

PRIVA-LITE CLASSIC

This document provides information on the inherent characteristics and features of the PRIVA-LITE.

1. MAIN FUNCTIONALITY

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.



Transparency
(Switch ON)



Privacy
(Switch OFF)



Projection
(Switch OFF)

1.1 Haze

Please note that in its transparent state, PRIVA-LITE will never be as clear as normal float glass. A light haze will always be visible. This haze effect is considered normal and unavoidable due to the nature of the product makeup.

It should also be noted that factors such as ambient lighting (intense diffuse daylight, direct lighting...), compositions (thickness, double and triple glazing unit, bent panel...), position of the glazing (inclined panel, roof application...) and position of the viewer (non perpendicular observation, facing glass façade...) will increase this effect of haziness.

Glassolutions Saint-Gobain taking all the necessary precaution to ensure minimum haze and making sure that all delivered panels are in our tolerances (see point 2.1 Optical and solar control performances), claim for such reason will automatically be refused.

1.2 Hiding power

PRIVA-LITE is a translucent glass in its natural state (switch OFF). It's not an opaque glass. Translucent means that it allows light to pass through but cause sufficient diffusion to prevent perception of distinct images (hiding power).

The shape of coloured items placed close to the PRIVA-LITE will by consequence always be visible. Please note that high privacy PRIVA-LITE with a higher hiding power is available for applications such as toilet door.

2. PERFORMANCES

2.1 Optical and solar control performances

		LT*	RL*	Haze*	g*	Ug (W/m ² K)
STADIP Planilux 55.4 (12mm)		85%	9%	~ 0.5%	71%	5.6 to 5.8
PRIVA-LITE Diamant 55.4 (12mm)	ON	77%	19%	7.5%	63%	5.6 to 5.8
	OFF	76%	18%	90%	64%	5.6 to 5.8
HIGH PRIVACY PRIVA-LITE Diamant 55.6 (13mm)	ON	67%	N.C.	10%	N.C.	N.C.
	OFF	64%	N.C.	98%	N.C.	N.C.

*Spectrophotometric data's are given with a tolerance of +/-2%

LT = Light Transmission

RL = Reflection

g = Solar Factor

N.C. = not communicated

Above performances are valid only for standard applications and for PRIVA-LITE panels installed and maintained according to our installation and maintenance guides.

Specifications for other compositions are available on demand.

Please consult Glassolutions Saint-Gobain before ordering.

2.2 Acoustical performances

	R _{a,tr}	R _w (C;Ctr)
PRIVA-LITE 55.4 (12mm)	35 dB	38 (-2;-3) dB

Specifications for other compositions are available on demand.

Please consult Glassolutions Saint-Gobain before ordering.

2.3 Electrical performances

	PRIVA-LITE
Supply voltage	100V ~ / 50Hz
Consumption ON mode @ 25°C	7.0 W/m ²
Time of change of state	<0,1s
Life test	3 000 000 cycles ON/OFF

2.4 Indexes/ classes

	PRIVA-LITE 55.4 (12mm)
Protection Index (EN 60529)	IPX7
Protection class laminated glass (EN 12600)	1B1
Protection class laminated glass (EN 356)	P5A
	P6B on demand with PRIVA-LITE 66.8 (16 mm)
Protection class laminated glass (EN 60439)	Class I
	Class II available on demand

	Power supply unit
Class Protection (EN 60335-1)	Class I
Protection Index Power supply	IP 42

3. NORMS

PRIVA-LITE is conformed to the following norms

- EN12543 Glass building – Laminated glass and laminated safety glass
- EN14449 Glass building – Laminated glass and laminated safety glass
- EN 60529 Protection index
- EN 356 Ball chock resistance
- EN12600 Pendulum test
- EN1279 Insulating glass
- EN 55014 Electromagnetic compatibility
- EN 60439 Standard related to low voltage connection
- EN 60335-1 Electro-domestic apparatus
- IEC 61558-2-4 Safety of power transformers, power supply units and similar
- IEC 60228 Conductors of insulated cables

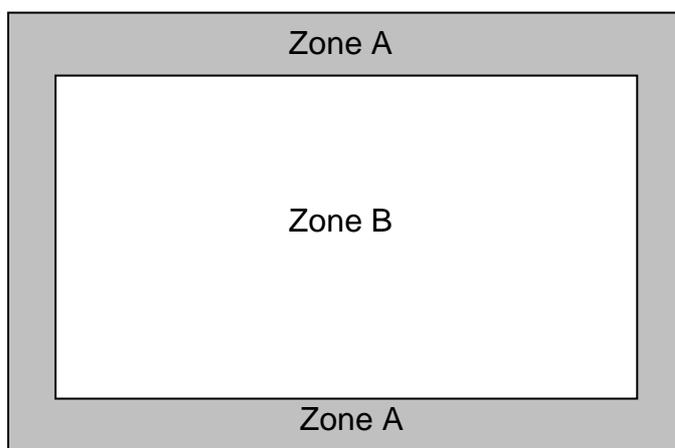
Certificates available on demand.

4. QUALITY TOLERANCES

4.1 Optical tolerances

	Area A (15mm from the edge)	Area B
Spot defects Black, white or transparent spots Foreign bodies	If diameter < 5mm then OK	If diameter <1mm and if no accumulation* then OK If $1\text{mm} \leq d \leq 3\text{mm}$ and max 2 spots then OK If diameter >3mm then NOK
Scratches on the LC film	If not visible when subjected to the test method EN12543-6 then OK	If <150mm, no accumulation* and not visible when subjected to the test method EN12543-6 then OK
Scratches on the glass	If not visible when subjected to the test method EN12543-6 then OK	If <30mm, no accumulation* and not visible when subjected to the test method EN12543-6 then OK
Bubbles	If diameter < 5mm and if bubbled area doesn't exceed 5% of the edge area then OK	If diameter <1mm and if no accumulation* then OK If $1\text{mm} \leq d \leq 3\text{mm}$ and max 2 bubbles then OK If diameter >3mm then NOK
Orange Skin	A light orange skin effect will always be visible in reflection and under certain conditions such as direct lighting, compositions and position of the viewer. This orange skin effect is considered normal and unavoidable due to the nature of the product makeup.	

*An accumulation of defect occurs if 4 or more defects are at a distance of < 200mm from each other.



Modifications of the photometric or colorimetric characteristics, or loss of functionality located in the edge area A are considered as acceptable, and are excluded of this guarantee.

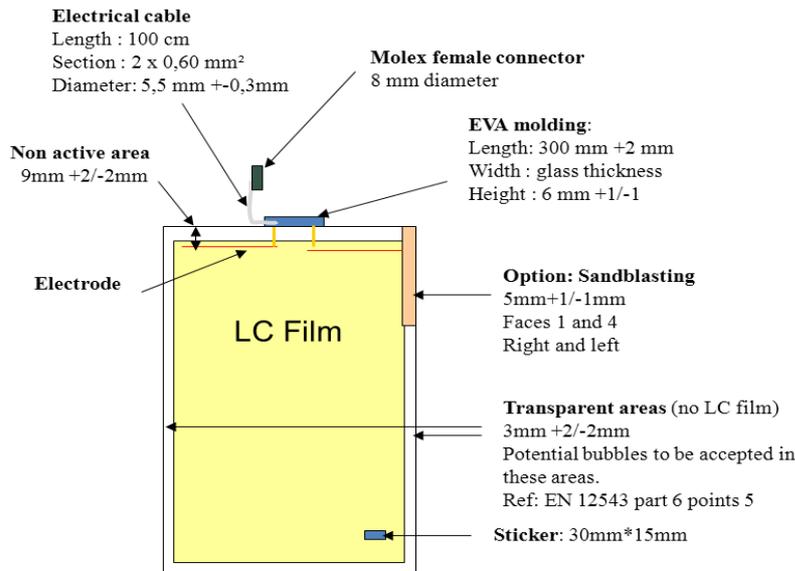
Test method EN12543-6

The laminated glass to be observed is put in a vertical position, in front of and parallel to a matt grey screen, lit by diffuse daylight or equivalent.

The observer will be at a distance of 2m from the glass observing it perpendicularly (the matt screen being on the other side of the glass).

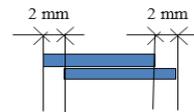
4.2 Specifications

Specifications PRIVA-LITE IPX7 - Single glazing



TOLERANCES

Size: +/-2mm
Thickness: +/-2mm
Bow : 3mm/meter
Overlap max ref EN 12543

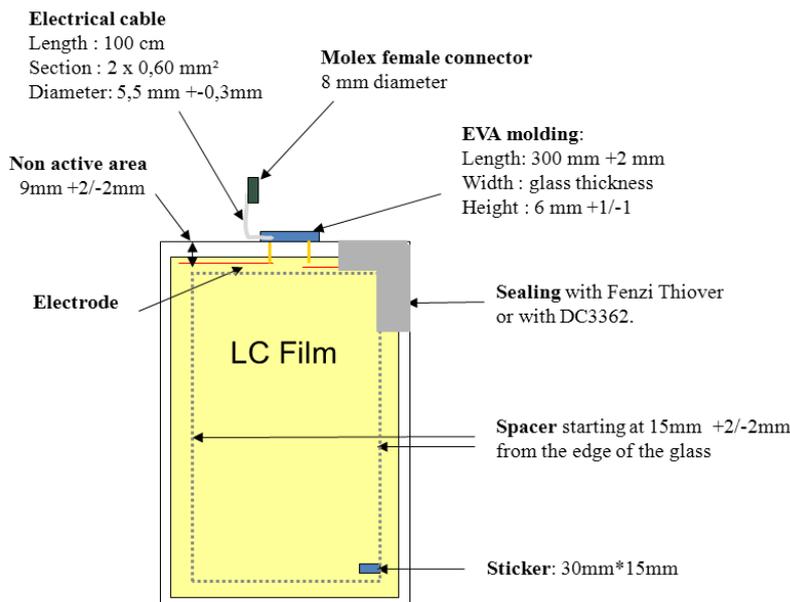


Extension cables
10 or 20 m long
Section : 2 x 0,60 mm²
Diameter : 5,5 mm +/-0,3mm



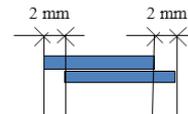
Molex male connector
7mm diameter

Specifications PRIVA-LITE IPX7 - Double glazing



TOLERANCES

Size: +/-2mm
Thickness: +/-2mm
Bow : 3mm/meter
Overlap max ref EN 12543

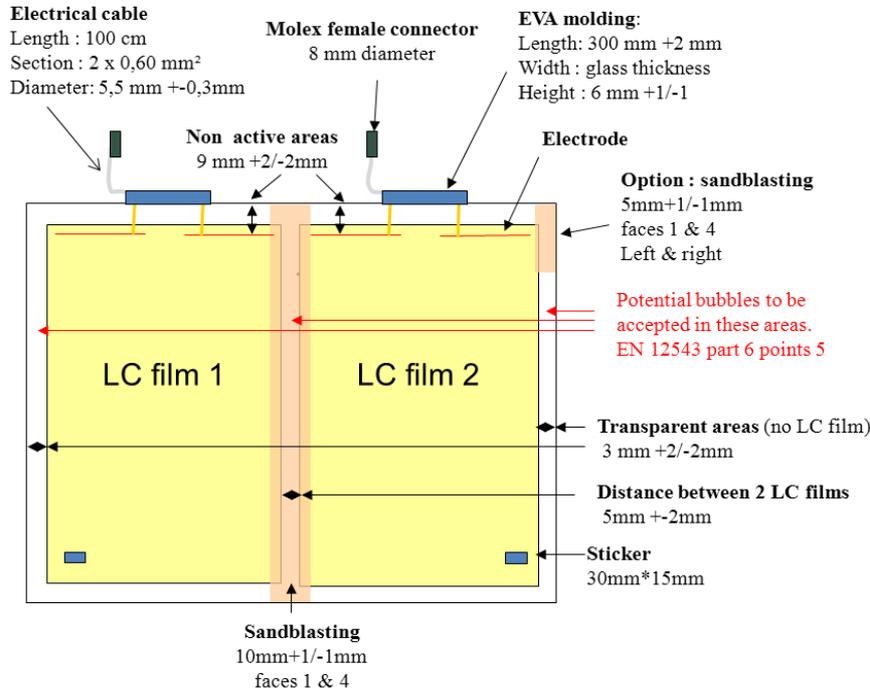


Extension cables
10 or 20 m long
Section : 2 x 0,60 mm²
Diameter : 5,5 mm +/-0,3mm



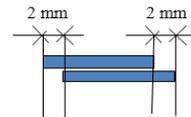
Molex male connector
7mm diameter

Specifications PRIVA-LITE Big format IPX7 - Single glazing

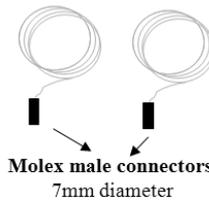


TOLERANCES

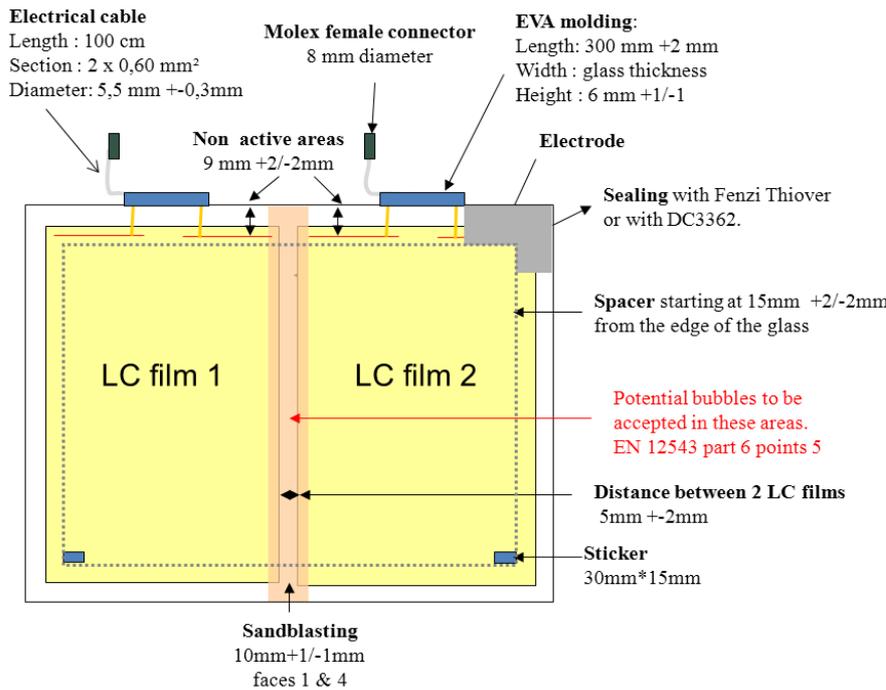
Size: +/-2mm
Thickness: +/-2mm
Bow: 3mm/meter
Overlap max ref EN 12543



Extension cables
 10 or 20 m long
 Section : 2 x 0,60 mm²
 Diameter : 5,5 mm +/- 0,3mm

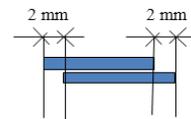


Specifications PRIVA-LITE Big format IPX7 - Double glazing

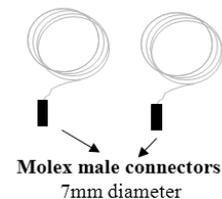


TOLERANCES

Size: +/-2mm
Thickness: +/-2mm
Bow: 3mm/meter
Overlap max ref EN 12543



Extension cables
 10 or 20 m long
 Section : 2 x 0,60 mm²
 Diameter : 5,5 mm +/- 0,3mm



4.3 Multisil silicone

The Multisil silicone delivered by Glassolutions Saint-Gobain is regularly tested by Saint-Gobain. However, the qualities and performances of the Multisil silicone remain under the responsibility of Multisil.

4.4 Extension cables

The extension cables delivered by Glassolutions Saint-Gobain have been tested by Saint-Gobain and their sleeve is considered as compatible with the PRIVA-LITE.

For sliding door application, a specific extension cable is needed. Please contact Glassolutions Saint-Gobain for more information.

4.5 Power supply units and relays

The power supply units and relays delivered by Glassolutions Saint-Gobain have been specially developed to assure a safe and perfect working of the PRIVA-LITE overtime. Our power supply units are CE marked and our Relays US is certified UL.

5 Warranties

5.1 Definition of the warranty

Under the conditions mentioned below, Glassolutions Saint-Gobain guarantees the functionality of the PRIVA-LITE for a period of 5 years starting from the date of Glassolutions Saint-Gobain's invoice, and the good working of its power supply units for a period of 2 years starting from the date of Glassolutions Saint-Gobain's invoice.

5.2 Conditions of warranty

These guarantees shall be invalidated if the instructions contained in our installation and maintenance guides are not followed.