
PRIVA-LITE®

V1.6

SWITCHABLE GLASS FOR MODULAR
PARTITIONING AND INTIMACY MANAGEMENT

- INTIMACY
- TRANSPARENCY
- COMMUNICATION

PRIVA-LITE® is a laminated glass with a liquid crystal film allowing immediate switching from transparent to translucent. PRIVA-LITE® is a unique solution in space management by way of instantaneous control of opalescence (transparent / translucent) and dynamic (back) projection of videos and images.

The first PRIVA-LITE® project was installed in 1989 on the Champs Élysées in Paris where it is still in use.

More than 50,000 m² are in use worldwide

MODULAR AND ACTIVE ARCHITECTURE



DYNAMIC SUPPORT FOR COMMUNICATION



INTIMACY AND CONFIDENTIALITY CONTROL

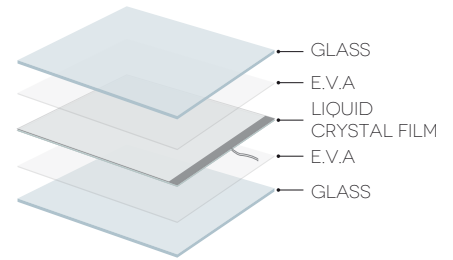
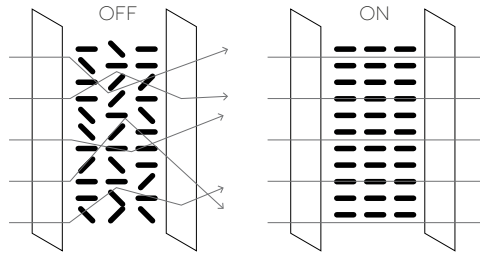


PRIVA-LITE® FEATURES

TECHNOLOGICAL PRINCIPLE

PRIVA-LITE® is an active glass which, under the effect of an electric current, switches from translucent to transparent with no alteration of light transmission.

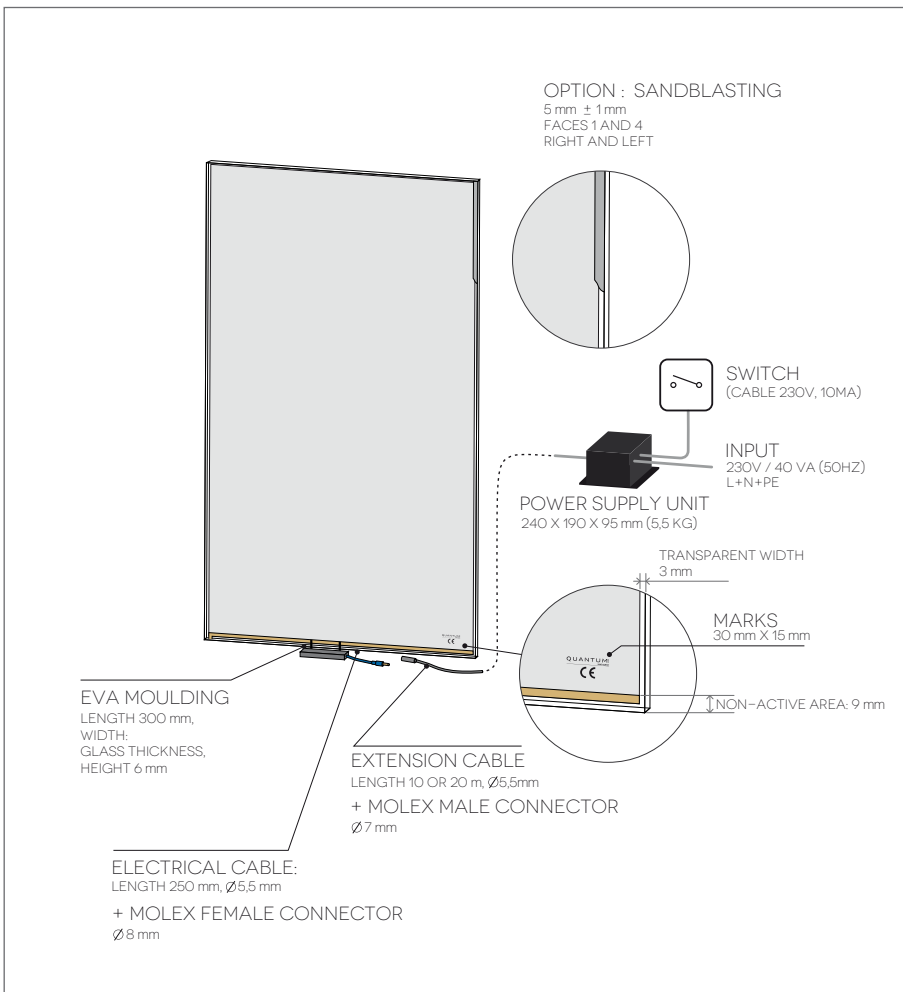
Two layers of glass (planilux or extra clear) encapsulate a liquid crystal (LC) film inserted between EVA layers. This LC film is constituted by two PET films coated with a transparent metallic deposit and laminated together thanks to a very fine layer of liquid crystal gel. Under a 100 volts alternative current (50Hz), the liquid crystals orient themselves in the same direction. The LC film – at first translucent – becomes instantaneously transparent!



In its translucent state, PRIVA-LITE® offers an ideal (back) projection screen.

DIAGRAM

Diagram based on a standard assembly as a simple glass-pane.



SIZE

Standard maximum size of :
1000 x 3000 mm with one LC film, or
2000 x 3000 mm with two LC films
next to each other in a same pane.
Minimum size: 200 x 300 mm.

THICKNESS

Standard: 12 mm
Others: from 8 to 22 mm

CUTTING

The glazing is delivered in the required dimension. No further cutting or drilling is possible. In the event of a hanging screen, the anchor holes have to be drilled previously during production and located in a zone without film.

ELECTRODES AND CABLE EXITS

Depending on the size of the glass-pane, both electrodes can be positioned on top, bottom, right or left side.

TRANSFORMERS

Standard: 240 x 190 x 95 mm, 5.5 kg
Other: 240 x 190 x 120 mm, 10 kg, for multiple panes.

PERFORMANCES

Simple glazing PRIVA-LITE® 55.4 (12 mm)

| | ⊙ ON | ⊙ OFF |
|------------------------------|--------------|--------------|
| Light transmission* | 77 % | 76 % |
| Light reflection* | 19 % | 18 % |
| Haze (level of blur)* | 7.5 % | 90 % |
| Solar factor* | 63 % | 64 % |
| Ug (W/m²K) | 5.6 to 5.8 | 5.6 to 5.8 |
| RW (C; Ctr) | 38 (-2;-3)dB | 38 (-2;-3)dB |

* The spectrophotometric data are given with a tolerance of +/- 2%

CLAUSE OF PARTICULAR TECHNICAL SPECIFICATIONS

Glazing product with controlled opalescence can be made transparent by applying a 100V AC electrical current, with a haze level of 7,5% in its transparent state

and 90% in its translucent state. No change in light transmission between the transparent and translucent states.

PRIVA-LITE® IMPLEMENTATION

APPLICATIONS

Interior/exterior partition, door, security glazing, projection screen, shop front, glass floor...

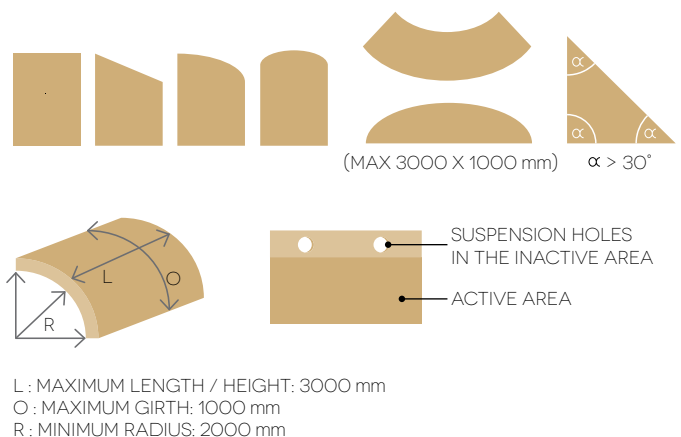
CUSTOMISATION OF THE GLAZING

COMPOSITION

Standard 55.4 (12 mm thickness) laminated glass. Can be composed of glass that is tempered, coloured, screen printed, bended ... Can also be used as the inner sheet of a double-glazing with all of the products from the range of glazing from SAINT-GOBAIN (Ultra N, Cool Lite, Antelio, Stadip protect, Stadip Silence, Contraflam...) and combined with panels from the range of product QUANTUM GLASS™ (SageGlass®, LEDinGLASS® or E-GLAS®).

SHAPES

All of the standard shapes, except complete circles as well as shapes with angles inferior to 30°. The panes can be curved, have a serigraphy or be sand-blasted.



INSTALLATION

TYPE OF FRAME / FIXING

- **Fixed**, opening or sliding frame
- **Possible to hang** (drilling over the non active part)
- **Use only untreated hardwood support blocks** (packers)
- **Only the Multisil silicone is approved** (provided on request by QUANTUM GLASS™)
- **Any material in contact with the edges of the glass must be checked** by QUANTUM GLASS™ for compatibility

MAIN PRECAUTIONS FOR USE AND IMPLEMENTATION

- **Intended exposure** of the glazing to temperatures exceeding +60°C or below -20°C will require a specific analysis
- **Prevent all pressure on the surface of the panel**, over the moulding and the cables
- **The transformer can be located remotely**, but must remain accessible (maintenance)
- **The control can be operated by a standard switch** or via a remote controle (230V, 50 Hz) directly connected on the transformer
- **The installation has to respect the current electrical regulations** and must be performed by a certified electrician

To guarantee the quality and durability of the installation, it's strongly recommended to entrust the installation to an installer trained by QUANTUM GLASS™

TECHNICAL DATA

| | |
|-----------------------------|---|
| Operating voltage | 100 volts (50 Hz) |
| Power | 7 watts/m ² when «ON». 0 watts/m ² when «OFF» |
| IP | IP X7 |
| Security to shock | PVL 55.4 is equivalent to a laminated glass (EN 12600, level 1B1) |
| Protection class | PVL 55.4 is P5A - PVL 66.8 is P6B |
| Electrical classification | Class I (class II available on demand) |
| Standards and certification | CE... - Certification list on demand |

WARRANTY

QUANTUM GLASS™ gives a 5-year warranty on the functionality of the PRIVA-LITE. This guarantee is valid only if the instructions contained in our installation and maintenance guide are followed.

PRIVA-LITE® BENEFITS

A SUSTAINABLE HIGH-PERFORMANCE SOLUTION

- Durability and reliability over time
- Unparalleled level of translucency and transparency
- Light transmission almost identical in the transparent and translucent states
- The best projected or back-projected image resolution on the market
- Instantaneous and silent change of state via simple command
- Low power consumption
- Improved security against theft and vandalism
- International certificates
- 5 years guarantee

QUANTUM GLASS™

AN ORGANISATION AT YOUR SERVICE

Our mission is to facilitate the creation of cutting-edge architectural projects and products that excite emotion and push back the boundaries of creativity.

- A dedicated, international commercial network
- Places for reflection and information sharing
- An international network of local, certified installers
- A technical engineering office at your disposal to study our project
- Product / Installation training on demand
- A Glass House – a 400 m² showroom in Paris
- The Saint-Gobain guarantee, a world leader in the glass industry



NOVOTEL NEXT ROOMS (WORLDWIDE)



LES CLOS DU LETHE (FRANCE)

SELECTED REFERENCES

- CHANEL BUILDING-GINZA BY PETER MARINO (TOKYO, JAPAN)
- LISBON MUSEUM (PORTUGAL)
- SIEM REAP ANGKOR INTERNATIONAL AIRPORT BY ALAIN DUPUY (CAMBODIA)
- PERRET TOWER BY THIERRY VAN DE WYNGAERT (AMIENS, FRANCE)
- HIGH SPEED TRAIN ICE & ICT (GERMANY) AND VELARO (SPAIN)
- THE PAVILION OF METAMORPHOSES, BY ELECTRONIC SHADOW (PARIS, FRANCE)
- ACCOR NOVOTEL NEXT ROOMS (WORLDWIDE)

CONTACT US

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