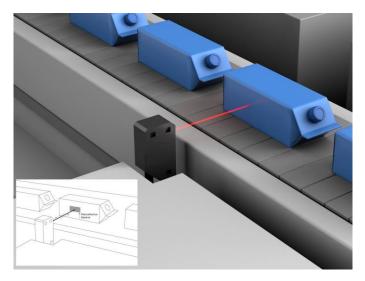
ORALITE® Photoelectric Sheeting

General

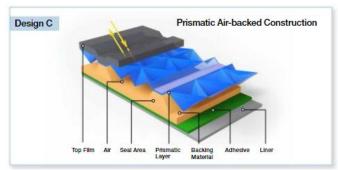
ORAFOL offers a range of retroreflective materials for use in photoelectric sensor applications produced to the highest standards that increase productivity and precision. Retroreflective materials work by reflecting transmitted light back to the receiver and can be incorporated into a variety of applications.

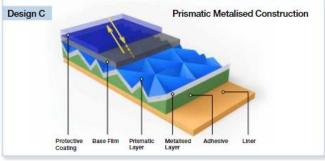
In an increasing automated world ORALITE® Photoelectric Sheeting allows longer sensing ranges due to the increased efficiency of the reflector and is available with or without polarization.



Product Description

The sheeting is composed of cube corner (microprism) elements, integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV-stabilised 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 targets.





Polarised

Non-Polarised

Range

ORALITE® Photoelectric Sheeting is available with different configurations, described in the below table.

Product Ref:	Product Construction	Thickness (mm)	Format	Non- Polarised	Polarised	Typical Reflectivity 0.2/5 ⁰ cd/lux/m ²	Indoor	Outdoor	Printable	Sheeting Logo Pattern	Protective Coating
3010	PET Metalized	0.2	Rolls	✓		500	✓		✓		
P82	PET Metalized	0.25	Rolls	✓		≥ 900	✓	☑		☑	✓
AC1000 (Air)	Acrylic Air-Backed	0.38	Sheets		☑	1000	✓	☑	☑		✓



ORALITE® Photoelectric Sheeting

Retroreflectivity

Typical values for the coefficient of retroreflection (R') are shown in the above table when illuminated with CIE standard illuminant A and measured with the provisions of CIE no. 54. The values are an average of rotation angles 0° and 90°.

Colour

ORALITE® Photoelectric sheeting is available in white/silver.

ORALITE® 3010 (metalised)

Features:

- Polyester (PET) Metalised microprismatic sheeting,
- For Indoor Applications
- The material is orientation sensitive.
- For permanent installation.
- Standard rolls are 762 mm x 45,7 m
- Minimum slit width is 25 mm
- Material availble in sticker size format subject to MOQ

ORALITE® P82 Sheeting (metalised)

Features:

- Polyester (PET) Metalised microprismatic sheeting,
- For Indoor and Outdoor Applications
- Minimum Reflectivity of 900cd/lux/m² in both orientations
- For permanent installation.
- Weather and solvent resistant protective coating
- Easy Cleanability
- Standard rolls are 762 mm x 45,7 m
- Minimum slit width is 25 mm
- Material availble in sticker size format subject to MOQ

ORALITE® AC 1000 Sheeting (air-backed)

Features:

- Acrylic Air-Backed microprismatic sheeting,
- Polarized Applications
- For Indoor and Outdoor Applications
- For permanent installation.
- Weather and solvent resistant protective coating
- Easy Cleanability
- AC1000 Air Backed is available as sheets with 16 x 49mm x 49mm pieces per each sheet.
- Other sizes available on request.

Adhesive

The permanent adhesive is 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 15° C and 38° C to assure proper adhesive bonding. Surfaces must be cleaned for 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 95°C) for an extended period of time could permanently reduce retroreflective efficiency.



ORALITE® Photoelectric Sheeting

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 20° C and at 50% relative humidity.

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 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.

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