

MirrorEffect AntiScratch ASLAN SE 75

Highly reflective, scratch-resistant mirror effect film in silver and gold

This self-adhesive polyester film is characterized by a high-quality mirror like effect. Applied on even substrates, the surface of the film reflects mirror images brilliantly, and makes rooms appear optically larger and brighter. The high scratch-resistance of the film ensures that the mirror effect remains brilliant in the long term. Since the mirror effect can be seen on both sides, the film particularly shows to advantage, when it is applied behind glass.

Especially designed for the decoration of smooth surfaces, the self-adhesive mirror effect film is ideally suited for applications in exhibition stand construction, shop fitting, visual merchandising, interior design, etc.

For further information or questions regarding special applications please contact our technical advisory service: **+49 2204.708-80**

Construction

Face film:	polyester with metallized coating	
Thickness:	~ 75 µm	
Adhesive:	pressure sensitive polyacrylate	square quantity: ~ 30 g/m ²
Release liner:	siliconised polyester film	square weight: ~ 75 µm

Characteristics

Adhesive strength (ASTM D903):	immediately: after 1 week:	~ 6,0 N/25mm ~ 14 N/25mm
Dimensional stability:	applied onto aluminium after 48 hours stored at 70 °C (158 °F) (25 x 25 cm)	no shrinkage measurable
Temperature:	application temperature:	min. 15 °C (59 °F) (dry application) min. 20° C (68 °F) (wet application)
	service temperature range:	-30 °C (-22 °F) up to +80 °C (176 °F)
Combustibility:	Classified to Euroclass flame retardant standard DIN EN 13501-1	
Durability:	3-5 years outdoors, with vertical exposure, in central European standard climatic conditions.	

Processing

Digital cutting:	The self-adhesive film is ideally suited for cutting. The vertical height of capital letters should not be smaller than 10 mm. When cutting the self-adhesive film, the pen pressure should be set a higher and a cutter blade for thicker materials should be chosen.
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Application:

In general the film can be applied dry. A wet application reduce static and helps positioning. Being a PET base film water can't diffuse through the film. Therefore all water used has to be squeegeed out during application.

MirrorEffect AntiScratch ASLAN SE 75 is exclusively suited for smooth, even, non-elastic and non-curved surfaces. The film must not be applied on outgassing surfaces like non-tempered acrylic glass, since bubbles might occur, particularly under short-term exposure to heat.

To bring out the mirror effect as ideally as possible, the substrate should be absolutely smooth and homogenous as well as free of dust, grease and lint. To minimize an electrostatic charge during the application, the humidity of the working environment should be increased and machines, e. g. laminators, should be grounded (please also see our separate tips on reducing electrostatics).

The liner should be removed in one piece and as evenly as possible.

Slightly moistening the back (liner) reduces an electrostatic charging when removing the liner from the self-adhesive film. When applying the product dry, a laminator or a flatbed applicator should be used.

Due to the high scratch-resistance of the film's surface, the film can be applied to large areas without the need to over-laminate it with an additional protective film.

For the application of letterings etc. we recommend the application tape LowTackTape ASLAN TP 110.

Edges of the film can be protected against humidity and environmental conditions by sealing them with a suitable edge sealing compound.

To exclude that tunneling might occur, the self-adhesive films should only be cut face down. In case, the cut film is rolled up for storage or transportation, this should be done in the same direction of winding it was delivered in, in a generous radius (> 5 cm) and ideally onto a core.

Film surface:

Tiny surface defects like spots and matt stripes as well as slight optical distortions are due to technical reasons and comply with the standard quality.

Cleaning:

The film can be cleaned with a microfiber cloth or commercially available cleaning agents. Cleaning aids or agents used should be non-abrasive and free of aggressive solvents.

Storage:

Before application the films can be stored up to 2 years from date of production. The film must be stored at room temperature (15-25 °C / 59-77 °F) and a relative humidity of the air of 50-60%. To avoid pressure points appearing on the roll surface, we recommend the rolls be stored either vertical standing or for this purpose designed 'hanging' racks.

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All technical data and advice is based on our experience and measured testing that we believe to be reliable. It remains the customer's responsibility to test the suitability of our products for the intended purpose.

The quality of our products is regularly examined, upgraded and developed. We take the right, without prior notice, to adjust, upgrade and improve the chemical structures or physical characteristics of our products in accordance with our latest knowledge.

Tips for wet application

Generally, polyester films should be applied dry. In certain cases however, e.g. applications onto large areas, a wet application is possible.

Materials: Surface cleaner (e.g. ASLAN AKR), transfer liquid (e.g. ASLAN TL 10), felt squeegee (e.g. ASLAN KRF 1) and a clean, absorbent cloth

1. Before the application, the substrate must be cleaned from dirt, dust and grease. We recommend using our surface cleaner ASLAN AKR.



The substrate should be cleaned immediately prior to the application to ensure that the surface is perfectly free of any pollution.

2. Lay the film onto a clean surface with the liner facing upwards and remove the liner in one piece and as evenly as possible. Slightly moistening the back (liner) reduces an electrostatic charging when removing the liner from the self-adhesive film.



Due to electrostatic charging, dust particles might end up on the adhesive. For more information on the topic electrostatics, please see our FAQ on the second page of this document.

3. Spray the substrate with a sufficient amount of transfer liquid (e.g. ASLAN TL 10).
4. Position the film on the wet surface. Thanks to the gliding characteristics of the transfer liquid, the film can be repositioned several times.
5. When the film has been optimally positioned, push out the transfer liquid with a felt squeegee (e.g. ASLAN KRF 1) as quickly as possible, starting from the center of the film to the edges and using firm pressure.



The more thoroughly the transfer liquid is being pushed out, the quicker the self-adhesive film will reach its final adhesion and a possible whitening of the adhesive can be prevented.

6. Remove dripping transfer liquid from the edges of the film by wiping them with an absorbent cloth, and once again press the film firmly on the substrate using the felt squeegee. Should the adhesive nevertheless turn white, this effect will disappear after a few days depending on the climatic conditions.



Repeating the procedure of firmly pressing the film on the substrate after a couple of hours will enhance the quality of the application.

General instructions:

When applying the film wet, the buildup of the adhesive strength will be delayed. Depending upon the environmental conditions, it might take several days until the final adhesion is reached. During this time period, a mechanical stress on the film should be avoided.

To prevent bubbles from occurring, an exposure of the application to large temperature fluctuations and direct sunlight should be avoided.

For the wet application of cut letters etc., we recommend using the paper tape ASLAN TP 110. After a short drying time, the paper tape should be removed in an 180° angle.

ELECTROSTATIC CHARGES DURING THE APPLICATION OF SELF-ADHESIVE FILMS

What is electrostatic charge?

Electrostatic charge is an unavoidable side effect that appears during the handling of isolated materials such as paper, textiles or plastics. It is created by the energy that is required to move the items during handling. The higher the speed of this movement (friction) the stronger the electrostatic charge.

Electrostatic charges can also be an issue during the application of self-adhesive films. When removing the liner from the self-adhesive film, it gets electrostatically charged. The degree of the charge depends on various factors: Humidity as well as the grounding of materials, persons and used machinery plus the speed of removing the liner play an important role. An electrostatically charged self-adhesive film attracts dust and lint and is more difficult to apply.

How can I reduce and control electrostatic charge during the application of self-adhesive films?

Avoid dust

The ideal environment for the application of self-adhesive films is free of any dust. Clothes should be free of lint. The working area should not be cleaned immediately prior to the application, in order to avoid dust being raised.

Humidity

Dry air increases the danger of an electrostatic charge. To avoid this, use a bowl or a bucket filled with water. The evaporating water ties the dust particles and reduces the electrostatic charge.

Alternatively, prior to the application, use a spray bottle to humidify the air, which will enhance the effect of dust particles being tied.

Grounding

Additionally, the person applying the self-adhesive films can himself be electrostatically charged, making the application more difficult. To discharge, it is helpful to touch a grounded metallic object.

Tips for reducing electrostatic charge when applying self-adhesive films with a laminating machine

When using a laminator at high speed, an above-average electrostatic charge might occur. The following measures can be taken to minimize this effect:

- Grounding the machine
- Using special „anti-static“ tapes which discharge the electrostatic charge
- Increasing the humidity, since dry ambient air cannot dissipate sufficient electrostatic charge