



SGG MIRALITE® REVOLUTION

An innovative mirror with exceptional purity



The ecological footprint of sgg MIRALITE REVOLUTION has been reduced by working on every step of its life cycle.

A product which protects well-being and health, with no toxic substances.

Quality and durability remain unchanged, from the previous sgg MIRALITE EVOLUTION, an outcome of a major Research and Development programme.

Attractive appearance to create light and pleasant living spaces.

Green Credentials

Saint-Gobain Glass is the first glass manufacturer to have subjected its products to a full Life Cycle Assessment (LCA). The LCA is verified by an Environmental Product Declaration (EPD), ensuring the quality and reliability of all calculations.

Documentation is available on request.

Visit **epd.saint-gobain-glass.com** for more information on EPDs.



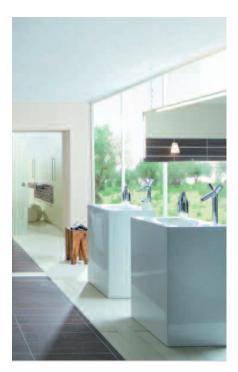
Application

The properties of sgg MIRALITE REVOLUTION help **enhance internal spaces** (increased light levels, welcoming atmospheres).

It is ideal for use **in the home** and in **professional settings** such as offices, businesses, hotels, restaurants and sports halls.

Possibility to bring new dimensions to rooms:

framed or unframed mirror, wall cladding, items of furniture (table, cupboard door, shelf) and signage.



Range

SGG MIRALITE REVOLUTION

Thickness (mm)	2		3	3			4	1			5			6		8
	3210 x 2000	3210 x 2000	3210 x 2250	3210 x 2440	3210 x 2550	3210 x 2000	3210 x 2250	3210 x 2440	3210 x 2550	3210 x 2000	3210 x 2250	3210 x 2550	3210 x 2000	3210 x 2250	3210 x 2550	3210 x 2250
Clear	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Extra Clear			•		•		•		•		•			•	•	•
Bronze			•		•		•		•		•			•	•	•
Grey			•				•				•			•		•
Green						•	•								•	

Manufacturing sizes:

PLF: 3210 x 6000 mm

DLF: 3210 x 2000/2250/2440/2550mm

SSS: Please contact us for further details.

Tolerance on thicknesses:

2, 3, 4, 5, and 6mm +/- 0.2mm

8mm +/- 0.3mm

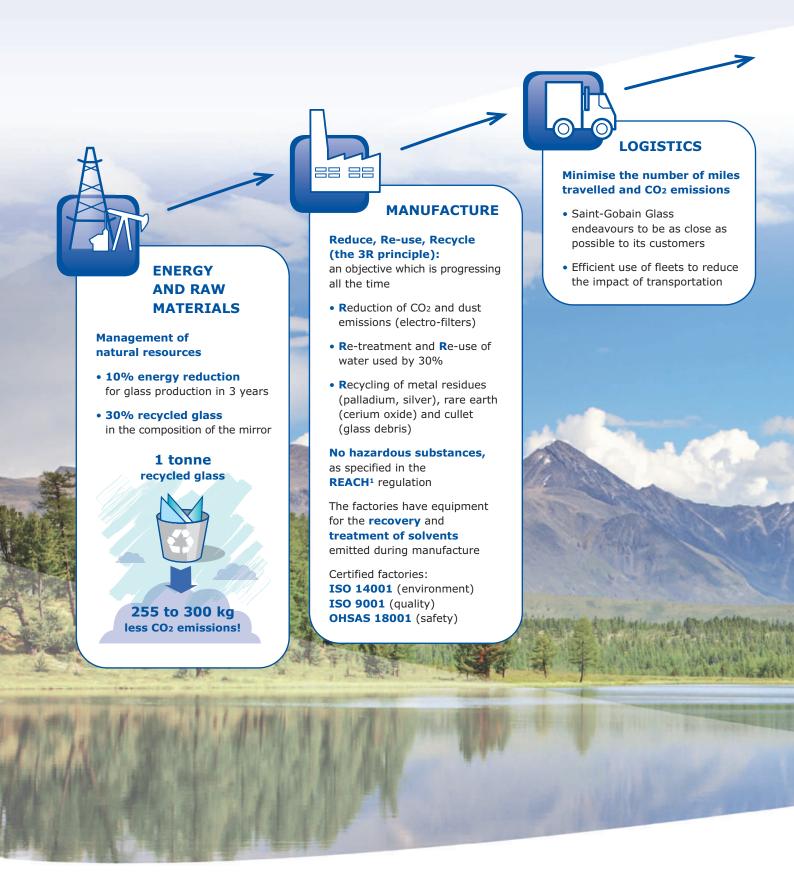
Please note:

Only certain sizes and colours are available from stock. Please contact us for more information or special requests.





A lasting reflection, with a mirror that is safer for health and the environment.

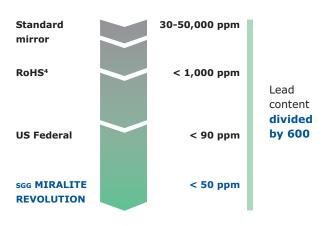




ENVIRONMENT AND HEALTH

No lead* added A miniscule concentration of natural lead (less than 50 ppm²)

Well below the levels specified by all current regulations



Lead content in dry paint following ISO 11 885, taken by TüV³

Maintain the air quality

sgg MIRALITE REVOLUTION is a design material which is unique due to its very low emissions of Volatile
Organic Compounds (VOC)** and formaldehyde**

	Measurements after 28 days				
	Total VOC (as Toluene equivalent)	Formaldehyde (with DNPH method)			
SGG MIRALITE REVOLUTION	≤6 µg/m³	≤5 μg/m³			
AFSSET ⁵ /AgBB ⁶	<1,000 µg/m³	10 μg/m³			

Measurements following ISO 16000 taken by EUROFINS

Produced **without copper** and contains **no phthalate** (substances present in some plasticisers)

DURABILITY AND QUALITY

Exceptional quality and longevity

sgg MIRALITE REVOLUTION offers an environmentally-friendly alternative, while retaining the technical performance of Saint-Gobain Glass mirrors:

- · Excellent durability characteristics
- Far exceeds the requirements of standard EN 1036⁷

Type of Test	Standard EN 1036	SGG MIRALITE REVOLUTION				
Neutral Salt Spray (NSS) ISO 9227 after 480H						
Maximum corrosion of the edges (μm)	≤ 1,000	50				
Cupro-Acetic Salt	Cupro-Acetic Salt Spray (CASS) ISO 9227 after 120H					
Maximum corrosion of the edges (μm)	≤ 1,500	250				
Water Condensation - Appendix A EN1036 after 480H						
Maximum corrosion of the edges (µm)	≤ 200	0				

Exceptional quality and longevity

 sgg MIRALITE REVOLUTION carries the CE mark and its performance is constantly monitored

- (*) Lead is a powerful anti-corrosive agent traditionally used in paint applied to the back of mirrors. It is potentially dangerous to health and the environment.
- (**) Volatile organic compounds (VOC) and formaldehyde are organic chemical substances that can be easily spread at room temperature. With a high concentration indoors, this can cause health problems (eye irritation, breathing problems, etc.)
- ¹ REACH (Registration, Evaluation and Authorisation of Chemicals): European regulation concerning the safe use of chemical substances.
- ² ppm (parts per million): Unit used to measure low concentrations of materials. One ppm corresponds to a ratio of 10-6, i.e. one gram per tonne.
- ³ TuV (Technischer Überwachungs-Verein): inspection and standardisation German agency certifying the safety and quality of products.
- ⁴ RoHS: European Directive 2002/95/CE on Restriction of the use of certain Hazardous
- Substances in electrical and electronic equipment.
 ⁵ AFSSET: French Agency for Environmental and
- Occupational Health Safety (France).

 6 AgBB: Committee for health-related evaluation of building products (Germany).
- ⁷ EN 1036: European standard concerning the quality of interior mirrors (glass in building).







Numerous edgeworking options

sgg MIRALITE REVOLUTION is suitable for cutting into all types of geometric or non-geometric shapes. It can be drilled and edgeworked (bevel, chamfer, etc.).

sgg MIRALITE REVOLUTION can be customised with a logo, a sandblasted design, or engraved on the face opposite the coating.

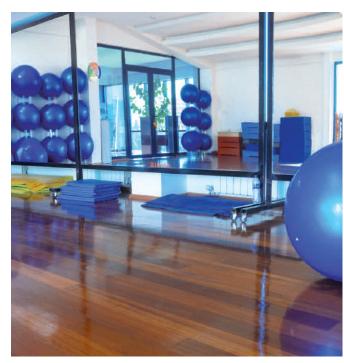
Optical performance

SGG MIRALITE REVOLUTION

Thickness	% LRe minimum
3mm	93
4mm	92
5mm	91
6mm	89

Measurement of reflectance is undertaken in accordance with EN 410, with the angle of incidence of light within 8° of normal.





Manufacturing principles

Paint 2: Protection against abrasion and scratches: miniscule emissions of Volatile Organic Compounds

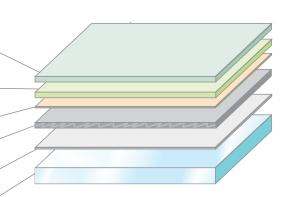
Paint 1: Protection against corrosion:
no added lead (<50ppm)</pre>

Post-treatment: Adhesion/durability

Silver: Reflection

Pre-coat: Chemical activation

Glass



Installation

Fixing

· Channel glazing in a frame

Ensure that the frame is clean and dry. Position the mirror on blocks at least 3 mm thick, to raise the mirror and avoid any contact with condensation water that may collect in the frame.

Fixing pads

Provide suitable fixings. Avoid contact between the glass and metal by using plastic spacers and washers. Attach the mirror without applying excessive pressure.

Adhesive fixing

Secure the sgg MIRALITE REVOLUTION using mirror adhesive or alcohol-based or oxime-based neutral silicone only*, together with double-sided adhesive pads. Follow the instructions of the adhesive manufacturer.

* If there is any doubt whether the products used are neutral, it is essential to carry out a test on the paint.

Exterior installation

Please contact Saint-Gobain Glass.

Safety

sgg MIRALITE REVOLUTION must be installed in accordance with current national regulations. It is often necessary to use a mirror with a safety film.

In all cases

Irrespective of how the mirror is attached, ensure the following:

- Install the mirror on a supporting wall that is stable, clean and dry, free from harsh substances and absolutely flat.
- Provide sufficient space between the supporting wall and the mirror to ensure good ventilation (5mm for a mirror less than 1m tall, 10mm for a larger mirror).
- Leave a space of 1 to 2mm between mirrors when they are installed side by side.
- Avoid placing the mirror near a source of heat.

Maintenance

Do not use harsh products (acid solution, highly alkaline or very abrasive).

Ensure that no residue from cleaning products is left around the edges.







Saint-Gobain Glass UK Ltd Weeland Road, Eggborough East Riding of Yorkshire, DN14 0FD, UK

www.saint-gobain-glass.com



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