# Avery Dennison® Etched Glass Film

# Cast Vinyl

## **Features**

- · Brilliant visual etched effect
- · Excellent conversion properties on computerised cutters
- Easy cutting and weeding
- · Outstanding durability and outdoor life
- Excellent dimensional stability
- Excellent UV, temperature, humidity and salt-spray resistance
- Excellent adhesion

## Conversion

Flat bed cutters	Cold overlaminating
Friction fed cutters	Estat printing
Die cutting	Water based inkjet
Thermal transfer	Solvent inkjet
Screen printing	UV Cured inkjet

# **Recommendations for Application**

- Use a high tack application tape.
- To facilitate positioning Avery Dennison Etched Glass Film can be wet applied using 0.5% of neutral detergent added to water.
- Water should be removed with a squeegee and firm hand pressure.
- Before removing application tape, allow the adhesive to build to a sufficient adhesion level (15-45 minutes).

#### Uses

Avery Dennison Etched Glass Films are designed to create the image of etched decorations on glass without the use of etching chemicals and is also suitable for functional and manifestation graphics. Avery Dennison Etched Glass can be applied to flat surfaces and produces best results when applied to transparent substrates such as glass, acrylic sheeting, and polycarbonate.

# **Description**



Film: 60 micron cast vinyl with etched effect



Adhesive: Permanent acrylic



**Backing**: One side coated bleached Kraft paper, 140gsm



#### Outdoor life:

up to 7 years on the outside of external windows

#### Indoor life:

up to 7 years on the inside of external windows up to 9 years on internal partitions and windows

# **Common Applications**

- Window graphics
- Architectural signage

## Physical characteristics

## General

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Calliper, face film	ISO 534	60 micron
Calliper, face film & adhesive	ISO 534	90 micron
Dimensional stability	DIN 30646	0.2 mm max
Tensile strength	DIN 53455	1.0 kN/m
Elongation	DIN 53455	25%
Gloss	ISO 2813, 20°	15%
Adhesion, initial	FINAT FTM-1, stainless steel	540 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	720 N/m
	Glass	640 N/m
	PMMA	640 N/m
	Polycarbonate	640 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Accelerated ageing	SAE J 1960 1500 hours exposure	No negative impact on film performance
Expected Durability **	Vertical exposure	
	External applications Applied on the outside of the window	up to 7 years
	Applied on the inside of the window exposed to sunlight	up to 7 years
	Internal applications Applied to internal partitions and windows with no exposure to direct sunlight	up to 9 years

#### Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 50°C to + 100°C

## Chemical

Humidity resistance	200 hours exposure	No effect				
Chemical solvent resistance						
Test Fluid	Immersion Time	Effect				
Water	24 hours	No effect				
Detergent (1% solution)	24 hours	No effect				
Detergent solution 65°C	8 hours	No effect				
Isopropyl alcohol/water (20/80)	10 minutes	No effect				

#### 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.

#### Warrantv

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.

#### \*\*Expected Durability

The expected durability of Avery Dennison films are defined as the expected performance life of the Avery Dennison graphic film(s) within Zone 1 of the Avery Dennison zone system, in outdoor vertical exposure conditions.

The actual performance life will depend on a variety of factors, including selection and preparation of substrate, angle and direction of exposure, application methods, environmental conditions and cleaning/maintenance of the films. In case of films used in areas of high temperatures or humidity, high altitudes and industrially polluted areas the performance will be further reduced.

# **Expected Durability and Warranted Period Definitions**

Expected durability is the expected period of time defined in the product data sheet, the product should, but is not warranted to, perform satisfactorily when applied in vertical exposure conditions as defined in Instructional Bulletin 1.30. The warranted period as defined in ICS Performance Guarantee Bulletin 2.3, is the maximum period of time Avery Dennison will warrant the finished products performance in accordance with ICS Performance Guarantee Terms and Conditions 1.0, provided that the film is properly stored, converted and installed in accordance with Avery Dennison guidelines.

## **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.

#### 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.

