



SMART FILM BLACKOUT ADHESIVE

Blackout smart film switches between tinted and clear states instantly. When power is off, liquid crystals and dyes (LC) absorbing light, making the film tinted. When power is on, the liquid crystals align, allowing light to pass through for full transparency.

ADVANTAGES



Fast Switching Time

Changes from clear to opaque in less than a second



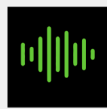
Low Power

Consumes less than 2W/m² when on



Ultra Clear

Transmits 55% of the visible light



Acoustic Insulation

Acts as a sound barrier reducing noise transmission



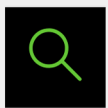
Long Lasting

Lasts over 15 years and endures 80 millions of switching cycles



Wellbeing

Allowing natural daylight



Low Haze

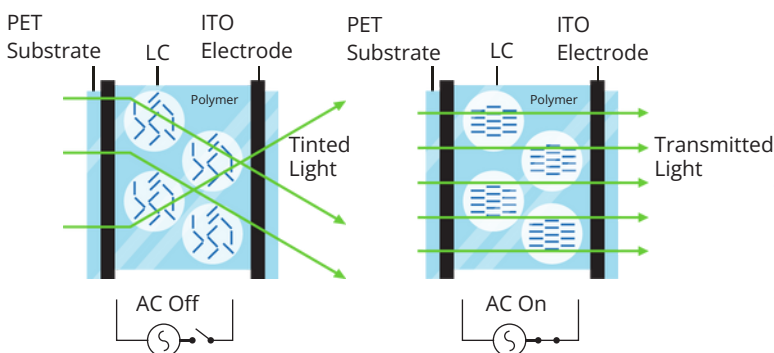
Maintains haze below 5%, preserving crisp views



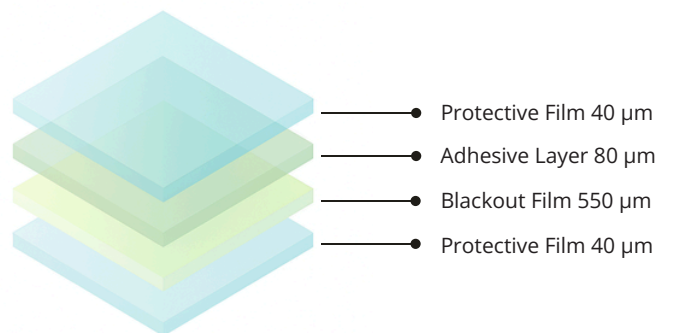
Control

Certified controllers offer on/off and dimming

WORKING PRINCIPLE



LAYERS STRUCTURE



APPLICATIONS



BLACKOUT SMART FILM ADHESIVE SPECIFICATIONS

CATEGORY	PARAMETER	STATE	BLACKOUT
OPTICAL	Color	ON	Transparent
		OFF	Tinted Blue
	Visible Light Transmittance	ON	55% ±5%
		OFF	1.5% ±0.5%
	Haze	ON	4.5%
		OFF	30%
	Viewing Angle	ON	>160°
	UV Blocking Rate	ON	80%
		OFF	96%
	IR Blocking Rate	ON	15%
OFF		36%	
ELECTRICAL	Controller Input Supply		110V / 220V AC
	Working Operating Voltage	ON	110V AC 50Hz
	Response Time	ON -> OFF	15 ms
	Response Time	OFF -> ON	5 ms
	Durability	ON	> 8 years
	Smart Film Power Consumption	ON	< 2 W/m ² /h (<0.18 W/Sq. F)
	Controller Power Consumption		2-4 W/m ² /h (0.19-0.37 W/Sq. F)
	Operating Modes		On, Off, Dimming
MECHANICAL	Width		1100mm (43"), 1300mm (51") 1500mm (59")
	Roll Length		30m (≈100 ft) 50m (≈165 ft)
	Formats		Cut to Size , Roll
	Available Colors		Bluish
	Compliance		Company: ISO9001, IATF16949 Products: RoHS,CE, UL
ENVIRONMENTAL	Storage Conditions		-20°C~ 60°C (-4°F ~ 140°F) 20%-60% humidity
	Working Temperature		-30°C~ 90°C (-22°F ~ 194°F)