

## SMART FILM T40 ADHESIVE GREY

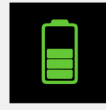
Adhesive Polymer Dispersed Liquid Crystal (PDLC) smart film switches between opaque grey and clear grey states instantly. When power is off, liquid crystals (LC) scatter light, making the film opaque. When power is on, the crystals align, allowing light to pass through for full transparency.

### ADVANTAGES



#### Fast Switching Time

Changes from clear to opaque in less than 10 ms



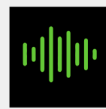
#### Low Power

Consumes less than 4W/m<sup>2</sup> when on



#### Ultra Clear

Transmits more than 45% of visible light



#### Acoustic Insulation

Acts as a sound barrier reducing noise transmission



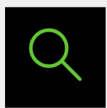
#### Long Lasting

Lasts over 15 years and endures 80 millions of switching cycles



#### Wellbeing

Allowing natural daylight



#### Low Haze

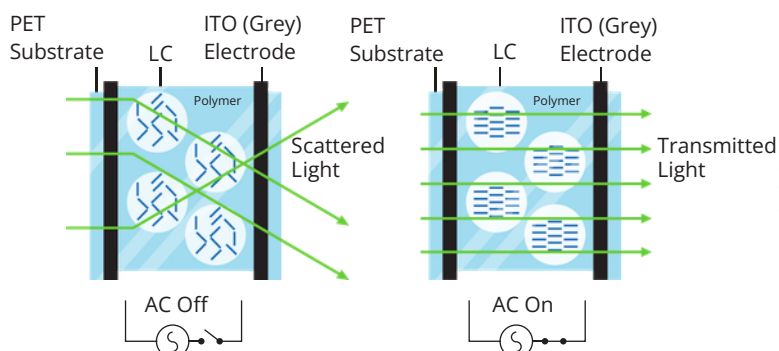
Maintains haze below 4.0%, preserving crisp views



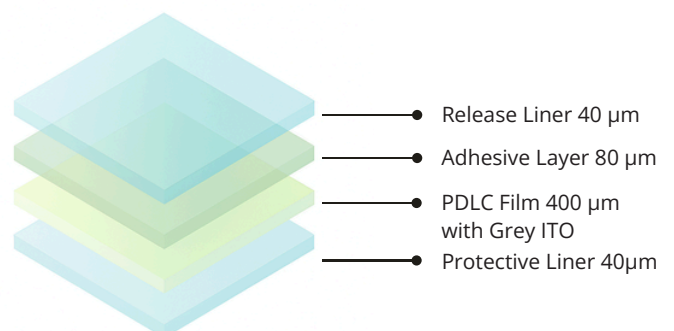
#### Control

Certified controllers offer on/off and dimming

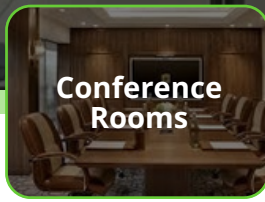
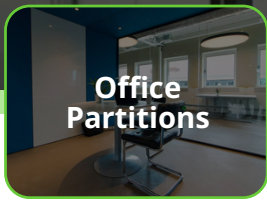
### WORKING PRINCIPLE



### LAYERS STRUCTURE



# APPLICATIONS



## T40 SMART FILM ADHESIVE GREY SPECIFICATIONS

| CATEGORY      | PARAMETER                    | STATE     | T40                                                  |
|---------------|------------------------------|-----------|------------------------------------------------------|
| OPTICAL       | Color                        | ON        | Clear Grey                                           |
|               |                              | OFF       | Opaque Grey                                          |
|               | Visible Light Transmittance  | ON        | 48% ±1%                                              |
|               |                              | OFF       | 5%±2%                                                |
|               | Parallel Light Transmittance | ON        | 45% ±1%                                              |
|               |                              | OFF       | 3%±2%                                                |
|               | Haze                         | ON        | <4.0%                                                |
|               | Viewing Angle                | ON        | >140°                                                |
|               | UV Blocking Rate             | ON        | 99.6%                                                |
|               | SHGC                         | ON        | 0.37                                                 |
|               |                              | OFF       | 0.07                                                 |
| 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)                       |
| MECHANICAL    | Operating Modes              |           | On, Off, Dimming, Segments                           |
|               | Width                        |           | 1030, 1235, 1535mm<br>(40 1/2", 48 5/8", 60 3/8")    |
|               | Roll Length                  |           | 30m (≈100 ft) 50m (≈165 ft)                          |
|               | Formats                      |           | Cut to Size , Roll, Custom Roll<br>Blinds, Shapes    |
|               | Available Colors             |           | White, Grey, Black, Custom                           |
|               | Compliance                   |           | Company: ISO9001, IATF16949<br>Products: RoHS,CE, UL |
| ENVIRONMENTAL | Storage Conditions           |           | -20°C~ 60°C (-4°F ~ 140°F)<br>< 50% humidity         |
|               | Working Temperature          |           | -20°C~ 70°C (-4°F ~ 160°F)                           |