Permanent StaFlat™

Revision: 6 Dated: 12/16/19

Uses:

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Avery Dennison MPI 2120 Matte film is a flexible calendered vinyl film. MPI 2120 offers exceptional value for applications requiring premium calendered film durability combined with a permanent or removable adhesive performance.

Face: 3.4 mil (86 microns) matte calendered



Adhesive: Clear Acrylic



Liner: 90# StaFlat™

Application Surfaces: Flat, simple curves (restricted to non-spill areas)

Features:

- 100% opacity, completely covers whatever is underneath
- Matte finish
- Outstanding durability and outdoor performance
- Great image clarity and color pop
- Dimensionally stable liner for easy converting
- ICC profiles available on Avery Dennison's website (<u>https://avery-us.color-base.com</u>)
- ASTM E84 Class 1 or A rating

Conversion:

- Latex Inkjet
- Solvent based inkjet
- UV inkjet*
- Mild/Eco Solvent inkjet

* For flat surfaces only, except for qualified flexible UV inks.

Common Applications:

- Fleet
- Outdoor Signage
- POP/ Trade Show
- Wall Murals

• Indoor Floor Graphics



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Physical Characteristics:

Property	Measurement	Typical Value
Caliper, face		3.4 mil (86 μm)
Caliper, adhesive		1.0 mil (25 μm)
Dimensional stability		<0.065"(1.651 mm) Note: Ink loads in excess of 250% may cause increased shrinkage and/or increased initial adhesion of the printed film
Tensile at Yield		
Elongation		
Gloss	Hunter Gloss @ 60 degrees	<16 GU
Adhesion:	15 min	4.7 lbs/in (831 N/m)
Flammability		Self Extinguishing
Shelf-Life		2 years from the date of manufacture (when stored at the following temperatures and humidity conditions $68^\circ\text{-}77^\circ$ F (20° - 25° C) and $50\pm5\%$ R. H.)
Durability	Vertical Exposure	Unprinted – 6 years Printed – Up to 6 years vertical. See <u>ICS Performance Guarantee</u> for printer specific information
Min. Application Temperature		50° F (10° C)
Service Temperature		-50° to 176°F (-45° to 80° C) (Reasonable range of temperatures which would be expected under normal environmental conditions).
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions

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Avery Dennison[®] MPI2120 Matte Permanent StaFlat™

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Data represents average values where applicable, and is not intended for specification purposes.

Warranty:

This Warranty applies to the Product listed in this Data Sheet. All statements, technical information (including physical and chemical characteristics) and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold subject to the Purchaser's assent and agreement that Purchaser is responsible for, and has independently determined, the suitability of such products for its purposes or its customer's purposes. Avery Dennison products are warranted to be free from defects in material and workmanship (i) for two years from the date of manufacture, or (ii) from the date of manufacture until the expiration of the period stated on the specific Product Data Sheet in effect at the time of delivery.. Such time periods are subject in either case to the proper storing and applicable Instructional Bulletin, negates any warranty. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited exclusively to: (a) repair or replacement of defective product without charge at Avery Dennison's plant or at the location of the product (at Avery Dennison's election), or (b) in the event repair or replacement are not commercially practical, a credit amount up to the price of the product taking into account the defect in the product in Avery Dennison's sole discretion.

THE WARRANTY EXPRESSLY SET FORTH ABOVE IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR USE AND/OR NON-INFRINGEMENT. SELLER SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER SUCH WARRANTIES. NO WAIVER, ALTERATION, ADDITION OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND MANUALLY SIGNED BY AN OFFICER OF AVERY DENNISON.

AVERY DENNISON'S LIABILITY FOR DEFECTIVE PRODUCTS SHALL NOT EXCEED THE PURCHASE PRICE PAID THEREFORE BY PURCHASER AND IN NO EVENT SHALL AVERY DENNISON BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHETHER FORESEEABLE OR NOT, CAUSED BY DEFECTS IN SUCH PRODUCT, WHETHER SUCH DAMAGE OCCURS OR IS DISCOVERED BEFORE OR AFTER REPLACEMENT OR CREDIT, AND WHETHER OR NOT SUCH DAMAGE IS CAUSED BY AVERY DENNISON'S NEGLIGENCE.

All sales and contracts for sale of Products are subject to Purchaser's assent and agreement to this Warranty. Avery Dennison hereby objects to any terms or conditions contained in any purchase order or other communication of any kind from the Purchaser that is conflicting, inconsistent or additional to this Agreement

or additional to this Agreement.

Failure to install the film in full compliance with Avery Dennison's installation instructions may result in personal injury or property damage. Read and follow all instructions when installing the film.

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Related Documents:

The following Avery Dennison literature will provide complete information to the user for proper application, storage, and other requirements and is available upon request from your Avery Dennison representative or from the Avery Dennison website (<u>www.graphics.averydennison.com</u>).

Document Title	Reference Number
Substrate Cleaning and Preparation	Instructional Bulletin #1.10
Storage, Maintenance, and Cleaning of PVC Films	Instructional Bulletin #1.20
Warranty of Avery Dennison Films	Instructional Bulletin #1.30
Multi Purpose Inkjet OEM Qualification Matrix, Durability Reference, &	Instructional Bulletin #5.80
Troubleshooting Guide	
Premask Recommendations	Instructional Bulletin #5.50
Removal Instructions	Instructional Bulletin #4.10
Wall Graphics	Instructional Bulletin #6.50
Application and maintenance of the Avery floor marking System	Instructional Bulletin #6.30

Removability:

Avery Dennison does not guarantee removability from the following substrates:

- Surfaces with poor paint-to-substrate adhesion
- Wallboard
- Existing graphics that must remain intact; damage to existing graphic when film is removed
- Aged paint or metal that may have surface oxidation or chalking
- Outdoor, horizontal surfaces



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Application to Glass:

- Because of the unique properties and varieties of glass, special considerations must be considered for windows and graphic applications. Avery Dennison accepts no liability for glass breakage.
- Glass absorbs heat when exposed to sunlight. The degree of absorption across windows can vary because of shading, heating, and cooling ventilation, and insulation from window frames. These temperature differences across the window produce stress, which can cause glass breakage. The ability of glass to resist breakage because of temperature stress is affected by window size, glass thickness, glass treatments, quality, and design.
- Window cleaning methods also vary, from the type of cleaners used, to the washing methods employed. Specific chemicals used in window cleaners may affect the adhesion of pressure-sensitive graphics. Power washing methods may impact the adhesion of graphics, if the water pressure or temperature exceeds the graphic's adhesion capability. Power washing window graphics is not recommended.

Revisions are italicized

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