

# ORACAL® 8870

## Blockout Film for Illuminated Graphics

Technical Datasheet  
12/24  
Page 1 of 2

### Description

ORACAL 8870 is a premium blockout film designed to control or block unwanted light transmission in illuminated sign faces. With a satin finish and a thickness of 4 mil, this film provides excellent durability and performance.

Also, consider these additional ORAFOL Graphic Solutions when constructing illuminated signage and graphics:

- [ORACAL 8830 Diffuser Premium Cast](#)
- [ORACAL 8860 Diffuser Premium Cast](#)
- [ORACAL 8500 Translucent High-Performance Cal](#)
- [ORACAL 8800 Translucent Premium Cast](#)
- [ORAJET 3850 Translucent High-Performance Cal Digital Print Media](#)
- [ORAJET 3951 Transparent Cast Digital Print Media](#)
- [ORAJET 3551 Transparent High-Performance Cal Digital Print Media](#)

### Key Features

- Finish: Satin
- Thickness: 4 mil
- Adhesive: Solvent-based, permanent
- Color Options:
  - ORACAL 8870-010 White (Black Backing)
  - ORACAL 8860-070 Black (White Backing)

### Release Liner

84# silicone coated paper on both sides

### Adhesive

Clear, solvent polyacrylate, permanent

### Applications

- Ideal for preventing unwanted light transmission in illuminated sign faces
- Effective light control film for precise illumination management

### Outdoor Durability

- Climate Zone 1: 10 years
- Climate Zone 2: 8 years
- Climate Zone 3: 6 years

### Compatible Substrates

- Acrylic
- Polycarbonate
- Translucent Flex-Face
- Glass

### Splice Free Guarantee

Our Splice Free Guarantee assures you that every roll of ORAGUARD® over-laminate is free from splices. If you identify a verifiable splice, we will promptly replace the roll at no cost and provide you with \$500 as a token of our commitment to your satisfaction and uninterrupted graphic production experience.



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Page 2 of 2

### Technical Data

<b>Thickness*</b> (without liner and adhesive)	4-mil
<b>Dimensional Stability</b> (FINAT TM-14)	Adhered to steel, shrinkage 0.004" max
<b>Temperature Resistance</b>	Adhered to acrylic, -40°F to +176°F, no variation
<b>Adhesive Power*</b> (FINAT TM-1, after 24h)	3.65 lb/in glass 4.11 lb/in acrylic
<b>Tensile Strength</b> (DIN EN ISO 527)	Along: Min. 17 MPa Across: Min. 17 MPa
<b>Elongation at Break</b> (DIN EN ISO 527)	Along: Min. 120% Across: Min. 120%
<b>Resistance to cleaning agents</b>	Adhered to acrylic glass, 8h in washalcalics (0,5% household cleaning agents) in room temperature and in 149°F, no variation
<b>Shelf Life**</b>	2 years
<b>Minimum Life Expectancy***</b>	10 years
<b>Minimum Application Temperature</b>	46°F
<b>Available Lengths</b> <b>Available Widths</b>	150' (50-yard) and 30' (10-yard) 48"
<b>Recommended Application Tapes</b>	ORATAPE® Series HT55, MT95, MT72, MT80P

\*average

\*\* in original packaging, at 68°F and 50% relative humidity

\*\*\* standard central European climate

### Note

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 completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. Films with structured surface are naturally more sensitive than the unstructured. Accordingly, these films are to be treated carefully both in processing and in cleaning. Impurities affect the appearance of structured films and require more frequent cleaning. Furthermore the application information published by ORAFOL is to be considered. The batch traceability according to ISO 9001 is possible on the basis of the roll number.

### IMPORTANT NOTICE

All ORACAL® 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 ORACAL® 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 ORACAL® 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. WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. ORACAL® is a registered trademark of ORAFOL Europe GmbH.



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