

AURA® 144 Conspicuity Tape

Product Code: 0144

Product Data Bulletin

Product Overview

Aura Optical Systems' AURA® 144 Conspicuity Tape is a microprismatic retroreflective tape designed for use on the sides of heavy trucks and trailers. It has been approved to the requirements of ECE Regulation No. 104, Class C.

Key Features

- Metalized, single-ply construction to prevent edge-lifting or delamination
- No edge sealing required
- Aggressive, high-tack adhesive for application to painted surfaces and other substrates
- Tiled microprismatic optics for retroreflectivity from multiple viewing angles

Retroreflection

AURA® 144 is an omni-rotational product. It can be applied in either a horizontal or vertical position and does not have an orientation marking.

Minimum Coefficient of Retroreflection per ECE-104, Class C at 0.33° Observation Angle (cd/lx/m²).

Color	Entrance Angle ($\beta_1 = 0^\circ$, $\beta_2 = \beta$)				
	5°	20°	30°	40°	60°
White	450	—	200	95	16
Yellow	300	—	130	75	10
Red	120	60	30	10	—

Physical Characteristics & Properties

Durability	Up to 10-years when properly installed. Vertical application only.
Retroreflective Elements	Microprisms, metalized with vacuum-deposited aluminum
Tape Thickness	11 mils, excluding release liner
Face Film	Acrylic
Service Temperatures	-30°C – 70°C (-20°F – 160°F)
Adhesive Bond Strength	> 15.0 N/25mm (90° peel test)
Corrosion Resistance	No visible deterioration after two salt mist exposure cycles of 24 hours per ASTM B117-18.
Solvent Resistance	No visible deterioration (1 minute in 70% n-heptane / 30% toluene)
Application Temperature	15°C (60°F) minimum

Color

The typical nighttime retroreflected color as tested in accordance with ECE Regulation No. 48, 2.30 is shown in the table below.

(Illuminant A, 2° observer, 5°/0.33°)

Color	x	y
White	0.425	0.400
Yellow	0.527	0.450
Red	0.655	0.330

Available Colors and Roll Sizes

Standard roll sizes are 50mm x 50m. AURA® 144 Conspicuity Tape is available in three colors.

Product Code	Color
0144-00	White
0144-01	Yellow
0144-02	Red



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Application Guidelines

Aura Optical Systems' AURA® 144 Conspicuity Tape should be applied only to clean and dry surfaces when temperatures are above 60°F. Wipe surfaces with rubbing alcohol (or similar solvent cleaner) and allow the surface to completely dry prior to application. Wet application methods should not be utilized. Apply only to surfaces free of rust, dirt, loose paint, or other contaminants.

During application, use a hand squeegee or hand roller to apply pressure to create a permanent bond. Starting from one end of the conspicuity striping, work from the center of the tape towards the edge to push air out from under the tape. It may be necessary to wrap the hand squeegee in a cloth to avoid scratching the surface.

The user should always test compatibility of the tape with the intended application surface. For freshly painted surfaces, the paint should be allowed to cure for at least 48-hours prior to application.

Application over large rivets or sharp corrugations is not recommended. For application over smaller rivets (< 1/2 inch), use a punching tool, such as an arch punch or belt punch, to cut the conspicuity tape around the rivet surface.

Storage


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

Warranty Information

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