



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

YOU CAN HAVE IT ALL

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.

MAGIC IN THE MOMENT

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.

REAL-WORLD VALUE

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.

CONFIDENCE INCLUDED

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 65 in x 144 in (1.65 m x 3.6 m)



APPLICATIONS

Office buildings

Dividers and partitions
Meeting rooms
Interior and exterior walls

Hotels, spas and restaurants

Guest rooms
Bathrooms
Walls and partitions

Entertainment venues

Ticket windows
VIP boxes
Divider walls
Bathrooms

Retail spaces

Display windows
Entryways
Dressing rooms

Homes and apartments

Doors and windows
Cabinets
Walls and partitions
Bathrooms

Healthcare environments

Waiting areas
Reception windows
Consultation spaces

Industrial settings

Entryways
Doors and windows
Walls and partitions
Observation spaces

Museums and public buildings

Exhibit displays
Entryways
Doors and windows

Courthouses and legal offices

Private offices
Conference rooms
Waiting rooms
Exterior façades

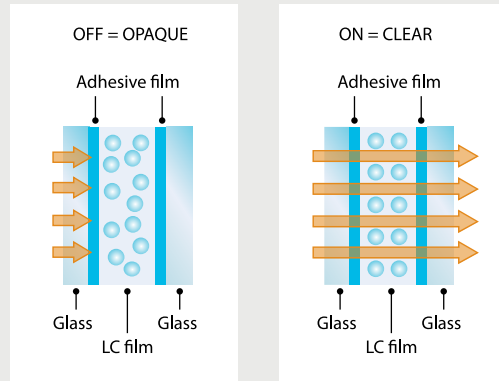


WHAT WILL YOU REVEAL?

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.

HOW IT WORKS

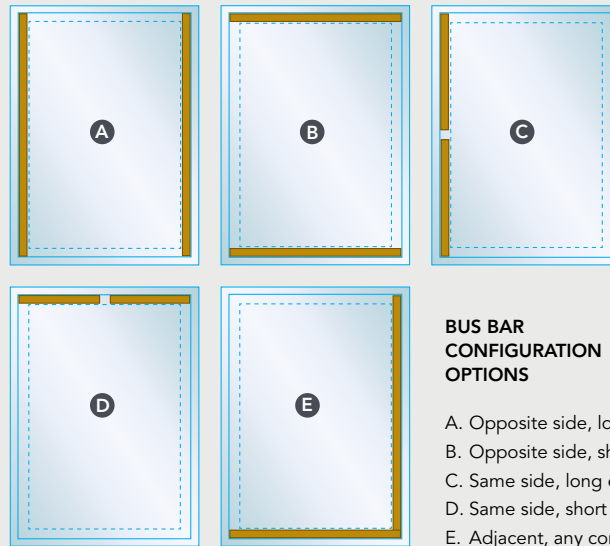
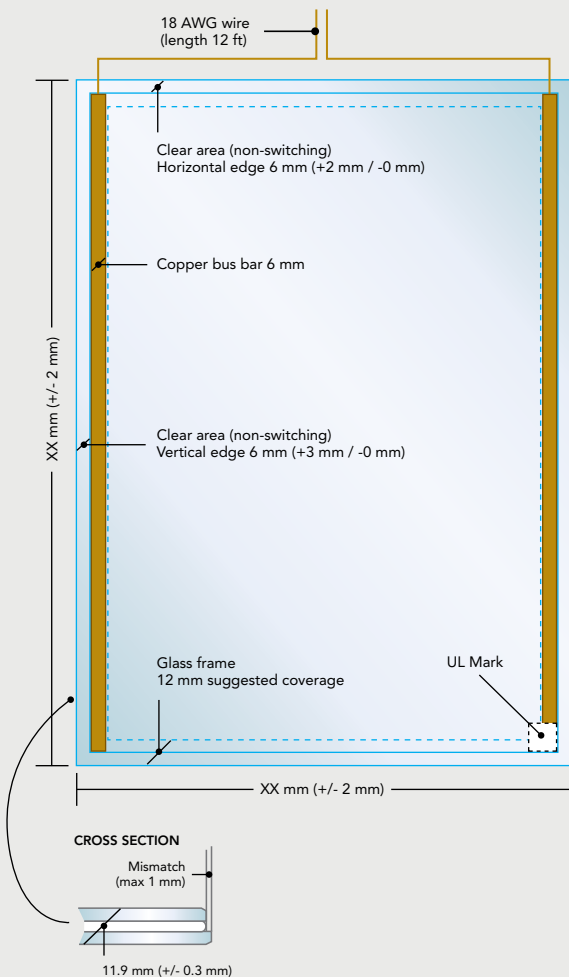
Guardian Reveal is created with high-quality Guardian float glass, laminated with a liquid crystal interlayer. When electricity is applied, this interlayer transitions from a gentle opacity to incredible clarity.



TWO STATES

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.

TECHNICAL AND PERFORMANCE INFORMATION

SPECIFICATIONS

ELECTRICAL	
Installation	Must be installed by licensed electricians in accordance with all local codes and regulations
Location	Suitable for wet and dry locations Reveal must be sealed along all edges
Voltage	65V AC with the use of a transformer One transformer powers 72 square feet of film
Current	$\leq 5 \text{ mA/ft}^2 \sim (\leq 54 \text{ mA/m}^2)$
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	
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 65 in x 144 in (1.65 m x 3.6 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

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

COMPOSITION

	Glass	Adhesive	LCD	Adhesive	Glass	Total Size
Standard	3 mm	0.762 mm	0.4 mm	0.762 mm	3 mm	7.924 mm
Minimum	2.7 mm	0.762 mm	0.4 mm	0.762 mm	2.7 mm	7.35 mm

GUARDIAN® INGLASS®

Advanced Interior Glass

Learn more

855.58.GLASS (855.584.5277)

Reveal is a featured product from Guardian InGlass™, forward-thinking interior glass solutions. To learn more about the breadth of Guardian InGlass products and services, visit GuardianInGlass.com, a comprehensive glass resource for interior architects and designers.

Berman Glass editions *designer glass textures*

Laminated *options in color, safety and sound control*

ShowerGuard® *shower and bath protection*

Standard textures *popular textures*

SatinDeco® *acid-etched glass*

UltraClear™ *low-iron glass*

UltraMirror® *corrosion-resistant mirror*

Float glass *basic glass substrates*



See what's possible™

Guardian Glass is a leading international manufacturer of float, value-added coated, and fabricated glass products and solutions for architectural, residential, interior, transportation and technical glass applications. To learn more, visit GuardianGlass.com.

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