

Avery Dennison® M-0500
Commercial Grade Reflective Sheeting
Pressure Sensitive Adhesive for Aluminum

Data Bulletin # M-0500

Dated: 01/00

Description:

Avery Dennison® M-0500 Commercial Grade Reflective sheeting is a quality, enclosed lens retroreflective material. M-0500 is ideal for non-specification signage requirements such as off-road signage and parking lots.

Construction:

Face Film:	High gloss
Adhesive	Permanent pressure sensitive (Class 1)
Liner:	White Polyethelene Coated Paper StaFlat®

Photometric Performance:

Minimum Coefficient of Retroreflection (R_A) (cd / lx / m²)

Observation Angle	Entrance Angle	White	Yellow	Orange	Green	Red	Blue	Brown
0.2°	-4°	50	25	13	5	10	3.8	—
	30°	12	7	4	2	3	1	—
0.5°	-4°	15	10	6.5	3	5	2	—
	30	6	3	2.5	1	1	.8	—

Colors & Specification Limits (Daytime):

The M-0500 retroreflective Sheeting will meet the color specifications as shown below

Color	1		2		3		4		Luminance (Y%)	
	x	y	x	y	x	y	x	y	Min	Max
White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316	27	--
Yellow	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472	15	45
Orange	0.550	0.360	0.630	0.370	0.581	0.418	0.516	0.394	14	30
Blue	0.144	0.030	0.244	0.202	0.190	0.247	0.066	0.208	3.0	9.0
Green	0.030	0.380	0.166	0.346	0.286	0.428	0.201	0.776	2.5	12
Red	0.613	0.297	0.708	0.292	0.636	0.364	0.558	0.352	2.0	10
Brown	0.430	0.340	0.430	0.390	0.550	0.450	0.610	0.390	4.0	9.0

The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant C.

Other Specifications

Consult your Avery Dennison Representative for information concerning additional world-wide specifications.

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Physical Properties:

Outdoor Durability	Avery Dennison M-0500 sheeting is warranted for 2 years when properly processed and applied.
Minimum Surface & Ambient Air Application Temperature	40°F (4°C) when applied with a squeeze roll applicator
Application Surface	Flat surfaces only. Not recommended for unpainted stainless steel. Always pretest your specific substrate prior to actual application. Note: Wet method of application is not recommended for Avery Dennison M-0500 reflective films
Service Temperature Range	-40°F to 180°F (-40°C to 82°C)
Typical Film Caliper (w/adhesive)	3.5 to 4.5 mils (89 µm to 114 µm)
Shelf Life	One year when stored at the following temperature and conditions 68° - 77°F (20° - 25°C) and 50% ± 5%± R.H.
Other Tests:	M-0500 meets all other requirements set forth in ASTM D 4956-99 including Shrinkage, Flexibility, Liner removal, Adhesion, Impact resistance, Specular gloss and Outdoor weathering.

Application & Conversion Information:

The following Avery Dennison literature will provide complete information to the user for proper application, storage, and other requirements and is available from your Avery Dennison representative, from the Avery Dennison web-site www.averyreflectives.com, or on request:

Approved screen printing inks:

Ink Supplier	Ink Series	Ink System
Maribu	PU	Solvent
Visprox	2000	Solvent
Ink Dezyne	GE	Solvent

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Instructional Bulletins:	
Sheeting Care & Handling	#8.00
Substrate Requirements	#8.01
Application Techniques PS Sheeting	#8.10
Steel Rule Die-Cutting	#8.20
Guillotine Cutting	#8.20
Thermal Die Cutting	#8.20
Flatbed Plotter/Cutting	#8.25

Color Availability:	
M-0500	White
M-0501	Yellow
M-0504	Orange
M-0505	Blue
M-0507	Green
M-0508	Dark Red
M-0509	Brown

Warranty:

Refer to the appropriate Avery Dennison product warranty available from your Avery Dennison representative.

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