



# SMART GLASS PARTITIONS

*Create Agile Spaces with a Click of a Button.*

# EXPERIENCE INNOVATION

Achieve acoustic privacy and astounding visual with our switch operated glass walls – go from open workspace into a completely private room instantly!



ON



OFF

PDLC Smart Film (polymer dispersed liquid film) is a leading-edge technology that instantly converts a transparent glass into sand-blasted or opaque glass under electricity application. This advanced glass design innovation redefines an environment into a whole new multifunctional space that simply adapts and responds to the needs of its users. Smart glass option can be incorporated into most of our glass partition designs and are ideal for collaboration areas in offices i.e meeting rooms, boardrooms and conference rooms to give privacy and seclusion.

# FEATURES AND BENEFITS



*Creates an instant visual privacy with just a single push of button.*



*A great alternative to window curtains, blinds or all unnecessary moving parts for a more aesthetically pleasing look.*



*Serves as a projector screen (when opaque) thus eliminating the need for a separate surface.*



*Ability to convert a large open space into a complete private room or vice versa within your control.*



*Provides an incredible combination of natural light, comfort, security & energy efficiency.*



*Easy to use and low maintenance.*



*Can be applied to new or existing glass wall system thus eliminating the need to reinstall a special glass into your space.*

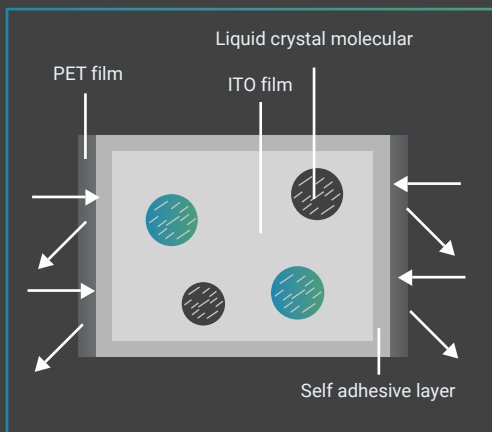
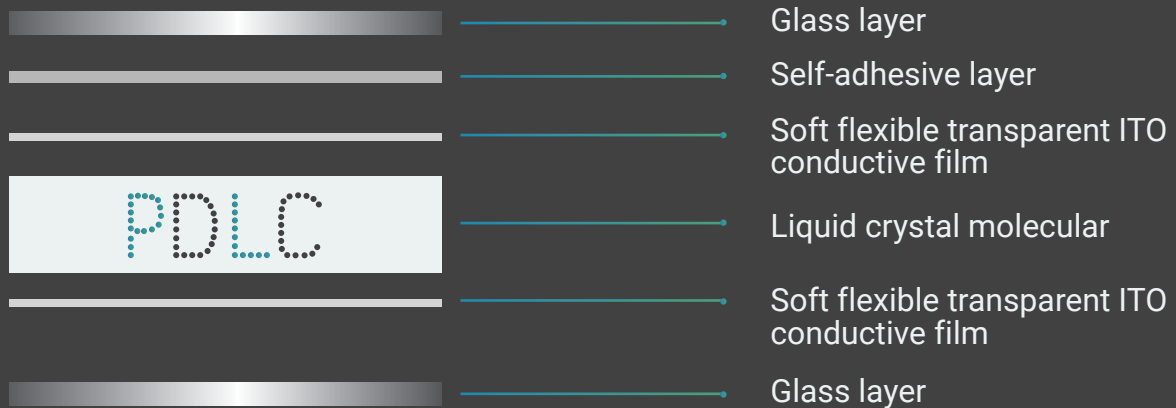


*Delivers excellent sound management for maximum privacy.*

# HOW DOES IT WORK



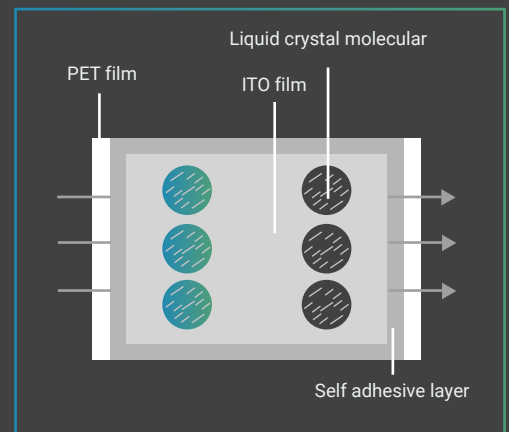
Switchable glass allows an electrical current to pass through the PDLC (Polymer Dispersed Liquid Crystal) interlayer sandwiched between two sheets of glass. This aligns the microscopic crystals along parallel axes, making the glass clear or see through. However, when no voltage is applied, the liquid crystals are randomly arranged into droplets, resulting in the scattering of light as it passes through the glass. This results in the opaque or sand-blasted appearance.



**OFF**

When the power is off, the liquid crystal molecules are arranged disorderly resulting in smart glass appearing opaque.

## LIQUID CRYSTAL MOLECULAR DISPLAY PRINCIPLES



**ON**

When the power is on, the liquid crystal molecules are arranged in order resulting in smart glass appearing transparent.

# DATA SHEET

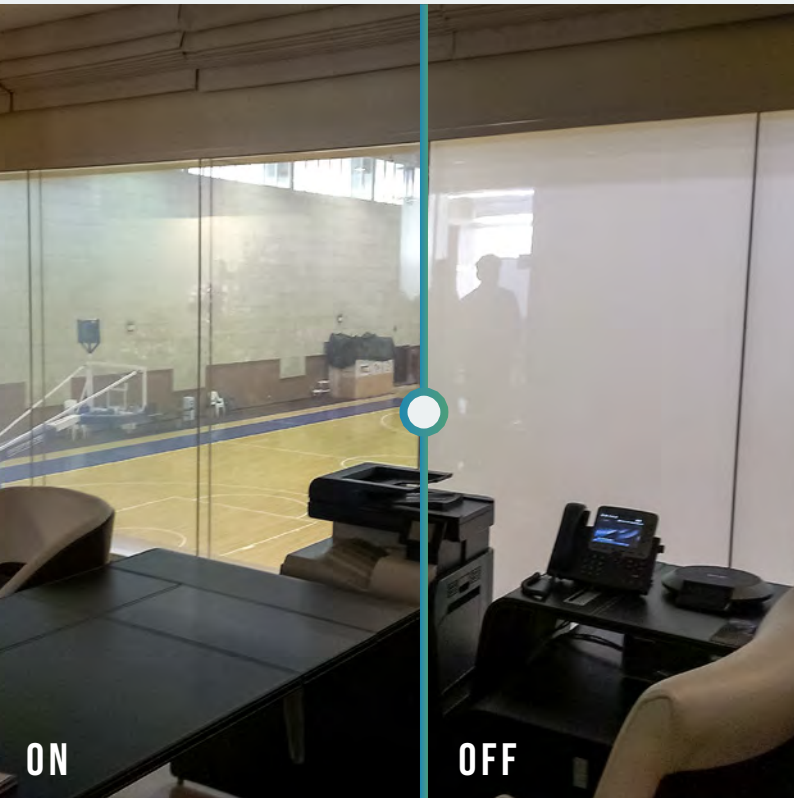


Working Principle	ON: transparent OFF: Opaque
Color	White, blue, green, yellow, gray
Thickness	0.54mm
Max. Width	1.2m
Max. Height	3m
Working Temperature	-20°C to +70C
Storage Temperature	-30°C to +70C
Working Voltage	48-65V (AC50/60HZ)
Current	0.08A/m <sup>2</sup>
Power Consumption	5w/m <sup>2</sup>
Transmittance	82%
Visible Angle	> 140°
Switch Speed	< 0.02s
Switch Lifetime	> 8000000 (ON/OFF)
Lifetime	> 80000 Hours



# PRODUCT COMPATIBILITY

Smart film glass solutions can be used to design effective collaborative spaces with exceptional visual appeal and acoustical privacy. Glass walls applied with smart glass gives you the freedom to use it in any glazed facility interiors that can be sliding or movable glass walls, fixed glazed partitions, and swinging or breakaway doors.



## OFFICE PARTITION SYSTEMS

Applicable to:

- G9 Double Glazed
- G9 Single Glazed
- G9 Transparent
- G5 Transparent
- G10 Double Glazed
- G14 Glassline

## MOVABLE GLASS WALLS

Applicable to:

- Acoustic glass walls
- Frameless glass walls
- Weather resistant glass walls



# PRODUCT APPLICATIONS

The potential applications of Smart film glass are limitless. This product is ideal for commercial, residential, retail store, medical, and educational sectors.



**OFFICES**



**EDUCATION**



**HEALTHCARE**



**RESIDENTIALS**



**RETAIL**



**HOSPITALITY**



# KEEP IN TOUCH WITH US

*We're happy to assist you.*



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