

**Avery Dennison® WR-6100**  
*High Intensity Grade Reflective Sheeting*  
*Pressure Sensitive Adhesive for*  
*Reboundable Channelizer Devices*

Data Bulletin # WR-6100  
 Revised 02/2005

*Description:*

Avery Dennison® WR-6100 High Intensity Grade Reflective sheeting for reboundable channelizer drums is a high-quality, durable, micro-prismatic retroreflective material. This is designed specifically for use on most plastic drum surfaces used for traffic control devices. Meets applicable requirements for high intensity grade sheeting applications for Type III retroreflective sheeting as set forth in ASTM D 4956 (table below).

*Construction:*

<b>Face Film:</b>	High Gloss Reflective Film
<b>Adhesive</b>	Permanent Pressure Sensitive (Class 1).
<b>Liner:</b>	Clear Film

*Photometric Performance:*

Type III values per ASTM D 4956. Minimum Coefficient of Retroreflection ( $R_A$ ) ( $cd / lx / m^2$ )

Observation Angle	Entrance Angle	White	Orange
0.1°	-4°	300	120
	30°	180	72
0.2°	-4°	250	100
	30°	150	60
0.5°	-4°	95	30
	30	65	25

*Colors & Specification Limits (Daytime):*

WR-6100 sheeting will meet the color specifications for Type III retroreflective sheeting as set forth in ASTM D 4956. These values are 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	--
Orange	0.550	0.360	0.630	0.370	0.581	0.418	0.516	0.394	14	30

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.

*Avery Dennison® WR-6100 continued...*

*Physical Properties:*

<b>Outdoor Durability</b>	Avery Dennison WR-6100 sheeting has a 3 year durability when properly applied.
<b>Minimum Surface &amp; Ambient Air Application Temperature</b>	60°F (18°C)
<b>Application Surface</b>	Recommended for HDPE & LDPE reboundable plastic drums surfaces. Smooth, dry and flame treated surfaces will allow for the best permanent bond. Always pretest your specific substrate prior to actual application. Note: Use of wet method of application is not recommended for WR-6100 reflective sheeting.
<b>Service Temperature Range</b>	-10°F to 140°F (-23°C to 60°C)
<b>Typical Film Caliper (w/adhesive)</b>	17.0 ± 0.5 mils (431 ±13µm)
<b>Shelf Life</b>	One year when stored at the following temperature and conditions 68° - 77°F (20° - 25°C) and 50% ± 5% R.H
<b>Other Tests:</b>	WR-6100 meets all other requirements set forth in ASTM D 4956 including Shrinkage, Flexibility, Liner removal, Adhesion, Impact resistance, Specular gloss and Outdoor weathering (Type III and supplementary section #2).

*Orientation:*

*Prismatic sheeting does not require a special orientation for mounting and thus does not require an orientation arrow datum mark.*

*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.reflectives.averydennison.com](http://www.reflectives.averydennison.com), or on request:

<b>Instructional Bulletins:</b>	
Sheeting Care & Handling	#8.00
Substrate Requirements	#8.01
Application of Reboundable Film	#8.03
Application Techniques for PS Sheeting	#8.10

<b>Color Availability:</b>	
WR-6100	White
WR-6104	Orange

Avery Dennison® WR-6100 continued...

*Warranty:*

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WR-6100 is protected by one or more of the following US Patents: 4,460,449; 4,633,567; 5,156,863; 4,486,363; 4,601,861; 5,213,872; 5,310,436; 5,854,709; 6,602,373