

# Avery Dennison<sup>®</sup> 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<br>1500 hours exposure  | No negative impact on film performance |
| Durability **                  | Vertical exposure  |  |
|                                | <b>External window applications</b><br>Applied on the outside of the window                                    | up to 5 years                          |
|                                | Applied on the inside of the window exposed to sunlight  | up to 5 years                          |
|                                | <b>Internal applications</b><br>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     |                       |               |
| <b>Test Fluid</b>               | <b>Immersion Time</b> | <b>Effect</b> |
| 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.

### \*\*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'.

\*\*\*Information unavailable at time of printing.