

# Avery Dennison® FC 440 Permanent

## Gloss Transparent Promotional Vinyl Permanent

### Features

- Gloss transparent film for a wide variety of short term screen printed graphics
- Very good printability and handling on screen presses
- Gloss finish for superior appearance and vibrant colours
- Good clarity after application
- Good dimensional stability after application
- Good outdoor durability and performance
- Excellent conversion and application characteristics
- Versatile permanent adhesive suitable for most substrates and removable with heat and/or chemicals

### Description



**Film:** 90 micron gloss transparent monomeric calendered vinyl



**Adhesive:** Clear permanent acrylic



**Backing:** One side coated kraft paper, 125g/m<sup>2</sup>



**Outdoor life\*\*:** Up to 2

### Conversion^

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

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

### Common Applications

- Short term outdoor advertising
- Indoor advertising
- Billboard advertising
- Vehicle advertising
- Vehicle part labelling
- Label and stickers
- Point of sale promotions
- Window advertising and decorations

### Uses

Avery Dennison® FC 440 Permanent is a gloss transparent promotional vinyl film designed for use in a wide range of short term promotional screen printed graphics applications, where excellent adhesion, good outdoor durability and value for money is required.

## Physical characteristics

## General

Caliper, facefilm	ISO 534	90 micron
Caliper, facefilm & Adhesive	ISO 534	115 micron
Dimensional stability	DIN 30646	0.5 mm max
Adhesion on Stainless steel, initial	FINAT FTM-1, stainless steel	>320 N/m
Adhesion on Stainless steel, ultimate	FINAT FTM-1, stainless steel	>400 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22°C/50-55 % RH	2 years
Durability **	Vertical exposure	up to 2 year (unprinted)

## Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 40°C to + 100°C

## Chemical

Humidity resistance	200 hours exposure	No effect
Saltspray resistance	120 hours exposure	No effect
Water resistance	48 hours immersion time	No effect
Solvent Resistance	Applied to aluminium: Applied to aluminium and immersed in: oils Greases, aliphatic solvents, motor oils, heptane, JP-4 fuel	No effect 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'.

^Compatible with most printer and ink combinations. Test prior to 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.