

# Avery® HP 700 High Performance Calendered Series

## Opaque Permanent StaFlat

(formerly: MX3200 Series Permanent )

Revision: New Dated: 1/6/2009

### Uses:

Avery HP-700 series calendered films are premium quality, flexible, opaque solid color semi-gloss or matte vinyl films designed for use in a wide range of screenprinted applications. This product is ideal for a variety of intermediate term outdoor projects.



**Face:** 3.2 mil (81 µm) semi-gloss calendered

3.4 mil (86 µm) matte calendered



**Adhesive:** Permanent Clear or Gray Acrylic



**Liner:** 90# StaFlat



**Durability:** 5 years

**Application Surfaces:**

Flat, Simple Curves

### Features:

- Outstanding durability and outdoor performance
- Dimensionally stable liner for easy converting
- Medium gloss finish
- Excellent conversion on CAD plotters
- Easy cutting & weeding
- Good dimensional stability
- Good UV, temperature, humidity, and salt-spray resistance

### Conversion:

- Thermal Die-Cutting
- Flat Bed Sign-Cut
- Drum Roller Sign-Cut
- Steel Rule Die-Cutting

- Thermal Transfer
- Screen Printing
- Cold Overlaminating
- Water based inkjet

- Solvent based inkjet
- Mild/Eco Solvent inkjet
- UV inkjet

### Common Applications:

Trucks  
Trailers  
Cars & Vans  
Banners

Architectural Signage  
Directional Signage  
Trains & light rail  
OEM Graphics

Heavy Equipment decals  
Outdoor advertising  
Vending Machines

## Product Data Sheet

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### Physical Characteristics:

Property		Value
Caliper, face	Semi-gloss	3.2 mil (81 µm)
	Matte	3.4 mil (86 µm)
Caliper, adhesive		1.0mil (25 µm)
Dimensional stability		<0.03"(0.765mm)
Tensile at Yield		9.0 -15.0 lb/in (1.6 - 2.7 kg/cm)
Elongation		100% min.
Gloss	Semi-gloss	50
	Matte	15
Adhesion: 15 min.		3.0 lbs/in (525 N/m)
	24 hr.	4.4 lbs/in (770 N/m)
Flammability		Self Extinguishing
Shelf-Life		1 year
Durability	Vertical Exposure	5 years
Min. Application Temperature		50°F (10°C)
Service Temperature		-40°- 180°F (-40°- 82°C) (Reasonable range of temperatures which would be expected under normal environmental conditions).
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions.

#### Important:

Information on physical and chemical characteristics are based on tests believed to be reliable. The values are intended only as a source of information. This information is given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of any material for their specific purpose. (Data represents average values where applicable, and is not intended for specification purposes)

#### Warranty:

All statements, technical information 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 with the understanding that Purchaser has independently determined the suitability of such products for its purposes. Avery Dennison products are warranted to be free from defects in material and workmanship for either one year (or the period stated on the specific product information literature in effect at time of delivery, if longer) from date of shipment if said product is properly stored and applied. 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 to repair or replacement of defective product without charge at Avery Dennison's plant or at the location of product (at Avery Dennison's election), or in the event replacement or repairs is not commercially practical, to Avery Dennison's issuing Purchaser a credit reasonable in light of the defect in the product.

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## Product Data Sheet

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## Colors: Cross Reference

MX SERIES - 90#	AVERY 700 HIGH PERFORMANCE CALENDERED OPAQUE PERMANENT STAFLAT™	MX SERIES - 90#	AVERY 700 HIGH PERFORMANCE CALENDERED OPAQUE PERMANENT STAFLAT™
MX 3200 White	HP 700-106-O Semi-Gloss White	MX 3400 White	HP 700-102-O Matte White

### COMMENTS:

NOTE: Some color fade may occur in severe environmental areas. Reference IB 1.30 for durability guidelines.

α - pigmented adhesive, not reversible

### Dimensional stability:

Is measured on a 6" x 6" (150 x 150 mm) aluminum panel to which a specimen has been applied; 72 hours after application the panel is scored in a cross pattern, exposed for 48 hours to 150°F (65°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 panel, 24 hours after the specimen has been applied under standardized conditions. Initial adhesion is measured 15 minutes after application of the specimen.

### Flammability:

A specimen applied to aluminum 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.

*Revisions are italicized*

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