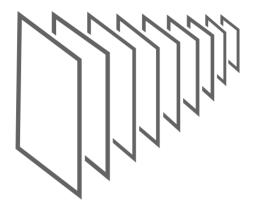
DREAM GLASS GROUP

est. 2005

EVALUATION OF

PRODUCT CATALOGUE

Pioneering the future of smart glass innovation and design

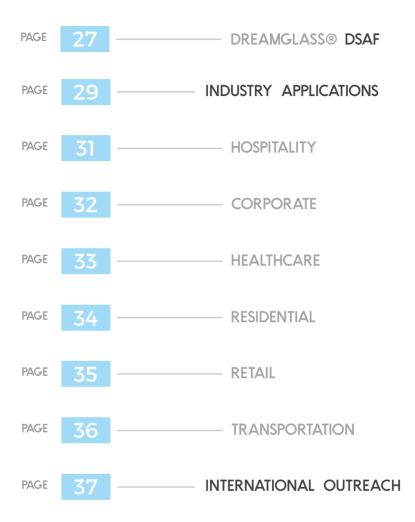


DREAM GLASS GROUP

Dream Glass Group (DGG) was founded in 2005 in Madrid, Spain, on the principle of supplying high quality smart glass. Having experienced significant and continuous growth since its foundation, DGG established its own R&D facility in 2009.

Ground-breaking investigations and continuous product development have placed DGG at the forefront of the smart glass industry with great success.





WHAT IS DREAMGLASS®?

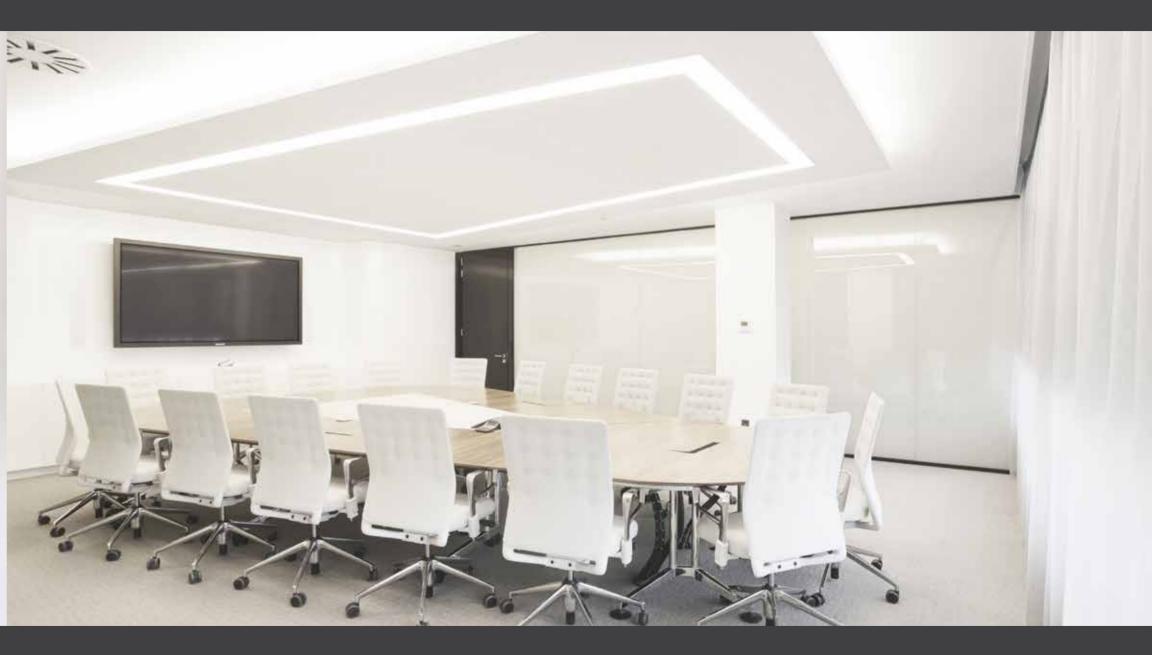
A PRODUCT LINE OF SMART GLASS TECHNOLOGY SOLUTIONS

As crucial elements of modern design, glass separations provide access to natural light and open views. The downside to using conventional glass, however, is the necessity of inconvenient blinds, curtains, or roller shades to gain privacy.

DreamGlass® products provide the benefits of natural lighting and protects the pristine aesthetic of your interior space without the loss of privacy. The featured "inbuilt privacy system" allows for the effortless shift from transparency to privacy and vice versa with the flick of a switch.

1

DREAMGLASS® ON



DREAMGLASS® OFF

THE SCIENCE BEHIND DREAMGLASS®

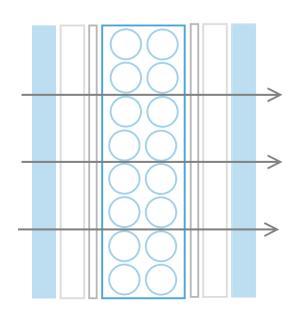
Switch the current off and the glass turns opaque. Reactivate the current and the glass reverts to a clear, transparent view. This ingenious technology involves a film of dispersed liquid crystal in a polymer matrix pressed between two glass sheets. When a small current is applied to the liquid crystal, its molecules align allowing light to pass through. When the current is disconnected, the molecules immediately disarrange for instantaneous and total privacy.

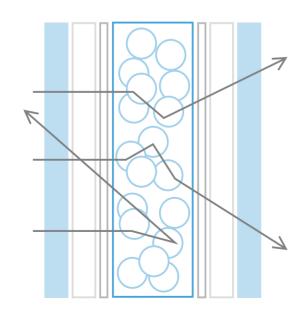
POWER ON

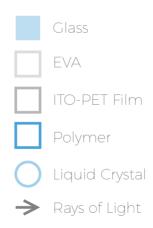
The liquid crystal molecules align and light can pass through.

POWER OFF

The liquid crystal molecules are randomly aligned making light scatter and the glass opaque.







GLASS

Choose the desired thickness, type, shape or color.

EVA

2

3

Ц

A cross-linked transparent sheet which acts as a bond between the glass and ITO-PET laminate.

ITO-PET

A transparent, conductive film of only a few microns in thickness.

PDLC

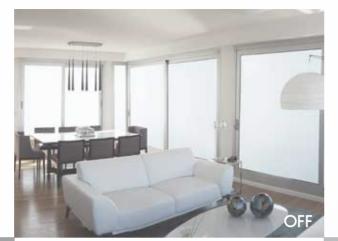
(Polymer Dispersed Liquid Crystal) A pool of randomly orientated liquid crystal molecules. When stimulated with electrical current, the liquid crystal molecules align themselves allowing incident light to pass through, thus the glass becomes clear.





CONVENIENCE

DreamGlass® products work flawlessly every time. The effect happens with the press of a button and works in a fraction of a second. What's more convenient than that?



NO MOVING PARTS

Unlike other privacy systems, DreamGlass® products have no pulleys, strings, fixtures, or chains to wear out, tangle up, or get stuck.

MAINTENANCE?

No moving parts means maintenance-free enjoyment. It's also easy to clean compared to curtains and blinds, with just a quick wipe-down.



TRUE TRANSPARENCY

DGG has mastered the switchable glass formula in order to offer the absolute lowest amount of haze in our products.





TRANSFORM YOUR SPACE

DreamGlass® products allow you to completely change a space to suit your different needs. With the flick of a switch an open office space can turn into a private meeting room. All our products can also be converted into rear projection screens with incredible image quality.



WHY DREAMGLASS®?

Why invest time and money into buying or fixing traditional privacy systems when DreamGlass® products offer superior innovation, reliability and cost efficiency, while delivering a sophisticated and timeless modern design solution?

EFFORTLESS AND STUNNING

DreamGlass® products deliver total privacy while maintaining access to natural light- without any moving parts. Free from the need for blinds or walls, our products create pristine and open interior spaces. The dynamic features and benefits offered by our products can be applied in various situations, resulting in an unparalleled privacy solution.

BULLET PROOF

DreamGlass® products can be made bullet proof, allowing it to withstand high-impact situations.

CUSTOMIZE YOUR AESTHETIC

As the designer of your space, you have the freedom and capability to do almost anything with DreamGlass® products. We offer many different options for customization, and have added benefits that make us the preferred switchable smart glass and privacy option.

1



CUSTOM SHAPES

DreamGlass® products can be cut into rectangles, triangles, squares, circles, rounded corners, custom angles, custom shapes, domes, cut outs, hinges, and curved glass to meet all your design needs.



LOW IRON

As a standard, all panels are manufactured with Low Iron Glass allowing them to offer the highest levels of transparency.

COLOR TINTED

DreamGlass® products can be tinted in various colors to suit aesthetic preferences. Create a more interesting atmosphere with this option.



DOUBLE GLAZED

DreamGlass® products can be glazed in double or triple insulated units for interior or exterior applications.

FIRE RATED

Combine DreamGlass® products with fire rated glass to offer the most durable solutions.





OPERATION CONTROL

DreamGlass® products can be controlled in multiple ways, to reach different levels of privacy. Simply choose whichever method best suits you and start operating your switchable smart glass.













Smart Phone Motion Sensors Dimmer Remote Control







DURABILITY UNDER DEMANDING CONDITIONS

DreamGlass® products are tested under the highest quality standards, so you can be sure you're getting the absolute best product available. And, you can feel sure that your glass is safe and durable for many years to come.

Having our own lab is what makes us completely unique in our industry, allowing us to control the full production and quality of our products from initial film technology, to final glass delivery.



ENVIRONMENT

ELECTRICAL PROPERTIES

OPTICAL PROPERTIES

Storage Operation

Operating Voltage Operating Frequency Power Consumption Switching Time

Total Transmittance OFF State Direct Transmittance OFF State Total Transmittance ON State Haze ON State -20° C to 50° C -10° C to 50° C

60 - 80V AC 50 - 60 Hz < 8 W/m ² < 0.1 seconds

62% ± 2% 0.3% ± 0.1% > 80% < 4.5%



	PHYSICAL, OPTICAL	DESIGN OPTIONS						CERTIFICATIONS				WARRANTY				
	Construction	Max. Size	Haze	UV Protection	db Rating Rw (1)	Colour Tinted	Curved	Shapes	Sand Blasted	Screen Printed	Patterned	CE	ISO 9001:2015	ISO 10140-2:2011	IPx7	
4 + 4 mm	4mm low iron glass + 0,4mm EVA + PDLC + 0,4mm EVA + 4mm low iron glass	1.800 x 3.500 mm	< 5%	> 98%	36	~	~	✓	✓	✓	~	~	~	~	✓	~
5 + 5 mm	5mm low iron glass + 0,4mm EVA + PDLC + 0,4mm EVA + 5mm low iron glass	1.800 x 3.500 mm	< 5%	> 98%	37	✓	✓	✓	✓	~	✓	~	~	~	✓	✓
6 + 6 mm	6mm low iron glass + 0,4mm EVA + PDLC + 0,4mm EVA + 6mm low iron glass	1.800 x 3.500 mm	< 5%	> 98%	38	✓	 Image: A start of the start of	 Image: A start of the start of	 Image: A start of the start of	~	 Image: A start of the start of	~	~	~	~	~
8 + 8 mm	8mm low iron glass + 0,4mm EVA + PDLC + 0,4mm EVA + 8mm low iron glass	1.800 x 3.500 mm	< 5%	> 98%	39	~	 Image: A start of the start of	~	~	~	✓	~	~	 Image: A start of the start of	✓	✓
Custom Configurations	non-standard compositions	1.800 x 3.500 mm	subject to composition	> 98%	subject to composition	~	~	~	~	✓	✓	✓	✓	optional	optional	✓
Double/Triple Clazing	standard double glazed units or triple glazed units	1.800 x 3.500 mm	subject to composition	> 9 8%	subject to composition	~	✓	✓	✓	~	✓	~	~	optional	optional	✓
Bullet Proof	combinations of DreamGlass® with bullet proof glass and interlayers	1.800 x 3.500 mm	subject to composition	> 98%	subject to composition	✓	~	~	✓	✓	~	~	✓	optional	optional	~

(1) In accordance with the standard UNE-EN ISO 10140-2-2011

(2) Larger sizes of glass can be done upon request

DREAMGLASS® PRODUCTS

- DREAMGLASS® THE ORIGINAL
- DREAMGLASS® SMART BLINDS
- DREAMGLASS® IR SHIELD
- DREAMGLASS® DYNAMIC SHUTTER
- DREAMGLASS® MATRIX
- DREAMGLASS® DSAF





DREAMGLASS® THE ORIGINAL

DreamGlass® The Original ON/OFF switchable smart glass is a laminated glass panel with a polymer dispersed liquid crystal interlayer film (PDLC). It offers privacy at the flick of a switch, by changing its state from opaque to transparent and vice versa instantly, through a small electrical current.

DREAMGLASS® SMART BLINDS

Smart Blinds, allows users to activate different sections or strips of their switchable smart glass at a time. Composed of a PDLC film in a roll format with predetermined lines hardly visible to the eye.







\bigcirc GIVE YOURSELF OPTIONS

With Smart Blinds, users are able to control which predetermined strips of their glass become active or not.

FEATURES

- Custom width and length
- Specific areas of the glass surface can be set to be switched ON/OFF
- Can be controlled through APP via tablets or smart phones



DREAMGLASS® IR SHIELD

DreamGlass® IR Shield is 4 times more efficient in energy savings than normal glass, allowing it to create cooler environments in the summer, and warmer ones in the winter without the high cost of heating and air conditioning.

It also minimizes UV light penetrating your home or building, therefore protecting furnishings and displays from accelerated color fading and premature aging.

The IR Shield Feature can be added to any DreamGlass® product.



BENEFITS

Increase energy efficiency

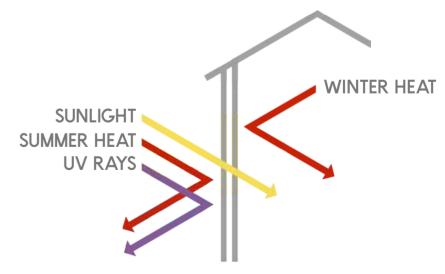
- \cdot Harvest daylight and reduce use of electric lighting
- \cdot Gives you less need for expensive air conditioning
- More than 4 times more efficient in Energy Savings than normal glass

Protection against ultra violet light

- Minimize UV light penetrating your home or building
- Protect furnishings and displays from accelerated color fading and premature ageing

Create a cooler environment

- Enjoy a cooler and more comfortable living environment
- · 3° C to 10° C Cooler in Summer
- \cdot Up to 3° C Warmer in Winter



DREAMGLASS® DYNAMIC SHUTTER

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ABOUT DYNAMIC SHUTTER

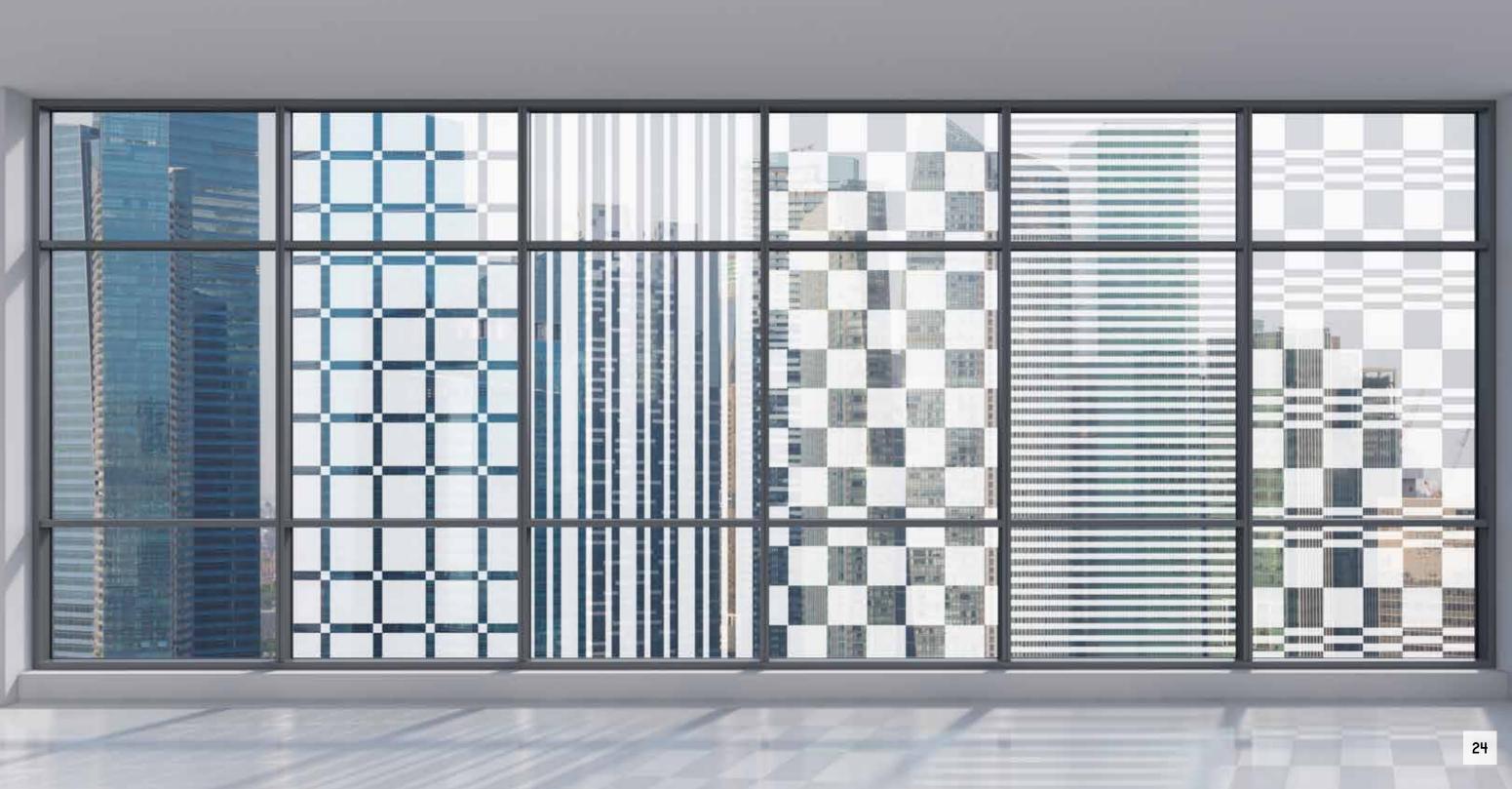
Dynamic Shutter can be controlled vertically or horizontally at the same time in variable widths in large format. It allows users to customize a given matrix design by either choosing a predetermined design or creating a custom one.



- Custom width and length
- Specific areas of glass surface can be set to be switched ON/OFF
- Reprogrammable to offer alternative operating areas
- · Controlled through APP via tablets or smart phones



Upload all the patterns and/or sequences you desire onto the glass via Bluetooth through your tablet or Smart Phone. You can even determine the switching time between each design making the interaction and experience even more dynamic.



DREAMGLASS® MATRIX

ABOUT \mathbb{Q}

Single pixels can be controlled individually. Composed of an array of active squares. Customers can activate any of these squares independently. By selecting a group of pixels, logos and shapes can be portrayed on the surface of the glass.



FEATURES

- · Custom width and length
- \cdot Any area of glass surface can be set to be switched ON/OFF
- \cdot Reprogrammable to offer alternative operating areas
- \cdot Can be controlled through APP via tablets or Smart Phones





DREAMGLASS® DSAF

The need for substituting the entire glass installation is now over. Simply peel off a protective liner from the film and stick it onto a window.



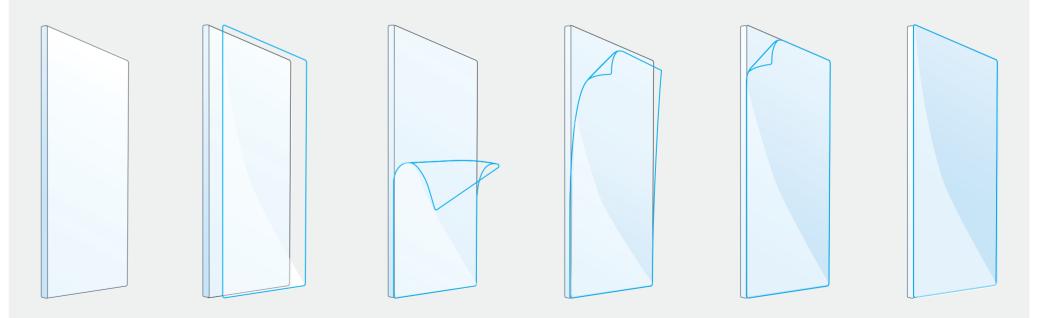
\mathbb{Q} about

DSAF is a switchable smart film, which can be stuck directly onto glass, allowing it's users to have privacy at the touch of a switch. It's main difference with respect to the traditional DreamGlass® product line is that it no longer needs to be laminated in between 2 glass panels. Clients are now able to take advantage of their existing glass installation and convert it to a switchable smart solution.

FEATURES

- · Custom width and length
- \cdot Applicable to existing glass installation
- \cdot Fast lead times

DSAF is seamlessly applied by an expert team of glass specialists.



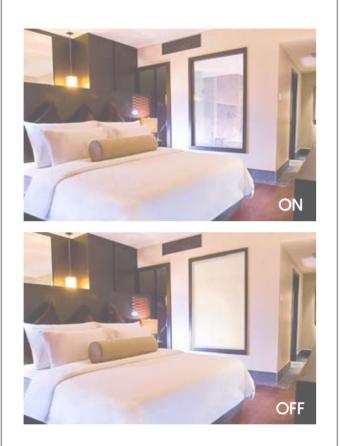
INDUSTRY APPLICATIONS

- HOSPITALITY
- CORPORATE
- HEALTHCARE
- RESIDENTIAL
- RETAIL
- TRANSPORTATION



HOSPITALITY

Creates a space that feels larger, and welcomes natural light into any hotel room. DreamGlass® products can be used for bedroom/bathroom privacy partition screens, external windows, conference/meeting rooms, bar and restaurant projection screens, toilet partitions, balconies, and more.



EN SUITE DIVISIONS

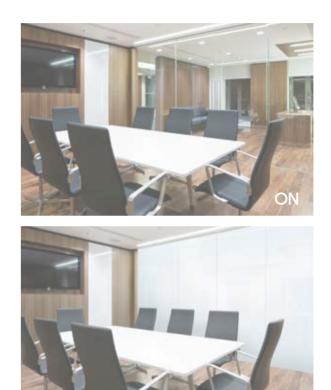


SHOWER PARTITIONS





MINIMIZE DISTRACTIONS



KEEP MEETINGS PRIVATE

CORPORATE

Can create small segments of privacy to conduct important business meetings and presentations without any distractions from observers and co-workers passing by. Gives a feeling of openness when switched on, and uses low operating voltage/consumption. Also available for automated doors.



HEALTHCARE

Can be used in intensive care units, high dependency units, emergency rooms, operation rooms, moveable privacy screen/ doors, neonatal wards, hermetic doors, and fire related doors to improve hygienic conditions, staff productivity, and patients' recovery.









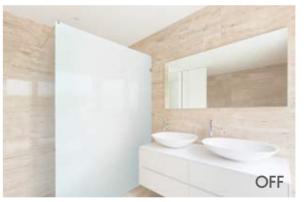
OPERATING ROOMS





WINDOWS





SHOWER PARTITIONS

RESIDENTIAL

Eliminates the need for blinds or curtains. Can be applied in place of regular windows, roof lights, en-suite bathrooms, shower screens, sliding doors, folding doors, kitchen partitions, and more.



Shop windows, banks, marketing campaigns and more can utilize smart glass technology to conceal merchandise, provide privacy, or even reveal new products in style.



STORE FRONT DISPLAY





MARKETING CAMPAIGNS





PUBLIC TRAINS, PLANES, ETC...





PRIVATE VEHICLES

TRANSPORT

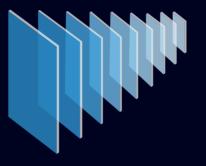
DreamGlass® products can be used for driver privacy screens, business class partitions, security screens, and cockpit partitions. It also grants the riders over 98% UV protection against harmful rays.

DREAM GLASS GROUP

INTERNATIONAL OUTREACH

An exceptional product and commitment to superior service allows us to deliver premier solutions for the world's most complex design challenges. But our promise to you doesn't end there. We offer the fastest turnaround time in any region of the whole world while ensuring on time and on budget international delivery. Our multilingual sales team is always ready to offer assistance.





DREAM GLASS GROUP

est. 2005

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