

MIRALITE® EASYSAFE

Anti-Shatter Safety Mirror





MIRALITE® EASYSAFE is an innovation in safety mirrors, delivering enhanced safety performance and finishing without the need for safety film application during processing.

Added during the manufacturing process, an antishatter resin backing retains 98% of glass splinters in case of breakage. At the same time it allows easy cutting and grinding, thus reducing time, waste and labour costs compared to traditional safety back-filmed mirrors.

MIRALITE® EASYSAFE offers a higher safety level for end-users, and its performance has been tested and certified against the most demanding standards.

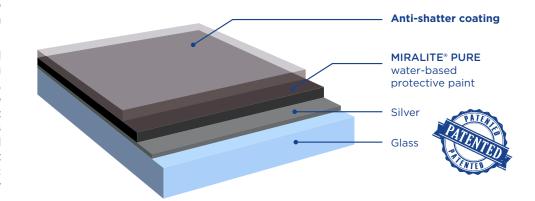
To align with Saint-Gobain's commitment to health and sustainability, MIRALITE® EASYSAFE uses water-based and lead-free raw materials in the manufacturing process, which preserve interior air quality and the environment (reduced VOC emissions).

Finally, much of the usual waste that is produced with traditional safety backfilmed mirrors is avoided, for better sustainability.

A REVOLUTION IN SAFETY MIRRORS

MIRALITE® EASYSAFE has been designed to overcome the challenges faced when producing safety mirrors.

The anti-shatter resin is applied at Saint-Gobain's factory during a single-step industrial process, removing the need for the application of a safety film at processing stage. This results in a mirror that is safe and simple to work with, straight off the manufacturing process: a huge step forward in safety mirror innovation.



MIRALITE® EASYSAFE

Conforms to EN 12600 (3B3 in 4 mm, 2B2 in 6mm)

Anti-shatter resin retains 98% of fragments

Reaction to fire class: A2 according to EN 13501-1

No additional safety film needed

Easy to cut, grind, drill and process

Superior look and finish

Easy to fix, compatible with a large number of products used to fix standard mirrors

Certified durability according to EN 1036-1. Anti shatter / safety level tested after ageing

Environmentally friendly at all processing stages (less waste)

A+ classification: ultra-low VOC emissions according to EN ISO 16000

Conventional safety back-filmed mirrors

Variable performances, depending on the film

Variable performances, depending on the film

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Safety film needs to be applied during processing

Difficult to cut, grind, drill and process due to the plastic film

Low visual quality at the back (bubbles, film overlapping) and

on the edges (frayed film)

Special fixing conditions with a reduced number of gluing products

products

No guarantee of safety performance durability

Waste of film and mirror at processing No VOC test available



MIRALITE® EASYSAFE is an ideal solution for a wide variety of indoor applications

As a new benchmark in safety mirrors, MIRALITE® EASYSAFE is an ideal solution for any interior design application – homes, offices, retail spaces or public buildings. It is particularly recommended for environments where safety is a primary concern, such as sports facilities, retail outlets or entertainment venues. Its durability and shatter resistance make it a great choice for wall covering, furniture manufacturing and decorative mirror applications.



MIRALITE® EASYSAFE range

Dimensions 2 250 x 3 210 2 550 x 3 210 (in mm) 4 500 x 3 210 5 100 x 3 210 6 000 x 3 210

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As a ready-to-process safety mirror, MIRALITE® EASYSAFE delivers time and cost savings to processors, as well as a reduction in plastics and waste products. Easy to cut, drill and handle, it introduces multiple processor-friendly benefits.



Easy and safe to process

- No need to cut and add a plastic film at the processing stage
- Using the right cutting wheel, grinding and drilling become very easy, almost as easy as a simple mirror
- Avoiding complicated handling and cutting, processors work in a safer environment



Easy to install

- Easy to install with recommended glues and tapes
- Can be safely cut to any size and shape on the premises



Time and cost savings

- Simplified processing reduces time and labour costs
- Removing need for backing film reduces waste
- Available in Jumbo size (PLF)



More sustainable

- Reduces plastic usage and waste at processing stage
- Produced with lead-free and waterbased paints'
- Fully recyclable

For more information: please consult the documents "Processing guideline" and "Usage guideline" available at www.saint-gobain-glass.com

CLEAR BENEFITS FOR BUILDING OCCUPANTS

The benefits of MIRALITE® EASYSAFE extend to installers and end-users. While delivering outstanding safety, it also embodies Saint-Gobain's commitment to health and the environment.

Extended safety for building occupants

With anti-shatter functionality* (retains 98% of glass splinters in case of breakage) and safety performances conforming to EN 12600, MIRALITE® EASYSAFE ensures safety for building occupants regardless of where it is installed (wall cladding, furniture, wardrobes and cupboard doors etc.). MIRALITE® EASYSAFE cannot be installed as interior partition.

Anti-shatter resin also provides extra safety for installers.





Anti-shatter test - TÜV Rheinland

Optimal durability

The durability performance of MIRALITE® EASYSAFE exceeds by far the EN 1036-1 European standard for mirrors, which means highest quality on the market.

	EN 1036 STANDARD	MIRALITE® EASYSAFE
Cupro-Acetic Salt Spray (CASS), ISO 9227 after 120 hours. Maximum corrosion of edges (millimetres)	≤ 1.5	PASS
Water condensation (EN 1036 - Appendix A) after 480 hours. Maximum corrosion of edges (millimetres)	< 0.2	PASS

Neutral salt spray test (ISO 9227) is not relevant as MIRALITE® EASYSAFE is a copper-free mirror

SUPERIOR FINISH

Easy cutting, grinding, drilling and no frayed edges when the mirror is processed ensure MIRALITE® EASYSAFE has a superior finish for end customers. Visual aspect remains perfect even in non-framed application.



FIRE RESISTANCE

Reaction to fire-tested as A2 according to 13501-1, MIRALITE® EASYSAFE is far better than traditional plastic back-filmed mirror, allowing for its use in a large number of applications (public buildings etc.).

INTERIOR AIR QUALITY

Meeting A+ classifications according to EN ISO 16000 emissions test, MIRALITE® EASYSAFE contributes to improve indoor air quality.

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^{*}Tested before and after ageing simulation

OUTSTANDING PERFORMANCE

MIRALITE® EASYSAFE is designed to conform to existing European building and furniture standards, giving customers peace of mind that local requirements are met.

			MIRALITE* EASYSAI	E
Standard Reference	Description	Notified body	Result	Reference
EN 1036 Mirror quality standard	Silvered mirror quality standard, compulsory for CE marking	INISMA, Belgium	PASS	4 mm
EN 12600 Safety test	Resistance to impact (Pendulum test)	TUV, Netherlands	PASS 3B3 PASS 2B2	4 mm 6 mm
Anti-shatter test	In case of breakage, retention of >98% of glass shatters	TUV, Netherlands	PASS	4 mm
EN 14072 Glass in furniture	Test method for vertical glass	FCBA	PASS	
EN 13501-1 Reaction to fire	Classification using data from reaction to fire tests	WFRGENT, Belgium	PASS A2	4 mm
EN ISO 16000 VOC emissions	Total VOC emissions after 28 days Total formaldehydes after 28 days	Eurofins	PASS A+ (France) VOC emissions: <10µg/m3 Formaldehydes: <10µg/m3	4 mm





Making the world a better home

Saint-Gobain designs, manufactures and distributes solutions for the construction, mobility, healthcare and other industrial application markets. Developed through a continuous innovation addressing the challenges of sustainable construction, resource efficiency and the fight against climate change.

This strategy of responsible growth is guided by the Saint-Gobain purpose, "MAKING THE WORLD A BETTER HOME", which responds to the shared ambition of all the women and men in the Group to act every day to make the world a more





Installation

With MIRALITE® EASYSAFE installation is safer. A wide range of tapes and glues can be used to install it.

See below for the use of mirror glues and tapes recommended by Saint-Gobain for MIRALITE® EASYSAFE.

Maintenance

MIRALITE® EASYSAFE can be cleaned the same way as any standard mirror. Remove any residue from cleaning products, particularly from the edges. Avoid the use of harsh products such as acid solutions, highly alkaline or very abrasive materials.

Recommended glues and tapes*

Silicone glues	
Brand	Reference
Dow Corning	Dow Corning 817
Otto-Chemie	Otto-Chemie Ottocol S16
Kawo	Kawo SK86
DL Chemicals	DL Chemicals Paracol Miroseal MS

Double-sided adhesive tapes

Brand	Reference
3M	3M 4032
3M	3M 4026
3M	3M 4910F VHB
Bohle	Bohle Xtracryl
Lohmann	Lohmann DuploCOLL 918
TESA	TESA Powerbond

Saint-Gobain Glass does not guarantee the chemistry and properties of adhesives or glues. In all cases, the installation must conform to the adhesive or glue manufacturer guidelines.

Saint-Gobain Glass recommends to carry out preliminary tests to validate the suitability of the adhesive or glue.

*based on adhesion performance, using internal testing procédure.

GENERAL ADVICE

However the mirror is installed, it is advisable to follow these guidelines:

- Install the mirror on a supporting wall that is absolutely flat and stable, clean and dry and free from aggressive chemicals.
- Provide sufficient space between the supporting wall and the mirror to ensure good ventilation.
- Leave a space between mirrors when they are installed side-by-side.
- Avoid placing the mirror near a source of heat.

For more information on processing and installing MIRALITE® EASYSAFE, visit www.saint-gobain-glass.com





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