

Avery[®] MPI 3409

Perforated Window Film 60/40

Features

- Perforated film with white print face, black on adhesive side for one way vision graphics
- Very good printability on Eco solvent, Solvent and Latex*
- 1.6 mm holes with 40% open area
- Good outdoor durability
- Good Dimensional stability
- Good adhesion level on glass substrates

Conversion*

- | | |
|---|---|
| <input type="checkbox"/> Flatbed cutters | <input type="checkbox"/> Cold over laminating |
| <input type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Electrostatic printing |
| <input type="checkbox"/> Die cutting | <input checked="" type="checkbox"/> Latex* |
| <input type="checkbox"/> Thermal transfer | <input checked="" type="checkbox"/> Eco Solvent |
| <input type="checkbox"/> Screen printing | <input checked="" type="checkbox"/> Solvent inkjet |
| <input type="checkbox"/> Offset printing | |

*Always test with your combination of printer and inks prior to commercial use.

Application

If exposed to rain, the use of an optically clear, compatible Overlaminates is recommended to prevent the holes from filling with water and/or dirt to ensure clear vision. Avery DOL 4100 is only recommended for 100% flat windows. Avery DOL 4000 can be used for either flat or slightly curved windows.

Uses

Avery MPI 3409 is a digital printable white/black perforated calendared vinyl film for use in a wide range of promotional window graphics applications where one way vision, removability and value for money is required. Used on vehicles for continuous, uninterrupted vehicle graphics and window areas and large size graphics on building windows that provide sufficient interior daylight and exterior viewing.

Description



Film: 130 micron white/black perforated monomeric calendared vinyl



Adhesive: Removable acrylic



Liner: 140gsm PEK Replacement Liner



Outdoor Life:** Up to 1 year (unprinted)

Application surface: Flat, simple curves

Common Applications

- Window graphics
- Vehicle & bus window graphics
- Glass Building Advertising
- Retail & commercial signage
- Bus shelters
- POP displays
- Other transparent surfaces

Physical characteristics

General

Caliper, face film	ISO 534	130 micron (± 10%)
Open area		40% (approx.)
Perforation diameter		1.6mm
Dimensional stability	DIN 30646	0.5 mm max
Adhesion, Initial	FINAT FTM-1, glass	4 N/25mm
Adhesion, Ultimate	FINAT FTM-1, glass	6 N/25mm
Shelf life	Stored at 22° C/50-55 % RH	1 year
Durability **	Vertical exposure	up to 1 year unprinted

Temperature Range

Minimum Application temperature	+10°C
Temperature range	-20°C to +65°C

Chemical

If not overlaminated, Avery MPI 3409 is resistant to water, humidity, solvents, most mild acids, alkalies and salt. Due to the open structure of the film, exposure should be limited to an absolute minimum. Overlaminated Avery Perforated Window Film has the same resistance to chemical substances as the overlaminated film.

Avery Perforated Window Film is also resistant to most commonly used cleaning detergents, provided that through rinsing is following the recommended exposure to the cleaning detergents.

Note:

Materials have to be properly dried and cured before further processing, like laminating, varnishing, trimming, contour cutting or application. The residual solvents can otherwise change the products' specific features and properties.

Test Methods

Dimensional stability:

Is measured on a 150 x 150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70°C, after which the shrinkage is measured.

Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180° angle from a stainless steel or float glass panel, 24 hours after the specimen has been applied under standardized conditions. Initial adhesion is measured 20 minutes after application of the specimen.

Flammability:

A specimen applied to aluminium is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

Important

Information on physical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of any material for their specific use.

All technical data is subject to change without prior notice.

Warranty

Avery® materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give guarantee, warranty, or make any representation contrary to the foregoing.

All Avery® materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

**Durability

Durability is based on exposure conditions in the Asia Pacific region. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing north in the southern hemisphere or south in the northern hemisphere; in areas of long high temperature exposure such as northern Australia; in industrially polluted areas or high altitudes, exterior performance will be decreased.

*Compatible with most printer and ink combinations. Test prior to commercial use.

***Information unavailable at time of printing.

Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

Corrosion Resistance:

A specimen applied to aluminium is exposed to saline mist (5% salt) at 35°C. After exposure, the film is removed and the panel is examined for traces of corrosion.