

SMART FILM ADHESIVE WHITE

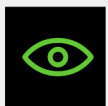
Adhesive Polymer Dispersed Liquid Crystal (PDLC) smart film switches between opaque and clear states instantly. When power is off, liquid crystals (LC) scatter light, making the film opaque. When power is on, the crystals align, allowing light to pass through for full transparency.

ADVANTAGES



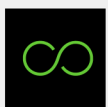
Fast Switching Time

Changes from clear to opaque in less than 10 ms



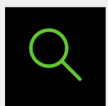
Ultra Clear

Transmits more than 88% of visible light



Long Lasting

Lasts over 15 years and endures 80 millions of switching cycles



Low Haze

Maintains haze below 3.0%, preserving crisp views



Low Power

Consumes less than 4W/m² when on



Acoustic Insulation

Acts as a sound barrier reducing noise transmission



Wellbeing

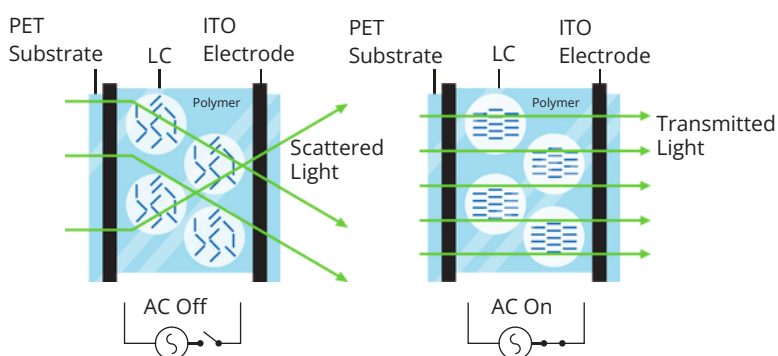
Allowing natural daylight



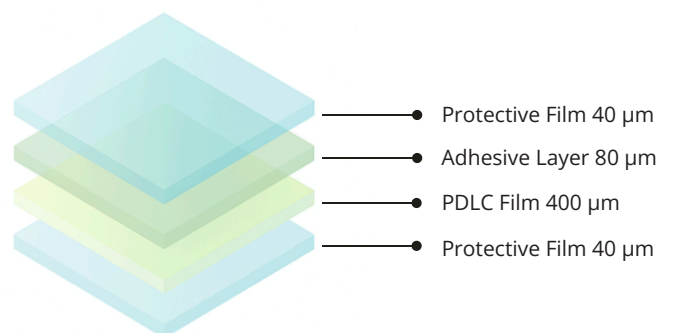
Control

Certified controllers offer on/off and dimming

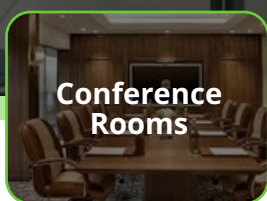
WORKING PRINCIPLE



LAYERS STRUCTURE



APPLICATIONS



SMART FILM ADHESIVE WHITE SPECIFICATIONS

CATEGORY	PARAMETER	STATE	T89	T91
OPTICAL	Color	ON	Clear	
		OFF	Opaque White	
	Visible Light Transmittance	ON	88% ±2%	90% ±2%
		OFF	69%±5%	72%±5%
	Parallel Light Transmittance	ON	84.80%	86.10%
		OFF	3.30%	4.20%
	Haze	ON	<3.0%	<2.5%
	Viewing Angle	ON	>150°	>160°
	UV Blocking Rate	ON	99.6%	99.7%
	SHGC	ON	0.923	
		OFF	0.638	
ELECTRICAL	Controller Input Supply		110V / 220V AC	
	Working Operating Voltage	ON	48-65V AC	
	Response Time	ON -> OFF	< 200 ms	
	Response Time	OFF -> ON	< 10 ms	
	Switching Times		> 80 million Times	
	Durability	ON	> 15 years	
	Smart Film Power Consumption	ON	< 4 W/m2/h (<0.36W/Sq. F)	
	Controller Power Consumption		2-4 W/m2/h (0.19-0.37 W/Sq. F)	
	Operating Modes		On, Off, Dimming, Segments	
MECHANICAL	Width		1030, 1235, 1535, 1830mm (40 1/2", 48 5/8", 60 3/8", 72")	
	Roll Length		30m (≈100 ft) 50m (≈165 ft)	
	Formats		Cut to Size , Roll, Custom Roll Blinds, Shapes	
	Available Colors		White, Grey, Black, Custom	
	Compliance		Company: ISO9001, IATF16949 Products: RoHS,CE, UL	
ENVIRONMENTAL	Storage Conditions		-20°C~ 60°C (-4°F ~ 140°F) < 50% humidity	
	Working Temperature		-20°C~ 70°C (-4°F ~ 160°F)	