



# QUICKFROST™

SWITCHABLE PRIVACY GLASS

## PRODUCT DATA

Goldray Glass QuickFrost™ system is a switchable privacy glass assembly that allows a glass lite to go from opaque privacy, to non-privacy glass at the flick of a switch. This product has quickly gained popularity in commercial environments, including corporate and healthcare settings due to its ability to allow light transmission, while quickly providing privacy when needed.



### INSTALLATION

Edge(s) with bus bars must be installed in a channel at least ½" (12mm) deep with electrical components physically separated from the hardware. A neutral cure silicone is required for installing butt jointed lites.

**Installation Method:** Panels must be hard-wired using the 22 AWG wire leads installed on the glass. All panels must be wired by a certified electrician.

### INSTALLATION MATERIALS

When you order QuickFrost™, Goldray Glass will supply the following materials (the entire system is CSA/UL certified):

- A 24 hour programmable timer switch
- Power control boxes
- Conductive hinges (if needed)
- The QuickFrost™ panels needed for the project



## GOLDRAY

G L A S S



## GLASS TOLERANCE

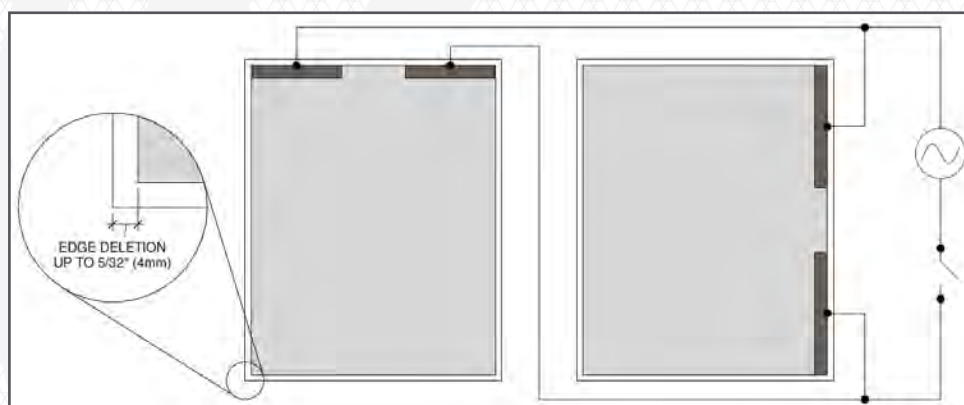
SI Designation	Traditional Designation	Glass Makeup Thickness Range				Glass Weight	
		min (mm)	max (mm)	min (in)	max (in)	kg/sqm	lb/sqft
3mm + 3mm	1/8in + 1/8in	7.05	9.02	0.277	0.355	16.55	3.39
4mm + 4mm	5/32in + 5/32in	8.77	10.60	0.345	0.417	19.58	4.01
5mm + 5mm	3/16in + 3/16in	10.35	12.32	0.407	0.485	23.68	4.85
6mm + 6mm	1/4in + 1/4in	12.33	14.62	0.485	0.576	28.61	5.86

## ELECTRICAL SPECIFICATIONS

All electrical components needed to install the QuickFrost™ system, such as switches, control boxes, and QuickFrost™ panels will be provided by Goldray Glass.

- **Supply Voltage:** Goldray Glass recommends using 36 VAC to 60 VAC to electrify the panels (any voltage  $\geq 65$  VAC & DC current will damage the film). We recommend turning the QuickFrost™ panel off for at least one hour every 24 hours.
- **Energy Consumption:** The glass panels use less than 4 watts per square meter.
- **Circuit Design:** Goldray Glass recommends that the panels are installed in parallel NOT in series (See Exhibit A).

*Exhibit A - Panels installed in parallel:*

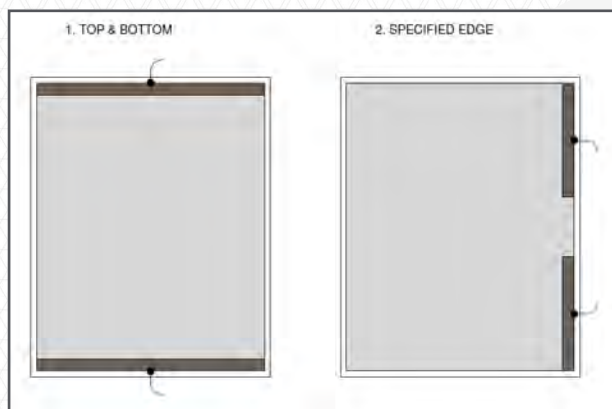




## ORDERING QUICKFROST™

**Bus Bar Location:** There are two bus bar location options for QuickFrost™ (see Exhibit B); please specify the desired bus bar location when ordering. Additional restrictions apply based on panel size and glass makeup. Please contact Goldray Glass for more information.

*Exhibit B - Bus Bar Location Options:*



## APPLICABLE SPECIFICATIONS

Goldray's QuickFrost™ system conforms to UL STD 60335-01 certified to CSA STD C22.2NO. 60335-1.

- ASTM C1036 - Specification for Flat Glass
- ASTM C1048 - Specification for Heat-Treated Flat Glass - Kind HS, Kind FT Coated and Uncoated Glass
- ASTM C1172 - Specification for Laminated Architectural Flat Glass

## PRODUCT FEATURES

- Can be installed using a variety of framing solutions
- Non-porous surface; easy to clean and maintain
- Save on heating, air conditioning, and lighting costs
- No moving parts

## TECHNICAL DATA & APPLICABLE STANDARDS

	"ON" Non-Privacy State	"OFF" Privacy State
<b>Total Light Transmittance:</b>	As high as 78.2%	> 41%
<b>In-Line Transmittance:</b>	> 73%	≈ 0.1%
<b>Haze:</b>	< 5%	<5%

- Color Tolerance: 1 Delta E (CIE LAB)
- ANSI 97.1: Passed
- 16 CFR 1201: Passed

