



SMART PRIVACY FILM & GLASS

SMART-HEALTHY-GREEN



Imagine a Glass that switches from clear to milky white in a flick of a button transforming open space to a private room on demand in less than a second.

www.smartfilm.com.my

About Us —

Bakti Teknologi, powered by Sun Barrier Sdn Bhd, is a leading supplier and installation service provider of smart film in Malaysia. Sun Barrier has been the country's premier window tinting film supplier for over 30 years, and with its wealth of experience in the glass tinting solution industry, it was the first Malaysian company to introduce smart film to the market. For more than five years now, Sun Barrier and Bakti Teknologi have been providing innovative smart film and smart glass solutions to customers throughout Malaysia.

Privacy control :

Control privacy by switching between opaque and transparent modes.

Energy efficiency:

Maximize natural light, allows daylight transmission, reducing electrical lighting costs.

Security enhancement:

Smart film can be used to create bullet-resistant glass, providing an additional layer of security in high-risk areas.

Space Customization :

Switch from open space to private zone upon demand.

Aesthetics:

Smart film can be used to create decorative displays and dynamic projections, enhancing the visual appeal of any space.

IR and UV Blocking:

Can block up to 98% ultraviolet rays and up to 80% infrared rays.

No maintenance:

After installation there is no maintenance requirements.



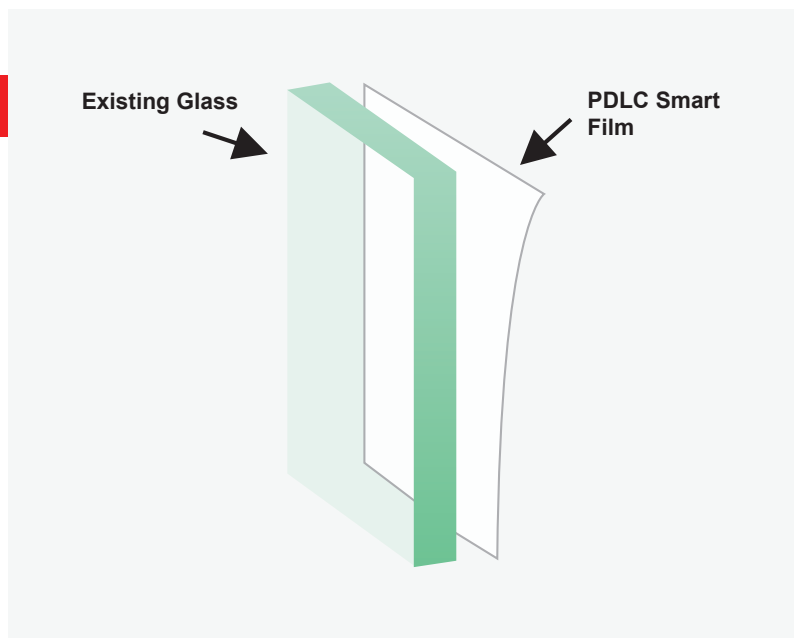
Smart Film & Glass

Smart Film is a high tech seamless invention that switches from transparent state to opaque with a one flick of a switch.

Smart technology provides unprecedented control over the amount of light, privacy and heat that enters a space and is ideal for commercial, residential, retail store, medical and automotive front applications.

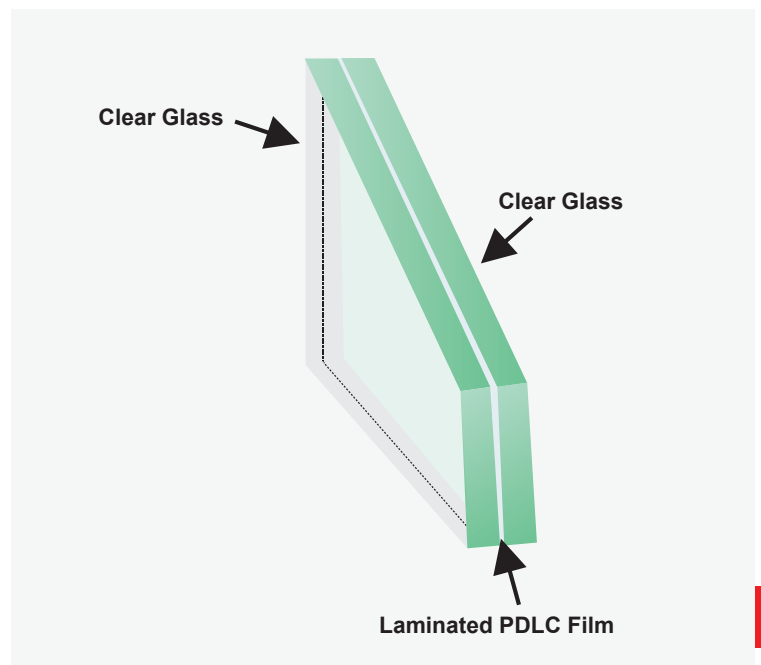
Smart Film is now becoming a must have for any modern office or home. Our product has the ability to redefine environments and create a multifunctional space that adapts and responds to the needs of its users. The potential applications of Smart Film are limitless. Our products are manufactured in accordance with the highest international standards, adapting to the rising design challenges faced nowadays.

Smart Glass is a laminated glass product consisting of a Polymer Dispersed Liquid Crystal (PDLC) film sandwiched between two layers of glass and two layers of conductive interlayers. The PDLC film is what allows you to change the visual appearance of the glass from opaque to clear on command (or dim anywhere in between).



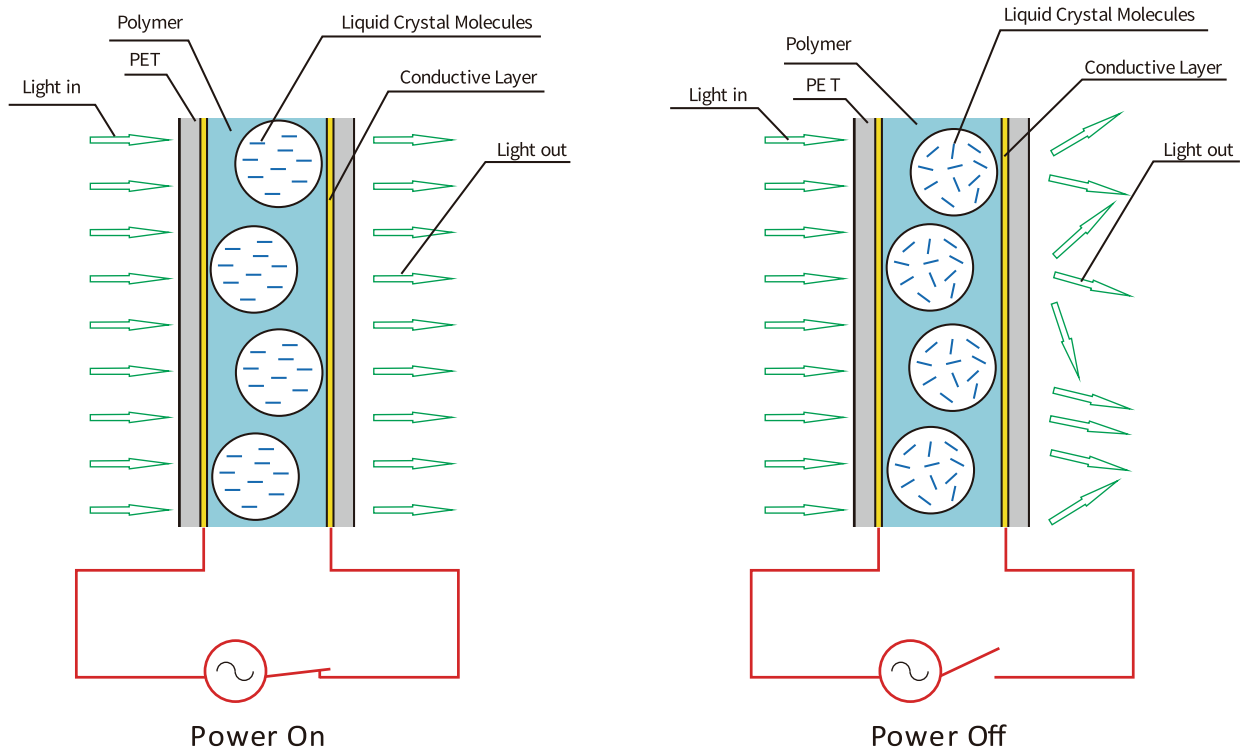
← Smart Film

Smart Glass →



How Smart Film & Glass Work?

Smart film technology consists of a special Liquid Crystal formulation that is coated between two sheets of PET-ITO, and then UV cured, creating a single film. dims or turns on and off from opaque to transparent with our patented control systems supporting dynamic light control



ON



OFF

SMART FILM TECHNICAL SPECIFICATION

	ON	OFF
Visible Light Transmission	> 80%	> 50%
Haze	< 10%	> 92%
UV Blocking	> 55%	> 98%
IR Blocking	> 50%	> 80%
Energy Consumption	7 watts	
Current	0.1A/ m ²	
Frequency	50~60 Hz	
Response Time	<200ms	
Color	Milky White	
Max. Sizes	5 feet (W) X 98 feet (L)	
Thickness	0.28mm (0.42mm) ± 10%	
Glass Structure	Any type	
Working Temperature	-40° C to 70° C / -40° F to 158° F	
Storage Temperature	-20° C to 40° C / -4° F to 104° F	
Life Time	80,000,000+ Times (> 20 Years)	

SMART GLASS TECHNICAL SPECIFICATION

	ON	OFF
Visible Light Transmission	> 85%	> 50%
Haze	< 5%	> 95%
UV Bloking	> 80%	> 98%
IR Blocking	> 50%	> 80%
Energy Consumption	5 watts	
Current	0.1A/ m ²	
Frequency	50~60 Hz	
Response Time	<200ms	
Color	Milky White	
Max. Sizes	5 feet (W) X 20 feet (L)	
Thickness	10mm, 12mm, 14mm, 22mm (custom)	
Glass Structure	Any type	
Working Temperature	-40° C to 70° C / -40° F to 158° F	
Storage Temperature	-20° C to 40° C / -4° F to 104° F	
Life Time	80,000,000+ Times (> 20 Years)	

Smart Film Market

Hospitality



Corporate



Healthcare



Residential



Retail



Transportation





CORPORATE

Switch from co-working to a private space, in a flick of a button, enjoy both worlds.

- Conference Room
- Meeting Room
- Showroom
- Board Room
- Glass Partition
- Presentation Room



CONFERENCE ROOM



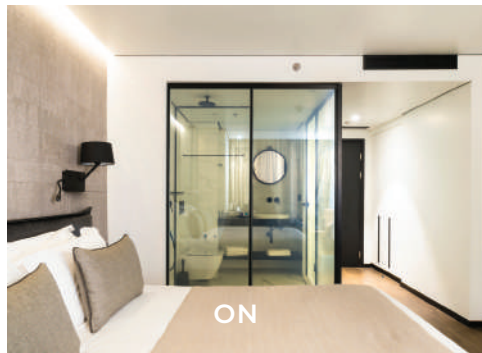
MEETING ROOM



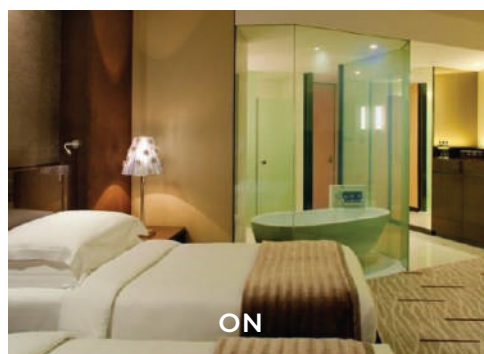
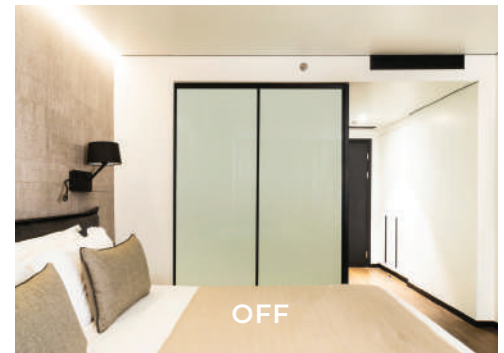
HOSPITALITY

Enjoy the benefits of space customisation, get the most out of your property.

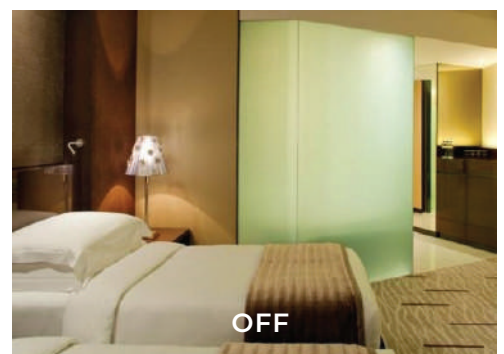
- Bedrooms Partition
- Shower Enclosure
- Bathroom Window
- Conference Room
- Rooms Divider
- Curtain Wall



BEDROOM PARTITION



SHOWER ENCLOSURE





HEALTHCARE

The most hygienic privacy on demand solution in your clinic, with no maintenance.

- Emergency Room
- Intensive Care Unit
- Newborn
- Dialysis Room
- Triage Room
- Hospitalisation Room



NEWBORN



INTENSIVE CARE UNIT



RETAIL

Smart Glass will make sure that everyone will talk about your business.

- Fitting Room
- Bank Teller
- Smart Toilets
- Private Room
- Store Front
- showroom



COSMETICS



RESTAURANT





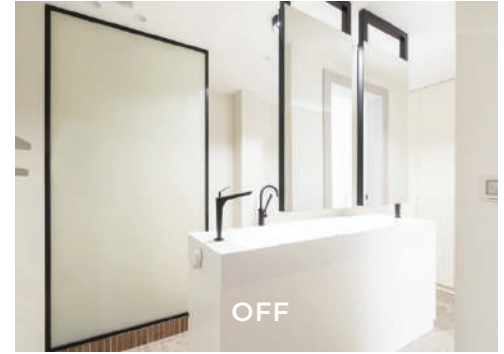
RESIDENTIAL

We are here to bring your dream house to life with Smart Privacy Glass.

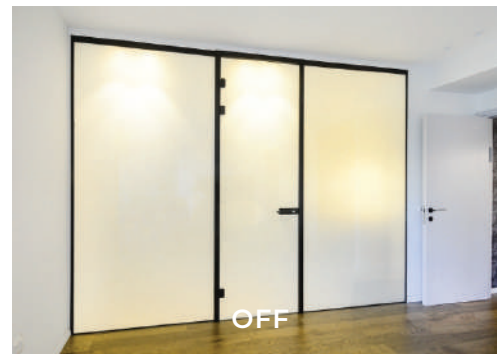
- Home Office
- Skylight
- Divider Window
- Bathroom Partition
- Bathroom Partition
- showroom Enclosure



SHOWER ENCLOSURE



BATHROOM PARTITION



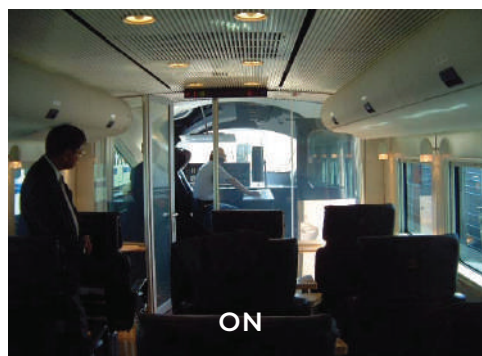
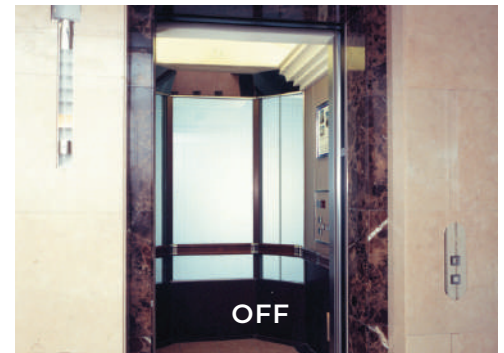
TRANSPORTATION

Control your privacy in a digital way for a comfort traveling experience.

- Minivan Partition
- Marine Glass
- Aircraft window
- Elevator Glass
- Train Partition
- Caravan Window



ELEVATOR



TRAIN





BT BAKTI TEKNOLOGI
ENTERPRISE



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