# AURA® 196 Prismatic Grade Sheeting

**Product Code: 0196 Product Data Bulletin** 

#### **Product Overview**

Aura Optical Systems' AURA® 196 Prismatic Grade Sheeting is a microprismatic retroreflective sheeting for regulatory and warning signing, temporary work zone signing, delineators, and other traffic safety applications. AURA® 196 has a cellular product construction and meets the performance requirements of ASTM D-4956 Type III and Type IV, AASHTO M-268 Class B, Mexico N-CMT-05-03-001/13 Type A, EN-12899 Class RA2, and many other industry specifications.

### **Key Features**

- Bright daytime color to maximize daytime visibility.
- Microprismatic optical elements aligned in multiple directions for a more uniform reflective appearance across different rotations.

### **Physical Characteristics & Properties**

Durability	Up to 7 - 10 years when properly installed. Vertical exposure only. †
Retroreflective Elements	Microprisms
Adhesive	Permanent, acrylic pressure sensitive adhesive. ††
Recommended Substrates	Flat sign panels made from aluminum, galvanized steel and other flat sign substrates. Not recommended for wood substrates. A second high-tack adhesive option is available for use on certain plastics. ††
Film Thickness	17 mils (425 microns) (excludes the release liner)
Application Temperature	18°C (65°F) minimum

## **Color Availability**

Product Code	Color
0196-00	White
0196-01	Yellow

### **Typical Retroreflection**

Typical Coefficient of Retroreflection when Measured per ASTM E-810. Average of 0° and 90° Rotations (cd/lx/m²)

Color	Observation	Entrance Angle				
	Angle	-4° / 5°	30°			
White	0.2°	420	240			
	0.33°	225	170			
	0.5°	210	110			
	1.0°	65	40			
Yellow	0.2°	300	170			
	0.33°	160	120			
	0.5°	150	75			
	1.0°	40	25			

<sup>†</sup> Durability will vary by geographic region. Contact Aura Optical Systems for more information.



USA Sales Inquiries: +1 (682) 227-1208

www.auraopticalsystems.com

<sup>††</sup> Suitability of the product for a specific sign substrate should always be tested prior to sign fabrication. Aura Optical Systems offers a variety of testing services to assist with such evaluations.

### **Daytime Color**

The daytime color of AURA® 196 sheeting will fall within the color boundaries identified below by four pairs of chromaticity coordinates (CIE 1931 Standard Colorimetric System) when measured with Standard Illuminant D65 using a 0/45 (45/0) geometry instrument.

#### Color Boundaries:

Color	1		2		3		4		Cap Y%	
	X	у	Х	у	Х	у	Х	у	Min	Max
White	.303	.300	.368	.366	.340	.393	.274	.329	40	
Yellow	.498	.412	.557	.442	.479	.520	.438	.472	24	45

### **Application Guidelines**

The following is a short overview of application guidelines. Please refer to the various Technical Data Bulletins supplied by Aura Optical Systems for a complete set of procedures.

AURA® 196 should be conditioned above 18°C (65°F) for at least 24-hours prior to application. Application should occur using a squeeze roll applicator with a firm rubber roller. Hand application in not recommended.

AURA® 196 is designed primarily for application to flat surfaces. Sign substrates should be cleaned prior to application. Wipe surfaces with rubbing alcohol (or similar solvent cleaner) and allow the surface to completely dry prior to application. Wet application method is NOT recommended.

After lamination, finished signs should be stored indoors at ambient temperatures for at least 24 hours prior to installation or exposure to outdoor environments. Store finished signs on edge in an upright position. Do not stack in outdoor environments or allow sign packages to become saturated with water. Store sign packages indoors in an upright position.

#### Storage

Store in a cool, dry area. Use within 1-year of receipt of the product.

## **Warranty Information**

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Aura Optical Systems, L.P.
7415 Whitehall, Suite 111
Ft. Worth, Texas 76118 U.S.A.
General / International Inquires: +1 (801) 668-3439

USA Sales Inquiries: +1 (682) 227-1208

www.auraopticalsystems.com