GUARDIAN REVEAL®

SWITCHABLE PRIVACY GLASS

FROM PUBLIC VIEW TO PRIVATE SPACE, WITH THE FLIP OF A SWITCH
GUARDIAN REVEAL® SWITCHABLE PRIVACY GLASS
Imagine a visually open space that shifts to a private enclosure in less than a second. Guardian Reveal® makes this possible. Turn it on for clear views through transparent glass. Turn it off, and a gentle opacity conceals all but the simplest of forms.

THE ULTIMATE PRIVACY CONTROL

Guardian Reveal brings new versatility to interior and architectural designs. With it, conference rooms, lobbies, waiting rooms, hotel rooms and homes offer clear views—and the option for privacy as needed. Forgo window treatments that must be cleaned and replaced over time. With Guardian Reveal, windows, interior walls and partitions become dynamic design elements that control light and privacy.

Delight building occupants and owners with the fast, on-demand transitions of Guardian Reveal. At once hard-working and a style statement, Reveal can be controlled with a switch, motion detector, daylight sensor or other device.

Energy efficient and a powerful tool for daylighting, Guardian Reveal is eligible for LEED certification points. UL-listed components are designed to work with standard interfaces. Tested for durability and safety, Reveal is an enduring value.

Reveal pairs high-quality Guardian float glass with state-of-the-art liquid crystal technology proven to perform over time. Guaranteed. Guardian’s global capabilities and stringent quality controls make this innovative product widely available, highly dependable. Our technical and engineering teams are here to help, from design through installation.
SHIFT YOUR THINKING

Clear or opaque at the flip of a switch. A stunning array of visual and performance options. Guardian Reveal® brings choice and control to exciting new levels.

VERSATILE BY DESIGN

Create show-stopping designs for walls and partitions, dividers, windows, doors, entryways and more. Guardian Reveal is available in a broad range of colors, tints, patterns and textures to add a creative touch to your vision.

REVEAL OPTIONS

**Color:** Clear on, white opaque off—choose from Clear and UltraClear™ low-iron glass—with color options through tinted or laminated glass

**Texture:** Berman Glass editions and standard textures

**Thickness:** Laminated units from 7 mm (two lites of 3 mm thickness with adhesive interlayer)

**Dimensions:** Maximum sheet size of 72 in x 120 in (1.83 m x 3.05 m)
WHAT WILL YOU REVEAL?

Reveal® creates dynamic spaces that shift with user needs around the clock—with the amount of electricity used to power a clock radio. Introduce it everywhere privacy and light matter. And ditch the dusty drapes.
Guardian Reveal® is created with high-quality Guardian float glass, laminated with a liquid crystal interlayer. When electricity is applied, this interlayer transitions from a gentle opacity to incredible clarity.

**How It Works**

Liquid crystal molecules naturally arrange themselves in a random pattern, which diffuses light and appears opaque to the human eye. When low-voltage electric current is applied, the positive and negative charges of the electric current rearrange the liquid crystal molecules into a transparent grid pattern.

**Configuration & Components**

The Reveal bus bar conducts electricity within the LCD emulsion unit, from the transformer to the film. This flat, copper strip is completely encapsulated within the laminate layer for insulation purposes. The strip is approximately 6 mm wide, and its length depends on the size of the film.

The switchable laminated panels require two bus bars with one 18 AWG wire per bus bar. Wire placement is versatile; wires can exit either end of the bus bar, allowing four different wiring options for each bus bar configuration.

**Two States**

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## Technical and Performance Information

### Specifications

<table>
<thead>
<tr>
<th>Electrostatic Performance</th>
<th>Standard</th>
<th>Minimum</th>
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</thead>
<tbody>
<tr>
<td>7.35 m</td>
<td>7.35 m</td>
<td></td>
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### Composition

<table>
<thead>
<tr>
<th></th>
<th>Glass</th>
<th>Adhesive</th>
<th>LCD</th>
<th>Adhesive</th>
<th>Glass</th>
<th>Total Size</th>
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<tbody>
<tr>
<td>Standard</td>
<td>3 mm</td>
<td>0.762 mm</td>
<td>0.4 mm</td>
<td>0.762 mm</td>
<td>3 mm</td>
<td>7.924 mm</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.7 mm</td>
<td>0.762 mm</td>
<td>0.4 mm</td>
<td>0.762 mm</td>
<td>2.7 mm</td>
<td>7.35 mm</td>
</tr>
</tbody>
</table>

Note: Unit configuration can be customized to meet specific project requirement. Specifications will change based on final project unit design.

### Electrical Performance

- **Installation**: Must be installed by licensed electricians in accordance with all local codes and regulations
- **Location**: Suitable for wet and dry locations
- **Voltage**: 65V AC with the use of a transformer
- **Current**: 
  - ≤ 5 mA/ft^2 (≤ 54 mA/m^2)
- **Power consumption**: Less than 0.5 watts/ft^2, equivalent to that of a clock radio
  - Uses no power when in opaque state (off)
  - The use of a timer is recommended, as Reveal must be powered off at least 4 hours per day to prevent permanent damage
- **Wiring**: 18 gauge
- **Transformer**:
  - Class 2 Transformer
  - Model #: LHA-666501000
  - UL File #: E249153
  - Input: 120V AC / 60HZ
  - Output: 65V AC / 60HZ

### Glazing Performance

- **Clarity**: Approximately 75% light transmission when transparent, with only 5% light reduction when opaque
- **Haze**: Diffusion of light is low at 7% when transparent
- **Dimensions**: Maximum sheet size of 72 in x 120 in (1.83 m x 3.05 m)
- **Custom dimensions and shapes are available, including holes**
- **Thickness**: Minimum thickness of entire unit is 7.35 mm
- **Operating temperature**: Withstands temperatures from -10°C to 55°C (14°F to 131°F)
- **UV transmittance**: 99% harmful UV rays blocked
- **Sound control**: STC (sound transmission class): 38
  - 36-45 is considered good sound transmission control
- **Bus bar placement**: Encapsulated within laminated glass panel for safety
  - Placement can be customized (see page 4)
  - Design solutions should consider that the outer 0.25 inch perimeter of each panel will remain clear (can be covered by frame) to achieve UL listing
  - Edge of unit with bus bar requires a frame with 0.5 inch channel
- **Output wires**: 6 feet of wire standard
  - Other lengths available upon request
- **Safety requirements**: Supports safety glazing requirements as stated in ANSI Z97.1
Reveal is a featured product from Guardian Glass interior glass solutions. To learn more about the breadth of Guardian Interior Glass products, visit GuardianGlass.com, a comprehensive glass resource for interior architects and designers.

- **Deco HT**: back-painted glass
- **Guardian UltraClear**: low-iron glass
- **SatinDeco**: acid-etched glass
- **ShowerGuard**: shower and bath protection
- **Standard textures**: popular textures
- **UltraMirror**: corrosion-resistant mirror
- **Berman Glass editions**: designer glass textures
- **Laminated**: options in color, safety and sound control
- **Float glass**: basic glass substrates

Learn more
855.58.GLASS (855.584.5277)