



Asahi India Glass Ltd.



Beauty is Real



Mirror



Would you prefer to see every stunning detail with precision and clarity? Then say goodbye to distorted reflections from ordinary mirrors, and choose AIS Mirror. AIS Mirror is long-lasting and provides perfectly clear reflections. They are manufactured without using copper or lead, making our mirrors the most environment-friendly option in the market.

Features

AIS Mirror is crafted to perfection and designed to meet all your needs. Manufactured using superior quality materials and state-of-the-art technology — we deliver long-lasting and reliable mirrors.

- **High Optical Clarity Mirrors**

With AIS Mirror, you will never have to deal with distorted images again. Our mirrors are manufactured to deliver high optical clarity, enabling you to enjoy the clearest reflections at all times.

- **Copper-Free Coating**

The copper coating on mirrors can oxidise over time, due to reagents present in the paint, and cause a brownish stain to appear. With AIS Mirror you can enjoy the benefits of copper-free coatings and see your mirror looking as good as new, always.

- **Corrosion-Resistant Mirrors**

AIS Mirror is manufactured to provide unparalleled resistance to corrosion and ageing. Lasting three times longer than conventional mirrors, our mirrors also have better resistance to harsh cleaning products.

- **Environment-Friendly**

Protecting the environment is key at AIS, and we manufacture our high-quality mirrors by adhering to this principle. Our coatings are made from lead-free protective paints thus helping in preserving the environment.

- **Compatible with a Wide Range of Adhesives**

- **Turquoise Green Back Paint for Easy Recognition**

- **Manufactured Using Belgian Technology from Glaverbel**

Applications

AIS Mirror can be used in a variety of applications:

- In showrooms, for a larger and more spacious appearance
- Sliding doors for cupboards, wardrobes, etc.
- Contemporary furniture
- Display cases
- and much more

AIS Mirror is a source of inspiration for interior decorators, furniture professionals, architects, and designers. The possibilities are endless and are open to imagination.

Technical Specifications

- AIS Mirror meets the requirements of the following standards: IS 3438, EN 1036, ASTM C 1503
- Copper-free protection layer
- Lead-free mirrors
- Reflectivity – 86% min. for thickness between 2 to 6 mm and 85% min. for 8 mm – applicable for Clear mirrors only
- Available in – Clear, Bronze, Grey
- Processing options – Hole Drilling, Cutting, Edge Grinding, Polishing, Safety Film Mirrors
- Thicknesses available – 3 mm, 3.5 mm, 4 mm, 5 mm, 6 mm, & 8 mm
- Size range – 1,830 mm x 1,220 mm (min.) and 3,660 mm x 2,440 mm (max.)
- Sustainability – Lead-, Copper-, and Arsenic-free mirrors

Reflectivity

AIS Clear Mirror	
Thickness (mm)	Min. Reflectivity (%)
3	88.50
3.5	88.00
4	87.00
5	87.00
6	87.00
8	86.00
AIS Bronze Mirror	
5	31.00
6	25.00
AIS Grey Mirror	
3	18.00
5	9.00

Test Performance

	Test Method	Standard	AIS Value
Performance	CASS Test 1	ISO 9227 Maximum edge corrosion (µm)- 1,500	Less than 300 µm
	Condensation Water Test	DIN EN ISO 6270	Qualified
	Scratch Resistance (Cross Cut Test)	Ideal = 0 Pass <= 2 Unacceptable = 5	<= 2
	Pendulum Hardness	Hardness of the coating according to number of oscillations (min. 125) DIN EN ISO 1522	>180
	Speed CASS	ISO 9227	Qualified
	Reflectance Test	IS 3438, III Rev. (83% min.)	Qualified
	Silver Test	BIS Annex A: Clause 4.2 (Not less than 0.70 gm/m ²)	Qualified
	Abrasion Test (Rub Test)	Min. 100	200
	Adhesives & Sealants	Recommendation: Neutral Silicone-based adhesives and sealants, free of Biocides and Fungicides. (Please refer to our Installation Guidelines.)	



Installation and Handling Guide

Storage

- The mirror must be unpacked as soon as possible. After unpacking, the mirror should be placed in such a way that the reflective side is in front and the painted side is at the back
- The mirror must always be stored vertically, on a soft surface such as wooden boards with spacers, in a dry and well-ventilated area, away from heat and reactive materials such as chemicals, acids, etc. Steam and acid must not come in contact with the mirror
- The mirrors must never be stored in the open air or under direct sunlight for a long time
- The recommended storage time is up to 6 months (subject to storage conditions)
- The mirrors should be properly stacked and removed
- The mirrors should be placed away from heat-emitting equipment
- Interleaving buttons, from the mirrors, should not be removed at the time of storage
- The mirrors should not be placed on a moisture-absorbing surface and should be kept at constant temperature and humidity free zones

Cutting Stage

- Clean hand gloves to be used for holding the mirror
- Sheets to be lifted one by one
- Clean the cups of the vacuum master with spirit or a clean cloth before use. Cutting tables should be covered with a clean cloth and should be free from cullet particles, as they cause scratches
- Cut the mirror on a straight surface
- Clean the cutting table regularly to avoid scratches on the mirror
- Small quantities of natural cutting oil to be used for cutting the mirror
- Always cut glass with the painted surface facing downwards

Edge Processing Stage

- Adjust the machine to an appropriate speed. Inappropriate speed will affect the condition of the mirror's back paint
- Use a neutral coolant. An acidic or alkaline coolant may corrode the silver from the glass edge
- Clean the coolant water circuit and replace the water regularly as it may turn acidic or alkaline after excessive usage
- The grinding wheel must always be in good condition and replaced before it wears out. A damaged grinding wheel may weaken the back paint of the mirror
- Clean the glass with water and dry it immediately after edge processing. Especially around the glass edge, moisture penetration may corrode the silver

Installation and Bonding

General Guidelines

- An air gap of minimum 4 mm should be maintained between the mirror's back paint and the supporting medium (plywood or wall). If the mirror is being fixed on plywood, confirm that the surface of the plywood is free from any chemicals and lubricants
- The mirror should be mounted on a perfectly flat, clean, and dry surface, waterproofed wherever necessary. Surfaces which are not flat should be evened out or non-metal spacers should be used to ensure that air can circulate vertically between the back of the mirror and the surface, to compensate for the uneven surfaces. This is especially important to avoid distortion of the reflected image
- The above is especially recommended when mirrors are mounted in very moist and humid areas such as bathrooms, etc.
- To minimise the risk of breakage, cracks, and splinters — when screw mounting the glass, synthetic protective collars must be used. When framing the mirror or using metal clips, non-metal spacers should be used between the mirror and the frame or the clips

Mechanical Fitting

- A. If using a frame to fit your mirror, you should do the following:
 - Use blocks and spacers to prevent contact with the frame
 - Avoid contact between the mirror and hard and / or brittle substances such as metals and porcelain
 - This type of fitting is recommended for ceilings
- B. Usage of screws can limit the risk of glass breakage, cracking, or splintering
- C. If the mirror is to be fixed using studs, ensure that no metallic surface is in touch with the mirror, which may lead to silver oxidation. To avoid this, plastic spacers and sleeves should be used

Adhesive Tape Fitting

- Never use acid-based glues
- Alcoxy-based and oxime-based silicones are advisable for use. Oxime silicones and double-sided adhesive tapes are perfectly safe and suitable for use

The amount of adhesive tape required will depend upon the type of tape being used and the weight of the mirror. The table below shows the weight per m² for the various thicknesses of glass.

You are recommended to use 100 mm × 100 mm strips per kilogram of mirror.

Thickness of mirror	Weight of mirror / m ²
3 mm	7.5 kg
4 mm	10 kg
5 mm	12.5 kg
6 mm	15 kg
8 mm	20 kg

Application of Adhesive / Bonding

- Always follow the installation guidelines from the adhesive suppliers
- Ensure that the adhesive used is compatible with the back paint of the mirror and the mounting surface
- Apply the adhesive (glue / tape) in vertical stripes, and ensure that air can circulate between the back of the glass and the mounting surface
- Apply regular pressure to the glass and the mounting surface

Cleaning

- The mirror must be cleaned using clean warm water with a soft cloth. The mirror should be wiped dry after cleaning
- Ammonia-based detergents or other aggressive cleaning agents must never be used
- Be sure to dry all joints and edges thoroughly so that no cleaning agent comes in contact with the edges and the back paint of the glass (moisture and chemicals may attack the back paint and that would result in oxidation)
- Cleaning spray should not be used on the edges of the mirror
- A wet cloth is better than spray cleaners. After cleaning, confirm the dryness of the mirror

Additional Protection Measures

(Especially for installation at sensitive locations, e.g.: swimming pools, seaside areas, bathrooms, etc.)

- Apply a safety film at the back of the glass
- Use a neutral cure sealant to seal up all gaps that may lead to water vapour penetrating into the edge and the back of the mirror, in future
- Use framing to cover the mirror edges for long-term applications
- Make sure that the glass edges are well-fabricated and protected
- Make sure that the sealant used is neutral and compatible

Company Profile

AIS is India's leading integrated glass company. Being a leader, AIS delivers top-of-the-line products and solutions through three Strategic Business Units (SBUs) – Automotive Glass, Architectural Glass, and Consumer Glass.

We use our glass product portfolio – which is the biggest in the country – to meet functional needs in an aesthetic and contemporary manner. With products that provide next-generation solutions, AIS brings new ideas to life – enabling an age of 'green buildings', and the dawn of a truly sustainable future.

Taking the versatility of glass to the next level, AIS today has unmatched glass processing capabilities, including the processing of special glass products, that enable us to meet your every need, and fulfil every requirement.

And help you realise the building of your dreams, in glass!



Asahi India Glass Ltd.

203-208, 'Tribhuwan Complex', Ishwar Nagar
Mathura Road, New Delhi – 110 065

E-mail: seemore@aisglass.com

Tel.: (011) 4945 4900 | (022) 6656 8700 |

(033) 4068 1112 / 3 / 4 | (044) 2854 2491 / 2 / 3

Toll-Free No.: 1800 103 4805

Follow us:



www.aisglass.com

To experience glass like never before,
download the AIS Apps now!

