



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



Low Power

Consumes less than 4W/m² when on



Ultra Clear

Transmits more than 88% of 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

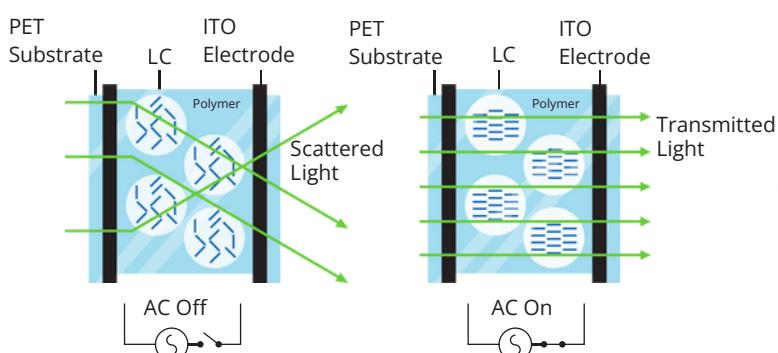
Maintains haze below 3.0%, preserving crisp views



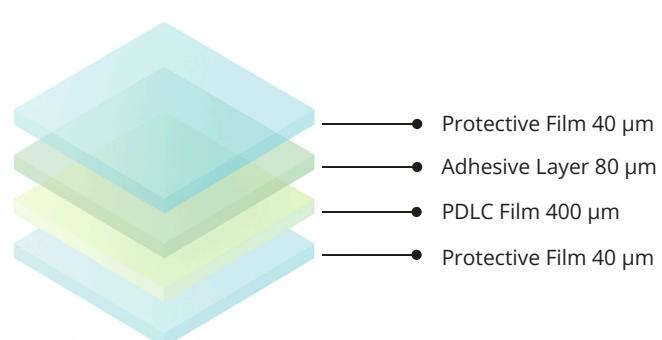
Control

Certified controllers offer on/off and dimming

WORKING PRINCIPLE



LAYERS STRUCTURE



APPLICATIONS



Office
Partitions



Conference
Rooms



Medical Centers
& Clinics



Bathroom
Partitions



Showrooms

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				
ENVIRONMENTAL	Compliance	Company: ISO9001, IATF16949 Products: RoHS,CE, UL				
	Storage Conditions	-20°C~ 60°C (-4°F ~ 140°F) < 50% humidity				
	Working Temperature	-20°C~ 70°C (-4°F ~ 160°F)				