

AURA[®] 122 Digital Commercial Grade Reflective Vinyl

Product Code: 0122

Product Data Bulletin

Product Overview

Aura Optical Systems' AURA[®] 122 Digital Commercial Grade Reflective Vinyl is an enclosed lens retroreflective vinyl intended for use on signing applications requiring durability of up to 3-years, including advertising graphics, promotional signing, and many other applications. AURA[®] 122 features a cast vinyl face film, which allows for exceptional printing results on a variety of digital printers. It is supplied with a permanent pressure-sensitive adhesive and exhibits a very good bond to the most common substrates, including painted steel, aluminum, and many OEM paints.

Key Features

- Similar daytime and nighttime appearance
- Retains retroreflectivity when wet
- Digitally printable on a variety of printer systems
- Computer sign cuttable

Color Availability

Product Code	Color
0122-00	White
0122-01	Yellow
0122-02	Red
0122-04	Orange
0122-05	Blue
0122-07	Green

Other colors available upon request

Retroreflection

Typical Coefficient of Retroreflection at 0.2° Observation Angle / -4° Entrance Angle.

Color	RA (cd/lx/m ²)
White	60
Yellow	35
Red	12
Orange	18
Blue	3
Green	9

Physical Characteristics & Properties

Durability	Up to 3-years, when properly converted and installed in a vertical position. Horizontal use may decrease the durability of the product and is not recommended.
Retroreflective Elements	Glass beads (Enclosed lens)
Film Thickness	160µm (approximately 6.5 mils) (excluding release liner)
Face Film	Cast vinyl
Adhesive	50µm (2 mils) Permanent pressure-sensitive adhesive
Release Liner	Poly-coated paper liner
Application Surface †	Flat surfaces or gentle curves. The adhesive is designed for aluminum and many painted surfaces. Not recommended for unpainted stainless steel.
Application Temperature	15°C (60°F) minimum

† Suitability of the product for an application surface should always be tested by the user prior to application.

Application & Conversion

AURA[®] 122 Digital Commercial Grade can be printed with a wide variety of digital ink systems. Additionally, AURA[®] 122 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 (65°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 & Conversion (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. A heat gun may assist conformability of the film around curved surfaces.

AURA® 122 is intended for use on flat sign surfaces or gentle curved surfaces. Slight tenting may occur around rivets, sharp ridges, or some complex curves.

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.

AURA® 122 Digital Commercial Grade can be computer sign cut using a variety of different industry plotters. A 60 degree blade is recommended for most plotters.

Roll Sizes

AURA® 122 is available in 45.7 meter (50 yard) rolls in different widths up to 1240mm (48 inches).

Storage


Store in a cool, dry area. Use within 1-year of receipt of the product. Store rolls in original shipping carton or suspend horizontally from a rod through the core.

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.

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