

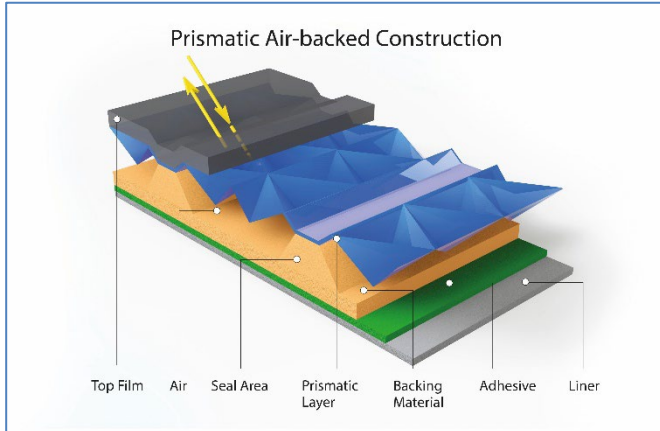
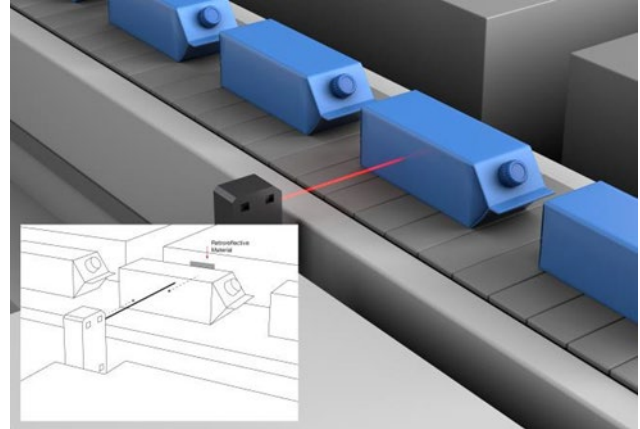
General Information

ORAFOL offers a range of retroreflective materials for use in photoelectric sensor applications produced to the highest standards that increase productivity and precision. Retroreflective materials work by reflecting transmitted light back to the receiver and can be incorporated into a variety of applications.

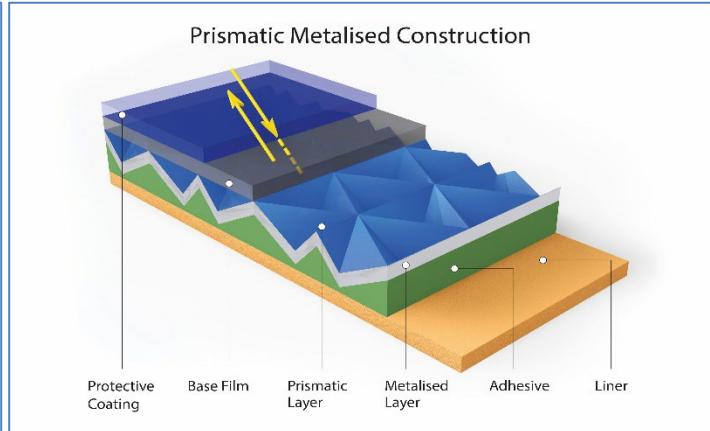
In an increasing automated world ORALITE® Photoelectric Sheeting allows longer sensing ranges due to the increased efficiency of the reflector and is available with or without polarization.

Description

The sheeting is composed of cube corner (microprism) elements, integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV-stabilized polymeric film. The Prismatic Air-Backed Construction type has the ability to accurately return the light energy, on a parallel axis (phase angle), back to the receiver and can be used in combination with polarization filters. Polarized retro-reflective sensors are recommended for any application with reflective or mirror-finish targets.



Polarized



Non-Polarized

Product Range

ORALITE® Photoelectric Sheeting is available with different configurations, described in the Table 1.

Table 1

Product	Construction	Reflectivity*	Non-Polarized	Polarized	Indoor	Outdoor	Printable
P66	Metalized	600	x		x		x
P82	Metalized	900 x 900	x		x	x	
AC1000	Metalized	900 x 900	x		x	x	x
5900	Air Backed	360		x	x	x	x

* Reflectivity measured at 0.2° / -4° geometry and shown in candelas/lux/sq. meter.

Reflectivity

Table 1 shows the typical values for the coefficient of retroreflection (R') when measured in accordance with ASTM E810 at rotation angles of 0° and 90°. Reflectivity values shown are either an average of rotation angles 0° and 90° or minimums at both 0° and 90° orientations.

Daytime Color

ORALITE® Photoelectric sheeting is available in white/silver.



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Adhesive

All product configurations are provided with a permanent adhesive protected by a release liner, which should be removed by peeling without soaking in water or other solvents.

Application Instructions

Material must be applied when the air and surface temperature is between 60°F and 100°F to assure proper adhesive bonding. Surfaces must be cleaned of all grease, oil and dirt. Use a clean towel and Isopropyl alcohol or similar to wipe the surface before application. Use in high temperature environments (above 200°F) for an extended period of time could permanently reduce retroreflective efficiency and adhesive bond strength.

Printing

ORALITE® P66, AC1000 and 5900 Photoelectric sheetings are printable with appropriate UV and solvent ink systems. Printing a clear overcoat may be used to extend the life of the retroreflector. It is not recommended to print transparent inks as they will reduce the retroreflectors photometric performance. Opaque inks can also be used however these inks will reduce the usable area of the retroreflector.

Shelf Life

The sheeting must be used within 1 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 70°F and at 50% relative humidity.

Note:

All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

IMPORTANT NOTICE

When using ORALITE® sheeting, please comply with relevant national specifications. ORAFOL recommends obtaining the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

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.

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure respectively. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The self-adhesive reflective material can only be used for dry application. The low tensile strength of the material can make the removability of the reflective film more difficult. Please review applicable application information published by ORAFOL.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at www.orafolamericas.com for detailed information.



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

ORALITE® is a trademark of ORAFOL Europe GmbH



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