

AURA[®] 188 Metalized Prismatic Grade Sheeting

Product Code: 0188

Product Data Bulletin

Product Overview

Aura Optical Systems' AURA[®] 188 Metalized Prismatic Grade Sheeting is a microprismatic retroreflective sheeting with up to 7-years durability for delineators, vehicle markings, and other safety devices. It is available in several colors and exceeds the reflectivity requirements of ASTM D-4956, Type V.

Key Features

- Metalized, single-ply construction to prevent edge-lifting and eliminate water ingress on cut letters or numbers. Edge-sealing is not required.
- Microprismatic optical elements aligned in multiple directions for a more uniform reflective appearance across different rotations.
- Aggressive high-tack adhesive for bonding to many different substrates

Physical Characteristics & Properties

Durability	Up to 7-years when properly installed. Vertical exposure only.
Retroreflective Elements	Microprisms, metalized with vacuum-deposited aluminum
Product Thickness	13 mils, excluding release liner
Release Liner	Poly Film Release Liner
Adhesive	Aggressive high-tack adhesive for bonding to aluminum and many paint surfaces and plastics [†] .
Application Temperature	15°C (60°F) minimum

[†] Suitability of the product for a specific substrate should always be tested prior to application. Aura Optical Systems offers a variety of testing services to assist with such testing.

Note: Covered by one or more US or International pending patent applications.

Color Availability

Product Code	Color
0188-00	White
0188-01	Yellow
0188-02	Red
0188-05	Blue
0188-07	Green

Retroreflection

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

Color	Observation Angle	Entrance Angle	
		-4°	30°
White	0.2°	825	450
	0.5°	220	120
Yellow	0.2°	550	300
	0.5°	145	80
Red	0.2°	160	85
	0.5°	40	22
Blue	0.2°	65	35
	0.5°	17	9
Green	0.2°	160	85
	0.5°	40	22



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

Data Bulletin: 0188-0815-r0
Aug, 2015

Typical Daytime Color

The daytime color of AURA[®] 188 is listed below as defined by the chromaticity coordinates and daytime luminance factor (CIE 1931 Standard Colorimetric System) as measured with Standard Illuminant D65 using a 0/45 (45/0) geometry instrument (2 degree observer).

Color	Typical chromaticity coordinates		Typical Daytime Luminance Factor
	x	y	Y%
White	0.290	0.305	9.0
Yellow	0.480	0.490	16.0
Red	0.620	0.350	3.5
Blue	0.150	0.130	2.0
Green	0.140	0.365	2.2

These color values are representative of typical product colors. Actual color may vary slightly on a lot-to-lot basis.

Application Guidelines

AURA[®] 188 should be conditioned above 15°C (60°F) for at least 24-hours prior to application. Application should occur using a squeeze roll applicator or by hand using a firm rubber roller or plastic squeegee. 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.

For application to painted surfaces, the paint must be fully cured and dried prior to application. For application to plastic substrates, especially low surface energy plastics, it is important to flame treat (or otherwise surface treat) the plastic substrate prior to application. Although AURA[®] 188 is supplied with an aggressive high-tack adhesive suitable for many plastics, it should be noted that all plastics are different. Many plastics, including fiberglass laminates, may contain ingredients or components that may migrate to the surface and adversely affect the adhesion or performance of the reflective sheeting. Similarly, the adhesive of AURA[®] 188 contains components that could potentially migrate into the plastic substrate. The user should always test the performance of AURA[®] 188 on their specific substrate.

Storage


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

Warranty Information

The information, technical data, and statements made herein are believed to be reliable, but the accuracy or completeness thereof is not guaranteed and should not be construed as a warranty or representation for which Aura Optical Systems assumes legal responsibility. All Aura Optical Systems products are sold with the understanding that the Purchaser has independently determined the suitability of such products for its purposes.

*The following is made in lieu of all other express or implied warranties. **No implied warranty of merchantability or fitness for a particular purpose is made.*** Aura Optical Systems products are warranted to be free from defects in material or workmanship for a period of one year from date of shipment if the product is properly stored and/or applied. Aura Optical Systems' sole obligation shall be to replace such quantity of product proven to be defective. Aura Optical Systems shall not be liable for any injury, loss or damage, direct or consequential, whether foreseeable or not, arising out of the use or of the inability to use the product.

Trademarks

AURA[®], the Aura Optical Systems logo, and the  symbol are registered trademarks of Aura Optical Systems, L.P., U.S.A.



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