered by a small transformer and switch very fast in under a second giving real wow factor. When switched **on** in the clear state, the view is uninterrupted {unlike blinds} with a stylish and modern finish which can be used in doors, roof lights and windows of any shape.

Switching response time from clear to opaque is less than 1 second.

Maximum size of unit is 1200mm x 3000mm in either single or double glazed options.

No moving parts, no cluttered blinds, no shape problems.

Switching performance is rigorously tested and the units are guaranteed for 10 years.

200x300mm
sample units
now available.

- Available in single glass and double glazed formats.
- Uses less energy than a light bulb @ 3.5 watts per m².
- 100% privacy in frosted/opaque mode.
- Safe low voltage 65V transformer power pack supplied for upto 25m²
- Manufactured in house using our patented methods.
- Suitable for roof glazing and windows as well as internal privacy screens.
- 100% UV protection to prevent fading and bleaching from the sun.

Be in control...
Get Smart-Tint™

Smart-Tint™ units **replace** the clutter of mechanical blinds!



Perfect for glass conservatory roofing with complex shapes, opening loft windows and a variety of lantern roof lights where privacy and glare control is required without the clutter of roof blinds.

Smart-Tint™ units are manufactured with an intelligent high grade functional film inside the unit which can adjust light under electric current to switch between opaque and clear.

*In the clear state the haze is less than 10% allowing good passive solar heat gain, good light transmission of 70% and clear visibility.

When a 65 Volt AC power supply is applied to the unit via a range of control switches the glass may be switched to clear or back to opaque for scattered light and glare control.

In addition to this the infrared solar heat transmission is reduced blocking the sun's heat and reducing solar heat gain. Damaging UV radiation is cut by 99% in the clear and 100% in the opaque state preventing bleaching to furniture and flooring.

Control Privacy...
at the flick of a switch!

Technical Specification:

* Clear mode with no direct sunlight on the glass

Item		Mode	Specification
Optical Reference	Internal Haze	ON	8%*
		OFF	90%
	Visible Light Transmission	ON	70%
		OFF	50%
	Viewing angle of glass	ON	90°
UV Blocking <400nm	ON/OFF	99/100%	
Electrical Reference	Working Voltage	ON	65V AC + / - 5 Volts
	Working Current	ON	1 AMP
	Response Time	On=>Off	.02 Seconds
		Off=>On	.10 Seconds
	Power consumption	ON	3.5W/m ²
Electrical Operating		ON	Transparent
		OFF	Translucent
Min size			50mm x 100mm
Max size			1200 x 3000mm
Storage Temperature			-30°C to +80° C
Operating Temperature			-20° to + 75°C
Switching duration		ON/OFF	3000,000+
Continuous power on duration	Clear mode	ON	>50,000hours

Smart-Tint™ Frequently Asked Questions

Q: Do I have to buy Smart-Tint switchable glass in a unit or can I buy it in single sheet format, say 6mm or 10mm thick?

A: Yes we can supply the product in single toughened laminated glass as well as the traditional double glazed unit; There is a 6mm border all round the edges so this needs to be hidden in a U-channel or frame.

Q: What is the depth of the seal at the edge of the Smart-Tint in the double glazed unit option?

A: The seal depth with spacer bar is 12mm for double glazed units.

Q: Can I buy direct from you as the main manufacturer in the UK

A: Yes we are the largest manufacturer in the UK fabricating the product using the latest generation of LCD element for the best clarity achievable.

Q: Smart-Tint units are powered using only 65 volts AC supply, why is this lower than your competitors?

A: Because lower power is safer and it means the LCD element lasts much longer than our competitors.

Q: Do you survey and install Smart-Tint™ units?

A: No we only manufacture for supply only, because the glass units are supplied pre-wired and simply connect to the power pack it can be installed very easily on site but we recommend using a qualified electrician.

Q: Can I purchase a sample for valuation?

A: We can supply boxed working samples 200mm x 300mm samples @ £75+vat & shipping.

Q: Are Smart-Tint units safe to use in conservatory roofs for overhead glazing?

A: Yes the units are toughened to BS EN12150 for safety and can be used in full height doors also.

Q: What is the largest possible size of a Smart-Tint unit?

A: The largest single unit size is currently 1200 mm wide X 3000 mm long.

Q: Is the light blocked out when the glass is in the opaque privacy state?

A: No the light is only reduced slightly but direct sunlight is scattered to provide a nice soft light which eliminates glare.

Q: Are Smart-Tint units 100% clear when the power is connected?

A: No there is always about 8% haze dependant upon the angle at which the glass is viewed but our product has the best clarity that is possible with this technology especially when you look at it straight on without direct sunlight.

Q: What U-value is achieved with Smart-Tint in the double glazed unit format?

A: With a 24mm double glazed unit the centre pane U-value is 1.1W/m2K



Breakthrough in design

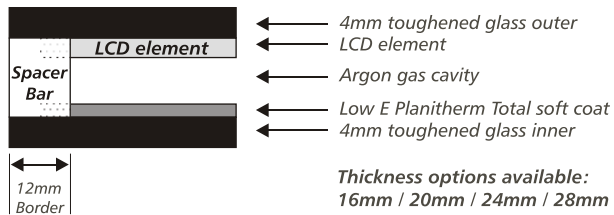
Dynamic control of daylight provides architects with a breakthrough in design solutions.

The positive impact that daylight has on a buildings occupants has been well documented and so has the negative impact of wasted energy, unwanted solar heat and uncomfortable glare.

With Smart-Tint™ units you no longer have these problems as you control glare and solar heat without sacrificing light. For south facing glazing we recommend the inclusion of a grey tint to help reduce the haze created by direct sunlight on the glass.

Smart-Tint™ Format Options

Option 1: Sealed Unit



Option 2: Single



Choose your format
Latest technology
Clean lines
Instant wow factor!



Smart-Tint™ is ideal for roofs, windows or doors.



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now available.

Contact us for
further information
or a quotation on

0116 269 6297

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- Switchable smart glass technology -

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