

AURA[®] 191T Fluorescent Yellow-Green Prismatic Sheeting

Product Code: 0191T-13 Product Data Bulletin

Product Overview

Aura Optical Systems' AURA[®] 191T Fluorescent Yellow-Green Metalized Prismatic Grade Sheeting is a microprismatic retroreflective sheeting with up to 5-years durability for vehicle markings, signing, delineators, and similar applications. The vibrant fluorescent color makes signing more visible during daylight hours.

Key Features

- Vibrant daytime color for enhanced visibility
- Metalized, single-ply construction to prevent edge-lifting and eliminate water ingress on cut letters or graphics.
- 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 5-years when properly installed. Vertical exposure only. Horizontal use will decrease the durability of the product and is not recommended
Retroreflective Elements	Microprisms, metalized with vacuum-deposited aluminum
Product Thickness	Approximately 16.5 mils (415µm) (excluding release liner)
Release Liner	Poly Release Liner
Adhesive	High-tack adhesive for bonding to aluminum, OEM paint surfaces, and many plastic sign substrates [†] .
Application Temperature	15°C (60°F) minimum

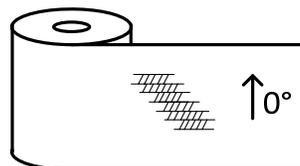
[†] Suitability of the product for a specific substrate and application should always be tested prior to using the product. Aura Optical Systems offers a variety of testing services to assist with such testing. Please see the Technical Data Bulletins for more information.

Retroreflection

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

Color	Entrance Angle	Observation Angle
		0.2°
Fluorescent Yellow Green	-4 / 5°	375
	20°	270
	30°	200
	40°	150

As shown in the diagram below, for maximum levels of retroreflection, AURA[®] 191T should be oriented at the 0° rotation with the parallelogram pattern tilting towards the right.



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[®] 191T Fluorescent Yellow-Green can be printed with a variety of digital ink systems. Additionally, the product can be printed with both solvent-based screen inks as well as many UV inks. Compatibility and adhesion characteristics of an ink should always be tested through a test print. To maintain high levels of retroreflection, transparent inks should be utilized.

Sheeting should be conditioned above 15°C (60°F) for at least 24-hours prior to printing, lamination, or application.

If over-laminating to protect a digital print, a premium cast gloss over-laminate film is recommended. Lamination should occur only after the printed graphics are completely dry. It is best to allow the graphics to dry overnight. Use only cold lamination methods. Ensure lamination is wrinkle



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Application Guidelines (Continued)

free and that the over-laminate film enters the nip without any wrinkles. If wrinkles occur, the nip pressure setting may be too high. Avoid high tensions on either the printed reflective film or the over-laminate film. After lamination, the material should lay flat without any curling. If curling is present, the tensions or nip pressures may be too high.

Application surfaces must be clean and free of dust, rust, oils, grease or other contaminants. Application should occur using a squeeze roll applicator or by hand using a firm rubber roller or plastic squeegee. Apply firm pressure during application to bond the adhesive to the substrate. Always apply pressure from the center of the graphic towards the edges to minimize air entrapment or bubbles. Use a dry application method. Do not use detergent, water, or any commercial application liquids to position the reflective sheeting.

AURA® 191T Fluorescent Yellow-Green is intended for use on flat sign surfaces or gentle curved surfaces. It is not recommended for installation over sharp edges, complex curves, rivets or other protrusions.

If applied to a vehicle, please note that some automotive paints may continue to out-gas for some time, which could disrupt application of the sheeting. Be sure painted surfaces are fully cured prior to application of the product.

The suitability of the product on any application surface should always be tested by the user prior to application.

The product can be computer sign cut. A flat-bed plotter is recommended and will allow the most accurate cuts. A 60 degree blade is recommended for most plotters.

Storage

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

Daytime Color (New Sheeting)

The daytime color of new AURA® 191T Fluorescent Yellow Green 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.

	1	2	3	4
x	0.480	0.473	0.523	0.550
y	0.520	0.490	0.440	0.449
	Min		Max	
Cap Y%	50.0		--	

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