

MPI 4230 Ultra Frontlit

440 gsm Matte White Banner

Revision 3

Introduction

Avery Dennison® MPI 4230 Ultra Smooth Frontlit is a versatile matte white banner film suitable for a wide range of indoor and outdoor banner applications where durability, matte finish and excellent printability are required.

Common Applications

- Billboards
- Outdoor banners
- Indoor banners
- Display and exhibition banners



Face Film
440 gsm matte white
PVC banner



Scrim
1000 x 1000 denier
Construction
9 x 9 per square inch



Outdoor Life**
Up to 3 year unprinted

Features

- 440gsm laminated PVC construction
- Smooth, low glare matte finish
- Excellent whiteness for fresh, vibrant colours
- Available in all popular print widths
- Up to 5m wide seamless construction
- Excellent outdoor durability
- Resistant to UV, rain, fungi and frost
- Compatible with most popular solvent inkjet printers
- Rapid drying after printing
- Excellent tear resistance
- Reduced fraying when trimming or eyeleting

Conversion

- Flatbed cutters
- Friction fed cutters
- Die cutting
- Thermal transfer
- Screen printing
- Offset printing
- Cold overlaminate
- Electrostatic printing
- Eco solvent inkjet
- Solvent inkjet
- UV curable inkjet
- Latex inkjet

Applications

- Refer to [Instructional Bulletin 4.07](#) for Tips for Creating Digitally Printed Banners

General

Roll width, length	1372mm	50m
Caliper		440 gsm
Tensile strength - length	ISO 13934-1:1999	139.0 kg / 50mm
Tensile strength - width	ISO 13934-1:1999	116.2 kg / 50mm
Elongation - length	ISO 13934-1:1999	22.2%
Elongation - width	ISO 13934-1:1999	29.3%
Tear strength - length	ISO 13937-2:2000	11.4 kg force
Tear strength - width	ISO 13937-2:2000	15.5 kg force
Adhesion strength	ISO 2411, C.R.E	13.7 kg / 50mm
Shelf life	Stored at 22° C/50% RH	1 year
Expected Durability**	Vertical exposure	Up to 3 years

Thermal

Temperature range	-20°C to +80°C
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Chemical

Fungi resistance	ASTM G21-1996	0
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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.

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.

**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.

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.

^^ Removability

Not removable when applied to nitrocellulose paints, fresh screen print inks, ABS, polystyrene & certain types of PVC.

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 the appropriate ICS Performance Guarantee Bulletin, 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.

Testing 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.



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