

LEDinGLASS

Glass comes alive with an interplay of light and colour

LUMINOUS • DYNAMIC • CHROMATIC

LEDinGLASS is a glass that animates itself through the dynamic interplay of light and colour.

LEDinGLASS is a system offering infinite possibilities for indoor and outdoor application, creating dynamic, ambient and interactive architectures. It highlights the design and the creation of communication structures (walls, media facades).



Dynamic and interactive



Atmosphere and enhancer



Communicating facade and wall

TECHNOLOGICAL PRINCIPLE

LEDinGLASS is a complete and sustainable active glass system that dynamically diffuses multicoloured light emitted by LEDs controlled by programmable electronics.

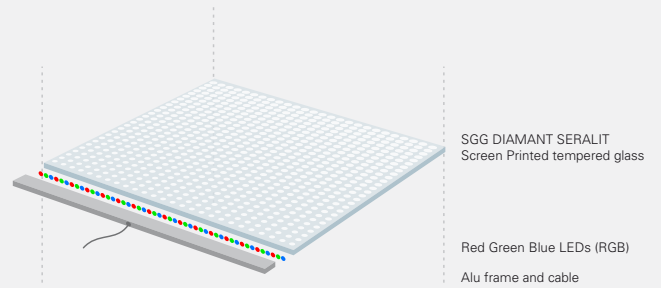
Unlike a traditional light bulb, the entire glass surface lights up!

One or several Red Green Blue LED strips direct a light beam through the edge of an extra clear glass. This light is refracted out of the front and back by white enamelled dots screen-printed on the back side.

Perfectly controlled, the gradual silkscreen print (from 10 to 50%) guarantees a homogeneous light diffusion (NB : this silkscreen print can be personalized).

RGB LEDs are installed on a PCB plate and integrated in an aluminum rail (6 x 6 mm). This LED strip is coupled with the glass edge via a transparent optical silicone. There are up to 160 LEDs per linear meter.

A digital remote control pilots the electronic control box(es) connected to the strips. The individually activated LED strips can generate infinite colour and chromatic effects.



DIAGRAM

SIZE

To guarantee a good light consistency, the width is limited to 600 mm for one side-installed source, and to 1200 mm on two sides.

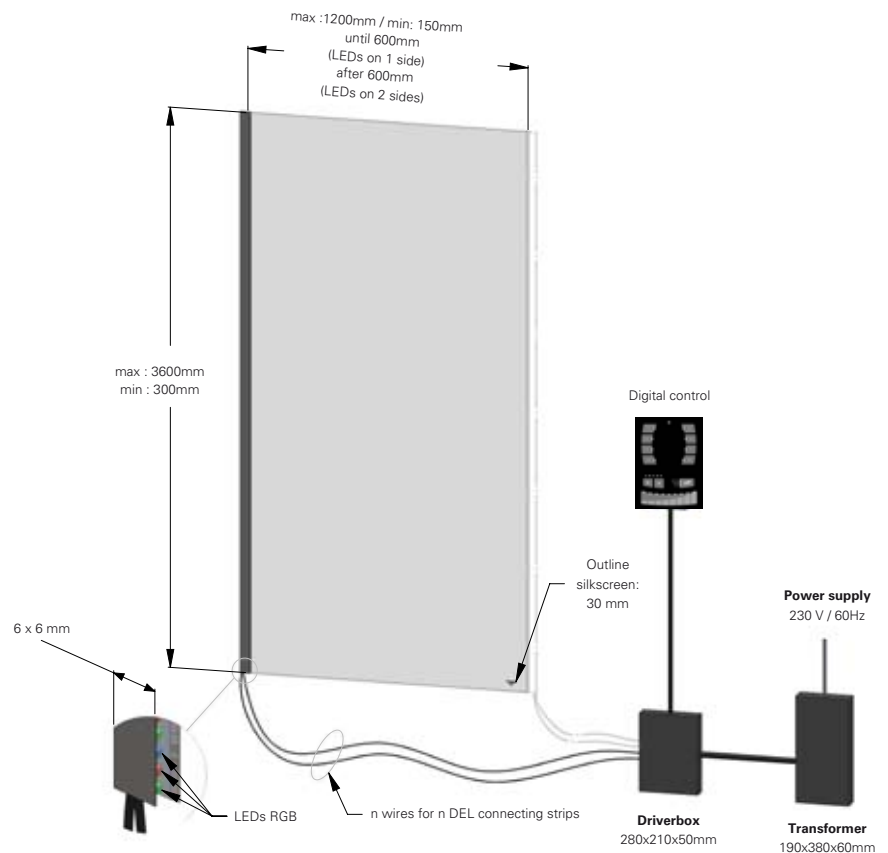
The length is achieved from a combination of the connecting different stripes length, up to 3600 mm.

THICKNESS

Minimum thickness : 6 mm

GLASS CUTTING

The glass is provided cut to size. Further cutting or drilling are not allowed.



CLAUSE OF PARTICULAR TECHNICAL SPECIFICATIONS

Extra clear glass panels with a dynamic lighting system from the edge. This lighting system is made up of RGB LED strips, embedded into the glass panel, and controlled by an electronic control (DMX) with an interface integrating preprogrammed chromatic sequences.

APPLICATIONS

Partitions, vertical outdoor applications, media façade, security glazing, projection screens, windows, glass floors, furniture, stands...

CUSTOMISATION OF THE GLAZING

COMPOSITION

Glass panels are always made of extra clear glass in order to provide the best luminous transmission. Double-glazing LEDinGLASS can be combined with other glass types and other QUANTUM GLASS™ technologies

SHAPES

Almost any shape, as long as the LED strips can be fixed on straight sides.

Standard Shapes



Possible Shapes



SILKSCREEN

The silkscreened white dots pattern can be changed for a specific effect on demand. This customization requires a preliminary study.

SEQUENCES AND CHROMATIC ATMOSPHERES

The programmed sequences – static or dynamic – are standard or customized. A digital interface simplifies the control of the pre-programmed sequences.

INSTALLATION

TYPE OF FRAME / FIXING

- Fixed, opening or sliding frame
- Suspension (specific realization)

MAIN PRECAUTIONS FOR USE AND IMPLEMENTATION

- A 10 to 20 mm glass covering is recommended to hide the LED strips
- The profile with the embedded LEDs must not be subject to any pressure
- The installation has to respect the current electrical regulations and must be performed by a certified electrician

An installer trained and certified by QUANTUM GLASS™ must conduct the installation in order to guarantee the quality and durability of the installation

TECHNICAL DATA

Operating voltage

24 Volts DC (220 Volts AC) for the case, 12 Volts DC for the DMX, from 1.75 to 3.25 Volts DC for the LEDs depending on colour and amperage

Security

Same as for a Securit glass with equal thickness

Standards and certification

CE – certification list on request

GUARANTEE

10 years for glass, 5 years for the LEDs, 2 years for hardware. The guarantee is granted upon respect of the implementation instructions and if a certified QUANTUM GLASS™ installer has conducted the installation.

LEDinGLASS, A UNIQUE SOLUTION FOR LUMINOUS ATMOSPHERES

- A system that integrates turnkey hardware, personalized software and installation
- Assistance in the conceptualisation and programming of possible set ups, simplicity of the remote control design and pre-programming
- Homogeneous lighting or customised lighting pattern on demand
- Relative transparency while in the 'off' position
- Indoor and outdoor functioning
- Incredible stability over time
- Simplified maintenance, components traceability
- Low power consumption
- International certifications
- A long term 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 enhance your creativity and concept of your choice
- Training at your disposal on request
- A GLASS HOUSE – a 400 m² showroom in Paris
- The Saint-Gobain guarantee, a world leader in the glass industry



SELECTED REFERENCES

The Toyota meeting in Paris (2008)
Sky Box by Sjeff van Hoof in the PSV Stadium in Eindhoven (2009)
Showroom Saint-Gobain in Amersfoort in The Netherlands (2009)
Drooghmans Balen in Belgium (2009)