

NW/439-HS



Description

Self-adhesive double sided silver metallized polyester film, provided with anti-scratch surface, designed to achieve the mirror effect* or for decorations where it is necessary emphasize the silver mirror effect on both sides of the graphic. Cleaning procedures must be carried out with the use of soft cloths, APA Easy Cleaner or non-aggressive liquid detergents. Suitable for wet or dry application.

Colour: silver.

Technical information

Technical data

Film:	Polyester.
Film Thickness (without adhesive):	150 +/- 3% µm (Op. Istr. n° 4).
Liner:	polyester siliconised.
Release:	55 +/- 25 cN/20mm.
Adhesive:	ultra-permanent acrylic high cohesion.
Grammage:	25 +/- 5 g/m2.
Adhesion after 20 min.:	min. 400 Nm. Peel 180° at 20°C on steel (Op. Istr. n° 7).
Adhesion after 72 h. :	min. 700 Nm. Peel 180° at 20°C on steel (Op. Istr. n° 7).
Method of application:	dry or wet.
Application temperature:	suggested between 10° and 28°C.
Shrinkage:	< 0,2 mm after 48 h. at 70°C on steel (Op. Istr. n° 8).
Temperature resistance:	from -40°C to +80°C adhered to steel no variation (Op. Istr. n° 15).

Average expected lifetime

The data below refer to the film as it is, applied on a standard flat surface and not taking into consideration the final application. Therefore, they are indicative values intended only as a source of information, and do not constitute a guarantee.

Life estimates are determined on the basis of the results of UV and Xenon accelerated aging lab tests which simulate some conditions when unprocessed, non shaped, non printed film is submitted/**exposed vertically** (+/- 10% from the vertical) and in weather conditions typical of **Central Europe, correctly applied** on a flat surface.

Factors which drastically reduce the film’s expected lifetime:

- horizontal/oblique exposure (angle greater than +/-10 ° from the vertical).
- exposure to long periods of sunlight as in southern climatic regions, areas characterised by high temperatures, high altitudes or high pollution.
- exposure facing towards the sun.
- imperfect application.
- excessive film deformation.
- improper cleaning and maintenance (use of aggressive detergents, scratches, abrasions and contaminations that may occur during installation or the lifetime of the product).
- surfaces subject to high temperatures.

The actual lifetime of a product depends on several factors, including the quality and the preparation of the surface, exposure (environment, weather, exposure angle), film maintenance, pollution. **Therefore, only the operator can determine the suitability of the product and its expected lifetime.**

In order to extend as much as possible the film’s lifespan, we recommend following the instructions for Application, Cleaning and Maintenance set out below in this data sheet.

Data from lab testing (UV – XENON TEST):

2 years.

Storage

2 years, film must be kept warehoused at room temperature (20°C / 50% R.H.) suspended horizontally or placed in a vertically upright position in polythene bag.
During the storage, gloss vinyl could become matt. This phenomenon, due to the pressure of the rolling up of the material, could worsen when close to the cardboard core and, is more frequent when the storage temperature is above 25°C and/or when the vinyl is particularly glossy and soft.
It is possible to return the gloss of the vinyl by heating the surface with an industrial heat gun.

Note

*** If applied on porous surfaces, the mirror effect may be distorted.**

The values and the data given are based on tests we believe to be reliable and are typical values intended only as a source of information, and do not constitute a guarantee. **Purchasers must independently determine, before use, the suitability of the material for their own specific use and under their own operating conditions** with the aim to determine if the APA product is suited for the specific goal and is furthermore suited for the use and the pre-selected application-method.

General information

**Warranty / exclusions
of liability**

APA materials are guaranteed to be free from all manufacturing defects.
In the event of ascertained defectiveness of the product, APA shall replace the materials used upon manufacturing the decorations.
APA shall not be liable for any additional costs, such as the work necessary for reprinting the design, the losses related to production time, the costs for removing or re-applying the graphics. APA, in addition, does not assume responsibility for the replacement of materials not produced by APA.

A.P.A. SpA cannot be held responsibility for any damages other than the substitution of the goods.

APA guarantees to maintain the interval of the variability of the colours of its products in the best possible way, using instrumental and visual checks.

To avoid colour variation, all the parts of the vinyl applied have to belong to the same production batch. It is also the case for decorations that are required for a long duration of time, updating or improvements of the decoration. Therefore, it is recommended to ask beforehand for the required material, belonging to the same production batch.

The feature of a metal colour depends of the angle of vision of the products. For a uniform colour all parts must be applied maintaining the same direction of orientation.

No salesman, representative, agent or distributor has authority to supply data different from those reported in this Technical Data Sheet. To make improvements all products may be modified without prior notice.

For a safe use of the self-adhesive materials by A.P.A. it is recommended to read the dedicated safety information.

For a safe use of the cleaners mentioned in this data sheet it is recommended to read the dedicated safety sheets.

Application

The film is conceived for a highly professional use.

The staff that apply the vinyl must possess the requirements and the training necessary.

Before applying the film it is important to acknowledge that during the removal process it is possible glue traces can remain on the surface.

Before making the decoration always make a compatibility test between the self-adhesive film and the surface to be decorated.

Make a general cleaning of the surface with liquid cleanser and ensure that all oils, waxes or other residuals, including those made by the cleaning, are removed, failure to do so could compromise the film adherence and cause a detachment over time. With metal surfaces or painted sheets a general cleaning with APA EASY CLEANER is recommended. Before using APA EASY CLEANER always test the compatibility of the product on a corner of the surface which has to be cleaned.

It is recommended to apply the film in a room with a temperature between 10 and 28°C.

The film is applicable both in dry and water.

This vinyl is not compatible with:

- porous surfaces in general either made of plastic or of other material
- surfaces with small superficial tensions, silicone, rubber, PP, PE and all apolar surfaces
- painted surfaces with poor adhesion of the paint to the surface underneath
- dusty surfaces
- dirty surfaces such as walls and non-smooth surfaces
- flexible surfaces such as banners, truck curtains or textiles
- surfaces that give out gas (out-gassing)
- gasoline vapors or spillages

Cleaning the vinyl

Use water with soft cloths and non-aggressive detergents.

Do not use rough sponges and cloths, abrasive creams or very strong solvents. Cleaning with unsuitable products and tools could cause a premature deterioration of the vinyl. To remove ground in dirt, we advise the use of the quick cleaner APA CLEANER FILM and water. **Do not use wax or polishing products** which, in addition to being difficult to remove, may alter or accelerate the deterioration of the film.

So as not to alter the appearance of the film, we recommend cleaning the surface gently and evenly.

If water under pressure is used for cleaning, never aim the jet at the edges of the film because the force of the water could lift it or detach it. However the nozzle must be perpendicular and never oblique to the surface to be cleaned and at least 1 meter away. The film with a gloss finish, if treated badly, could go matt and stripe beyond remedy.

Maintenance

The surface of the vinyl is delicate and therefore should be treated with care. Avoid rubbing against objects that could cause scratches or ripping of the vinyl beyond repair. An extended exposition to solar rays and to atmospheric agents could provoke a premature aging of the film, especially for the parts exposed horizontally or to the south. In this regard, gloss films can lose shine and give a matt appearance.

In conclusion, we recommend protecting the decorated surface from the sun and the elements to the greatest extent possible.

If a film deterioration should arise, for example, fading, change of colour or become brittle, then an immediate removal is recommended.

For a good maintenance of the vinyl regular cleaning is recommended.

Removal

Due to the high tack film adhesiveness, **it is important to acknowledge that during the removal process, it is possible that varnish or primer can be peeled off together with the film. Furthermore, possible glue traces can remain on the surface.**

During the removal process it is important to apply heat gun to the self-adhesive vinyl. The operations of the vinyl removal are conditioned by many factors, such as the time passed from the application, exposure of the decoration either outdoors or indoors, type of surface, temperature of the room and of the surface, etc... **Therefore it is difficult to quantify and determine the speed and execution time of the removal by A.P.A. SpA.**

The company APA cannot be held responsible of any damage caused during the removal phase and/or damages of the surface upon which the film has been applied.