

# AURA<sup>®</sup> 188 Black Metalized Prismatic Grade Sheeting

Product Code: 0188-10

Product Data Bulletin

## Product Overview

Aura Optical Systems' AURA<sup>®</sup> 188 Black Metalized Prismatic Grade Sheeting is a microprismatic retroreflective sheeting with up to 7-years durability for vehicle markings and other applications. The product has a deep black daytime appearance, but reflects a vibrant white color at night.

## Key Features

- Crisp, blue-white reflected color at night. Does not appear yellow or brown.
- Exceptionally high levels of reflectivity. Up to 10 times higher than glass-bead reflective materials.
- 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.

## 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 <sup>†</sup> .
Application Temperature	15°C (60°F) minimum

<sup>†</sup> 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.

Covered by one or more patents / pending applications. Refer to [www.auraopticalsystems.com/images/patents.pdf](http://www.auraopticalsystems.com/images/patents.pdf) for more information.



## Color Availability

Product Code	Color
0188-10	Black

## Retroreflection

Typical Coefficient of Retroreflection when measured per ASTM E-810. Average of 0° and 90° Rotations. (cd/lx/m<sup>2</sup>)

Color	Observation Angle	Entrance Angle	
		-4°	30°
Black	0.2°	90	40

## Daytime Color

The typical daytime color of AURA<sup>®</sup> 188 Black is listed below as defined by the CIE 1931 Standard Colorimetric System using Standard Illuminant D65 and a 2 degree observer (0/45 instrument).

Color	Chromaticity Coordinates		Daytime Luminance Factor
	x	y	Y%
Black	0.301	0.328	1.50

## Aura Optical Systems, L.P.

7415 Whitehall, Suite 111  
Ft. Worth, Texas 76118 U.S.A.  
General / International Inquiries: +1 (801) 668-3439  
USA Sales Inquiries: +1 (682) 227-1208  
[www.auraopticalsystems.com](http://www.auraopticalsystems.com)

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## Application Guidelines

AURA® 188 Black 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 Black 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 Black contains components that could potentially migrate into the plastic substrate. The user should always test the performance of AURA® 188 Black 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.

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