

Avery Dennison® Crystal Glass Film

Calendered Vinyl

Features

- Attractive frosted effect
- Homogenous matt face finish
- Excellent conversion properties on computerised cutters
- Easy cutting and weeding
- Good durability and outdoor life
- Excellent indoor durability
- Excellent adhesion

Conversion

- | | |
|--|--|
| <input checked="" type="checkbox"/> Flat bed cutters | <input type="checkbox"/> Cold overlaminating |
| <input checked="" type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Estat printing |
| <input checked="" type="checkbox"/> Die cutting | <input type="checkbox"/> Water based inkjet |
| <input type="checkbox"/> Thermal transfer | <input type="checkbox"/> Solvent inkjet |
| <input type="checkbox"/> Screen printing | <input type="checkbox"/> UV Cured inkjet |

Application

- To facilitate positioning Avery Dennison Crystal 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 sufficient adhesion level (15-45 minutes).

Uses

Avery Dennison Crystal Glass Film is designed to create the image of crystal decorations on glass and is also suitable for functional and manifestation graphics. It can be applied to flat surfaces and produces best results when applied to transparent substrates such as glass, acrylic sheeting, and polycarbonate.

Description



Film: 80 micron polymeric calendered vinyl



Adhesive: Permanent acrylic



Backing: One side coated bleached Kraft paper, 140gsm



Outdoor life:
Up to 5 years on the outside of external windows
Indoor life:
Up to 5 years on the inside of external windows
Up to 7 years on internal partitions and windows

Common Applications

- Window graphics
- Architectural signage

Physical characteristics

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	110 micron
Dimensional stability	DIN 30646	0.2 mm max
Tensile strength	DIN 53455	1.7 kN/m
Elongation	DIN 53455	100%
Gloss	ISO 2813, 20°	14%
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 window applications Applied on the outside of the window	up to 5 years
		up to 5 years
	Applied on the inside of the window exposed to sunlight	
	Internal applications Applied to internal partitions and windows with no exposure to direct sunlight	up to 7 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

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.

**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 indoor 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.

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.