

PRIVACY

TRANSPARENCY

PARTIAL

FORM

Smart Glass

Privacy or Transparency on Demand

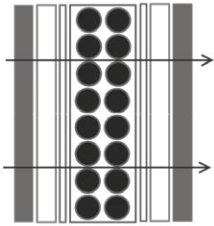
Separating spaces, ensuring privacy or transparency through a single click. All, while being the only film that fulfills the external certifications according to European regulations.

PORFYRIOS
GLASS

Why Porfyrios Smart Glass

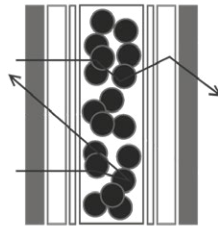
Smart Glass becomes opaque or transparent at the request of the user to achieve privacy, with the click of a button.

With the application of electric current, it is possible to align the liquid crystal molecules and with it the passage of light. Turning off the current the molecules are randomly disordered making the glass opaque and thereby giving intimacy.



MODE ON

The liquid crystal molecules align allowing the passage of light.



MODE OFF

Liquid crystal molecules randomly clutter, scattering light, causing the glass to become opaque.



Replaces the use of curtains or blinds.



Guaranteed durability through life cycle certifications of more than 100.000 ON/OFF.



Environmentally friendly thanks to its low energy consumption.



Thermal comfort in summer or winter



Easy adaptation to any control system: home automation, iPhone, iPad, motion sensor, remote control.



Better opacity/transparency ratio



Porfyrios SmartGlass has all regulations required by the ECC law of laminated glass for inside or outside glazing construction.





Internal Partitions

Porfyrios Smart Glass is suitable for a range of interior applications most commonly used as glass partition in office buildings, residential or even libraries, hotels, cafes and restaurants.



Quick Intimacy or transparency. Replaces the use of curtains or blinds providing a slick and modern solution.



Excellent sound insulation, making it appropriate for meeting and conference rooms.



Fast reaction in less than a second.



Less distractions.



No maintenance, just clean it properly as a normal glass.



Thermal comfort in summer or winter, especially good in south facing office spaces.



OFF



ON

Commercial Use

Porfyrios Smart Glass dynamic window display allows the retro-projection of photos and videos on the surface of the glass making shop-fronts or product displays more dynamic.

The Smart Glass dynamic window display can:

- Show your brand image.
- Adapt the image of the campaign depending on season -winter/summer- or promotions.
- Impact with new content, images and products
- Modify contents in all the shop windows quickly and instantly.
- Be customizable according to zone and tastes and location.

Currently in development :

- Interactive showcase using a touch screen with sensors to move.
- Interactive tables for the catering market with the possibility of making orders and connecting to the internet.



Outdoor Certification

Porfyrios SmartGlass has all regulations required by the ECC law for laminated glass for inside or outside glazing construction.



Its excellent moisture resistance makes it an ideal bath and pool product, both for residential projects, hotels and spas, providing more options and control of the level of privacy its users desire.



Porfyrios Smart Glass also has significant breakage resistance and avoids delamination in such environments which makes it an excellent material for balustrades in pools, balconies and viewpoints.



TECHNICAL SPECIFICATIONS

PROPERTIES		
THICKNESS	(mm)	0.4 +/- 5%
WIDTH	(mm)	1800 /1500 /1200 /1000
LENGTH	MTS	50
COLOR		Transparent
ADHESIVE BONDING STRENGTH	G/mm	50
LIFE CYCLE	ON / Click	> 10.000.000
TIMES ON/OFF	times	> 10.000.000
FUERZA DE ADHESIÓN / <i>ADHESION STRENGTH</i>	(mm)	50g/mm
VISIBLE LIGHT TRANSMITTANCE ON	%	> 78
VISIBLE LIGHT TRANSMITTANCE OFF	%	> 68
PARALLEL LIGHT TRANSMITTANCE ON	%	> 76
<i>PARALLEL LIGHT TRANSMITTANCE OFF</i>	%	< 1,5
HAZE ON	%	< 5,90
HAZE OFF	%	90,27
VIEW ANGLE		> 175
WORKING VOLTAGE ON	V	48
SATURATED VOLTAGE ON	V	< 25
RESPONDING TIME OFF-ON	ms	< 200
RESPONDING TIME ON-OFF	ms	< 10
POWER CONSUMPTION ON	W/M ²	3

CERTIFICATIONS

Porfyrios Smart Glass complies with the ECC regulation of laminated glass for outside glazing construction

- RADIATION TEST UNE-EN ISO 12543-4:2011 Satisfactory
- HUMIDITY UNE-EN 12543-4:2011 Satisfactory
- HIGH TEMPERATURE UNE-EN 12543-4:2011 Satisfactory
- ON AND OFF CYCLES UNE-EN 410:2011 Satisfactory
- Compatibility test silicones Satisfactory

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19, SPYROU KYPRIANOU, ERGATES INDUSTRIAL AREA, P.O.Box.28343 NICOSIA,
2093 NICOSIA-CYPRUS, TEL: +357 22 487756, FAX: +357 22 487910
Email: porfyriosglass@cytanet.com.cy
Web: www.porfyriosglass.com