

Avery Dennison[®] MPI 2728 Perforated 65/35 Perforated Window Film

Features

- Perforated film with white print face, black on adhesive side for one way vision graphics
- 65/35 hole pattern provides better image quality while still allowing one-way visibility
- Very good printability on Eco solvent, Solvent and UV curable inkjet printers
- 1.5 mm holes with 35% open area
- Very good outdoor durability
- Good Dimensional stability
- Good adhesion level on glass substrates
- Removable with heat and/or chemicals

Description



Film: 178 micron low gloss white/black perforated polymeric calendered vinyl



Adhesive: Permanent acrylic
Removability: 6 months



Liner: PET film laminated to perforated StaFlat Liner



Outdoor Life:** Up to 3 years (unprinted)

Application surface: Flat, simple curves

Conversion*

- | | |
|---|---|
| <input type="checkbox"/> Flat bed cutters | <input type="checkbox"/> Cold overlaminating |
| <input type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Electrostatic printing |
| <input type="checkbox"/> Die cutting | <input checked="" type="checkbox"/> Latex Inkjet |
| <input type="checkbox"/> Thermal transfer | <input checked="" type="checkbox"/> Eco solvent inkjet |
| <input type="checkbox"/> Screen printing | <input checked="" type="checkbox"/> Solvent inkjet |
| <input type="checkbox"/> Offset printing | <input checked="" type="checkbox"/> UV curable inkjet |

*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 overlaminate is recommended to prevent the holes from filling with water and/or dirt to ensure clear vision. Avery Dennison DOL 4100 is only recommended for 100% flat windows. Avery Dennison DOL 4000 can be used for either flat or slightly curved windows.

Uses

Avery Dennison MPI 2728 Perforated Window Film 65/35 is a perforated flexible calendered film for use on exterior-mount one-way visual panels. Graphics printed on this material are visible from the front and “invisible” from the back when mounted on windows. MPI 2728’s 65/35 perforation pattern provides an open area of 35% allowing for the best possible image quality while still providing a one-way graphic panel. This film is intended for stationary windows.

Common Applications

- Window graphics
- Commercial vehicle window graphics⁺
- Building wraps
- Retail & commercial signage
- Bus shelters
- POP displays
- Other transparent surfaces



Graphics
Solutions

Avery Dennison Graphics Solutions Asia Pacific

www.graphicsap.averydennison.com

Physical characteristics

General

Caliper, face film	ISO 534	178 micron
Caliper, face film & adhesive	ISO 534	203 micron
Open area		35% (approx.)
Perforation diameter		1.5mm
Visible Light Transmittance	ASTM E 972, E 1084 ASHRAE 74-1988	29%
Ultraviolet Light Transmittance	ASTM E 972, E 1084 ASHRAE 74-1988	89%
Dimensional stability	DIN 30646	0.5 mm max
Adhesion, initial, perforated	FINAT FTM-1, glass	700 N/m
Flammability		Self Extinguishing
Removability [^]	Smooth OEM painted surfaces	up to 6 months
Shelf life	Stored at 22°C/50-55% RH	2 years
Durability**	Vertical exposure	up to 3 years unprinted

[^] Not when applied to: Nitrocellulose paint, ABS, Polystyrene, screen printing inks (fresh), certain types of PVC, Polycarbonate or PMMA.

Temperature Range

Minimum Application temperature	+10°C
Temperature range	-45°C to +82°C

Chemical

If not overlaminated, Avery Dennison MPI 2728 is resistant to water, humidity, solvents, most mild acids, alkalis and salt. Due to the open structure of the film, exposure should be limited to an absolute minimum. Overlaminated Avery Dennison Perforated Window Film has the same resistance to chemical substances as the overlaminated film.

Avery Dennison Perforated Window Film is also resistant to most commonly used cleaning detergents, provided that thorough 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 standardised 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 Dennison® 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 Dennison® 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 normal middle European and central North American regions. 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. Please refer to Avery Dennison Instructional Bulletin 1.3 for definitions and reductions based on the 'Zone System'.

[^]Compatible with most printer and ink combinations. Test with your combination of printer and inks prior to commercial use.

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.

