# ORALITE® 3000/3010/3051 Photoelectric Sheeting

#### General

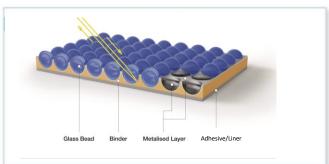
ORAFOL offers a range of retroreflective materials for use in photoelectric sensor applications produced to the highest standards that increase productivity and precision. Retroreflective materials work by reflecting transmitted light back to the receiver and can be incorporated into a variety of applications.

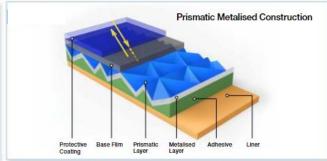
In an increasing automated world ORALITE® Photoelectric Sheeting allows longer sensing ranges due to the increased efficiency of the reflector and is available with or without polarisation.



### **Product Description**

ORALITE® 3000 incorporates exposed-lens retroreflective technology with a pressure-sensitive adhesive that is designed for use in photoelectric sorting and classification systems in warehouse or conveyor operations. ORALITE 3010 & 3051 are composed of cube corner (microprism) elements, integrally bonded to a flexible, smooth-surfaced tough and (3051) weather resistant UV-stabilised polymeric film. The prism surfaces are coated with a vacuum deposition of aluminium to provide a mirror surface to the prism facets. Polarised retro-reflective sensors are recommended for any application with reflective targets.





**Product construction ORALITE® 3000** 

Product construction ORALITE® 3010 and 3051

#### Range

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

## 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 grey/silver.

#### **Adhesive**

The adhesive is protected by a release liner, which should be removed by peeling without soaking in water or other solvents.



# ORALITE® 3000/3010/3051 Photoelectric Sheeting

## **Product Offering**

Product Ref:	Product Construction	Thickness (μm)	Format	Non- Polarised*	Typical Reflectivity 0.2/5 <sup>0</sup> cd/lux/m <sup>2</sup>	Indoor	Outdoor	Printable	Sheeting Logo Pattern	Protective Coating
ORALITE 3000 Super Lens Photoelectric Sheeting	Exposed-lens	240	Rolls	Ø	400	☑				
ORALITE 3010 High Intensity Prismatic Photoelectric Sheeting	Prismatic Metalized	200	Rolls	Ø	500	☑		☑		
ORALITE 3051 Ultra Brilliance Prismatic Photoelectric Sheeting	Prismatic Metalized	250	Rolls	Ø	≥ 900	Ø	Ø		Ø	Ø

<sup>\*</sup>For Polarised applications, please contact ORAFOL Customer Service

# **ORALITE® 3000 Super Lens Photoelectric Sheeting**

#### Features:

- Exposed-lens retroreflective tape with a pressure-sensitive adhesive & removable protective liner
- Uniform Appearance
- For Indoor Applications
- High Contrast
- Specialized for Angular applications
- Standard rolls are 762 mm x 50 m
- Minimum slit width is 25 mm, Material available in sticker size format subject to MOQ

# ORALITE® 3010 High Intensity Prismatic Photoelectric Sheeting

### **Features:**

- Polyester (PET) metalised microprismatic sheeting with a pressure-sensitive adhesive & removable protective liner
- For indoor applications
- The material is orientation sensitive.
- For permanent installation.
- Standard rolls are 762 mm x 50 m
- Minimum slit width is 25 mm, material available in sticker size format subject to MOQ

# ORALITE® 3051 Ultra Brilliance Prismatic Photoelectric Sheeting

## Features:

- Polyester (PET) Metalised microprismatic sheeting with a pressure-sensitive adhesive & removable protective liner
- For indoor and outdoor applications
- Exceptional reflectivity of 900cd/lux/m² in 0° and 90° orientations
- For permanent installation.
- Weather and solvent resistant protective coating
- Easy cleanability
- Standard rolls are 762 mm x 50 m
- Minimum slit width is 25 mm, material available in sticker size format subject to MOQ



# ORALITE® 3000/3010/3051 Photoelectric Sheeting

### **Application Instructions**

ORALITE Photoelectric Sheeting's are designed for application on metallic or coated substrates. 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.

The user is responsible for determining whether the ORAFOL product is fit for a particular purpose and suitable for the user's application. Users are urged to carefully evaluate substrates for material adhesion and compatibility. The user is responsible to test the application on alternative substrates (e. g. plastic substrates, glass, organic materials) prior to use. Material failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL.

#### **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 NOTE**

All ORAFOL products are subject to careful quality control throughout the entire manufacturing process, and it is ensured that they are of merchantable quality and free from manufacturing defects. The information published is based on our analyses and studies and does not constitute any warranted properties or any agreement as to quality. Due to the diverse possibilities of use of ORAFOL products and the constant development of new applications, the buyer should carefully consider the suitability and performance of the product for the respective purpose; it bears all risks associated with such use. No warranty is given for purposes other than those listed in the Technical Data Sheet or for applications that are not processed in accordance with ORAFOL's processing instructions.

The durability of the end product depends upon a variety of factors, including but not limited to substrate selection and preparation, compliance with the recommended application guidelines, geographical area, exposure conditions and maintenance of the ORAFOL material and of the end product. Product defects caused by the substrate or improper surface preparation do not lie within ORAFOL's sphere of responsibility.

When using ORAFOL products, the pertinent national regulations are to be observed. ORAFOL recommends that you obtain the current stipulations from your local authority and ensure that the product meets these requirements. Please contact ORAFOL for further information.

