

Description

ORALITE® V98 Conformable Pre-Striped Chevron sheeting is a pre-stripped fluorescent lime / red in the chevron pattern eliminating the need for piecing sheeting. The sheeting is designed for vehicles that require increased visibility such as fire, EMS, police, utility, telecom and DOT. The material is plotter cuttable and easy to apply to smooth painted or unpainted vehicle surfaces. The single layer product does not require edge sealing, and is designed to be applicator friendly. The Conformable Chevron Sheetting is available in Left-Hand and Right-Hand configurations. The sheeting meets and exceeds the requirements of NFPA 1901.

Product Construction

ORALITE® V98 Conformable Pre-Striped Chevron material is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced, tough and weather-resistant UV stabilized polymeric film. The prism surfaces are coated with a vacuum deposition of aluminum to provide a mirror surface to the prism facets.

Reflectivity

Minimum values for the coefficient of retroreflection for ORALITE® V98 Conformable Graphic Sheetting are shown in Table 1 when illuminated with CIE standard illuminant A and measured with the provisions of CIE No.54.2. Rotation angles of 0° and 90° are measured and averaged.

Daytime Color

ORALITE® V98 Conformable Pre-Striped Chevron sheeting's color shall be located in the area defined by the chromaticity coordinates and luminance factor provided in Table 2, when measured in accordance with the provisions of CIE No. 15.2. The four pairs of coordinates determine the acceptable color when measured with standard illuminant D65 using a Hunter ColorFlex.

Adhesive

ORALITE® V98 Conformable Pre-Striped Chevron sheeting is available with a high tack pressure sensitive adhesive. The high tack adhesive is designed for the increased durability requirements on the rear of fire, EMS and DOT trucks. The adhesive is protected by a release liner which shall be removed by peeling, without soaking in water or other solvents.

Impact Resistance

Following application to a smooth surface aluminum rectangle, 0.020" by 3" by 6", the specimen is conditioned for 24 hours at 72°F and 50% relative humidity. The sheeting shall show no cracking when the face of the panel is subjected to an impact of a two-pound weight with a 5/8" rounded tip dropped from a 100 in/lb setting on a Gardner variable impact tester, IG-1120.

Flexibility

The sheeting is conditioned for 24 hours at 72°F and 50% relative humidity. The release liner is removed and the sheeting is sufficiently flexible to show no cracking when bent in one second's time around a 1/8" diameter mandrel with the adhesive contacting the mandrel.

Solvent Resistance

ORALITE® V98 Conformable Pre-Striped Chevron material meets the requirements of LS-300C solvent resistance, section 3.6.7, when tested as specified in Table VI, test method 4.4.6.

Specular Gloss

The sheeting shall have a specular gloss of not less than 40 when tested in accordance with ASTM method D523 at an angle of 85°.

Shrinkage

A 9" x 9" specimen of the sheeting with liner is conditioned a minimum of one hour at 72°F and 50% relative humidity. The liner is then removed and the specimen is placed on a flat surface with the adhesive side up. Ten minutes after the liner is removed and again after 24 hours, the specimen is measured to determine the amount of dimensional change. The specimen will not shrink in any dimension more than 1/32" in 10 minutes and 1/8" in 24 hours.

Application Instructions

Sheeting must be applied when the air and surface temperature is 65°F or above. Use a clean towel and Isopropyl alcohol, or similar, to wipe the surface before application. If any air bubbles are trapped, use a pin to puncture the bubble and a squeegee to push the air towards the pin hole. Please refer to the V98 Conformable Graphic Sheetting Application Instructions for specifics.



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Table 1, Coefficient of Retroreflection (R_A)*

Observation Angle	Entrance Angle	Red	Fluorescent Lime
0.20°	-4°	75	300
	30°	40	150
0.50°	-4°	20	65
	30°	10	35

*all values have units of cd/ft² (cd/lx/m²)

**Table 2
Color Specification Limits**

Color	Chromaticity Coordinates*								Luminance Factor (Y%)	
	1		2		3		4		Min.	Max.
	x	y	x	y	x	y	x	y		
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5	15
Fl Yellow Green	0.387	0.610	0.369	0.546	0.428	0.496	0.460	0.540	60	---

*The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant D65.

Warranty

ORALITE® V98 Conformable Pre-Striped Chevron sheeting has a 5-year warranty. Please contact ORAFOL Americas for details.

Shelf life

The sheeting must be used within one year from the shipment date. All rolls including partially used rolls should be stored in original packaging, tightly wound. Store in a clean and dry area, away from direct sunlight. Store at room temperature 65-75°F and at 50% relative humidity.

Film Pattern



IMPORTANT NOTICE

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

ORALITE® is a registered trademark of ORAFOL Europe GmbH.



WARNING – This product may expose you to chemicals which are known in the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to – www.P65Warnings.ca.gov



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