

AURA[®] 180 Roll-up Signs

Product Code: 0180

Product Data Bulletin

Product Overview

Aura Optical Systems' AURA[®] 180 Roll-up Signs are a flexible, microprismatic retroreflective signing material capable of being rolled-up and stored when not in use. The product consists of a durable retroreflective face film with a fiber-reinforced backing. AURA[®] 180 meets the performance requirements of ASTM D-4956, Type VI. Available in both fluorescent and non-fluorescent colors.

Key Features

- Bright fluorescent color to maximize daytime visibility. Excellent colorfastness.
- Microprismatic optical elements aligned in multiple directions for a more uniform reflective appearance across different rotations.
- Stable optics that maintain high levels of retroreflection through both extended weathering or long-term storage conditions.
- Printable with both screen inks or digital inks. †
- Uniform daytime and nighttime appearance.

Color Availability

Product Code	Color
0180-00	White
0180-14	Fluorescent Orange

Other colors available upon request

Physical Characteristics & Properties

Durability	Exceeds weathering requirements of ASTM D-4956 for Type VI roll-up sign sheeting
Retroreflective Elements	Microprisms
Adhesive	Not applicable
Printability †	Can be screen printed with solvent-based or UV-inks. Compatible with many digital printers.
Thickness	Approximately 40 mils (1.5 mm)
Cold Flexibility	Can be wrapped around a 1/8" mandrel in 1 second at 32°F (0°C) without any cracking

† The user should always test the suitability of a specific ink or printing system for compatibility with the product. This should include a cross-hatch adhesion test.

Typical 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°	575	265
	0.5°	280	125
Fluor. Orange	0.2°	230	115
	0.5°	120	55



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Daytime Color

The daytime color of AURA® 180 Roll-up Signs 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.

Color Boundaries:

Color	1		2		3		4		Cap Y%	
	x	y	x	y	x	y	x	y	Min	Max
White	.303	.300	.368	.366	.340	.393	.274	.329	27	--
Fluor Orange	.583	.416	.535	.400	.595	.351	.645	.355	20	--

Conversion Guidelines

The following is a short overview of conversion guidelines. Please refer to the various Technical Data Bulletins supplied by Aura Optical Systems for a complete set of procedures.

Prior to printing, AURA® 180 Roll-up Signs should be conditioned above 18°C (65°F) for at least 24-hours. Clean the surface with a soft cloth. In some instances, it may be necessary to wipe the surface with a mild-alcohol wipe to prepare for printing.

AURA® 180 Roll-up Signs may be utilized with many industry sign stands. The user should always test compatibility of the product with their specific stand.

Storage


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

Warranty Information

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