

Guardian UltraMirror™ Beautifully Reflective



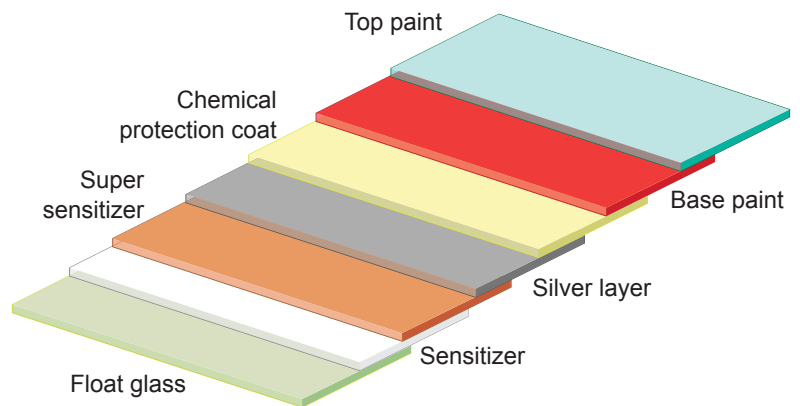
10 YEAR

INDUSTRY LEADING WARRANTY
Guardian offers a 10-year warranty
against deterioration or clouding
on UltraMirror



Guardian UltraMirror™ Transforms Internal Spaces with Radiance and Perspective

UltraMirror provides unparalleled protection against corrosion, chemicals, moisture and abrasion while adding beauty and elegance to any setting.



Experience beautiful, enduring, elegant reflections

When purchasing a Guardian UltraMirror, you are buying years of experience from the leading mirror manufacturer, coupled with the advanced state-of-the-art technology available in the field.

Light & Space....Guardian UltraMirror brings new dimensions into play. Small and confined spaces become bigger. Dark and dull rooms become filled with light.

Thickness and Sizes

Available in 2mm to 8mm in various sizes up to 3660mm x 2440mm. UltraMirror is available on clear, grey, bronze and low iron float glass.

Appearance

UltraMirror is highly reflective and offers a true image reflection with virtually no distortion. It is durable and long lasting.

Quality

Guardian in Thailand produces mirrors that comply with the requirements of different international standards such as ASTM, JIS, EN, AUS and with customer specifications.

Heat resistant

UltraMirror can be used in environments up to 60°C.

Moisture resistant

UltraMirror can be used in environments where moisture is present but cannot be immersed in water.



Stocking

As with typical float glass, Guardian UltraMirror™ must be stored in a dry environment. The edges of the product must be protected and in contact with chemical products must be avoided. As ordinary mirror, it must be stored vertically.

Processing

UltraMirror can be cut on the glass side and used in different fabrication processes such as hole drilling, grinding, etc.

Installation

Installation must be performed following installation norm EN1036. A neutral silicon (free of solvent) or a double sided adhesive can be used (alcoxy based silicones preferred). The way to apply silicone is to glue it in vertical caterpillar formations with gaps between them.

Cleaning

UltraMirror can be easily washed using a clean cloth with standard glass cleaners. Do not use any acid or alkali cleaners, the protective coating and the silver layer could be damaged.

For guidelines for receiving, storing and transporting Guardian UltraMirror, please contact Guardian.

Guardian UltraMirror™ Application

- Wardrobe doors
- Furniture
- Vehicle mirrors
- Decorative surfaces
- Wall mirrors
- Display cases
- Bathroom mirrors

Guardian UltraMirror™

Test		Standard	Criteria		UltraMirror
Cross Cut Test		DIN EN ISO 2409	0 (best)- 5 (worst)		< 2
Paint Thickness - Base & Top Coats		DIN EN ISO 2808	42-60um		46-60um
Pendulum Hardness		DIN EN ISO 1522	Persoz in sec (OSC)		211 sec
Xylene Rubs		PA-ENS-26	>=100 double rub strokes		> 200
Gloss		DIN EN ISO 2813	Angle 85° (GE)		50
Scratch resistance		PA-ENS-15	OK (best) - 6 (worst)		OK
Metal thickness		PA-ENS-37	Silver > 700 mg.m2		> 750 mg/m2
CASS	Edge Corrosion	ISO 9227	120 hrs	<= 1.5 mm	< 1.5 mm
	Spots			<= 3 spots (0=0.3 mm)	< 2 spots
	Mirror Surface Attack			OK (clear) - C (clouds)	OK
	Paint Blisters			# of blisters	0
Humidity	Edge Corrosion	DIN EN ISO 6270-2	480 hrs @ 40°C	<= 4 mm	OK
	Spots			<= 3 spots (0=0.3 mm)	0
	Mirror Surface Attack			OK (clear) - C (clouds)	C1
	Paint Blisters			# of blisters	< 1

Performance Data

Category	Criteria	Complies
Behaviour	Milky appearance	NO
	Resistance to ambient humidity	GOOD
	Resistance to stagnant water	NO
	Resistance to steam	NO
Resistance to adhesives	Alcoxy	Yes
	Acetic acid	NO
Cleaning products	Resistance to ammonia	>7days
Shaping	Edge grinding	YES
	Brilliant cut	YES
	Grinding	YES
	Drilling	YES
	Insert and notches	YES
Safety	Safety film	YES
	PVB Lamination	YES*
	Tempering	NO

* Please contact manufacturer for more details on the PVB lamination.

* The performance values shown are nominal and subject to variations due to manufacturing tolerances.

*See what's possible*TM

Whether you want to solve a practical problem or challenge architectural conventions, Guardian Glass is ready to help you see what's possible. As a leader in the glass industry, we are ready to embrace a future where glass will play an even greater part of what the world builds.

The products in this publication are sold subject to Guardian's standard terms and conditions of sale and any applicable written warranties. It is the responsibility of the purchaser to confirm that the products are suitable for their intended application in compliance with the applicable laws and regulations. Please contact your local Guardian representative to obtain any applicable handling and fabrication guides and for the most current product information.

Contact Us

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