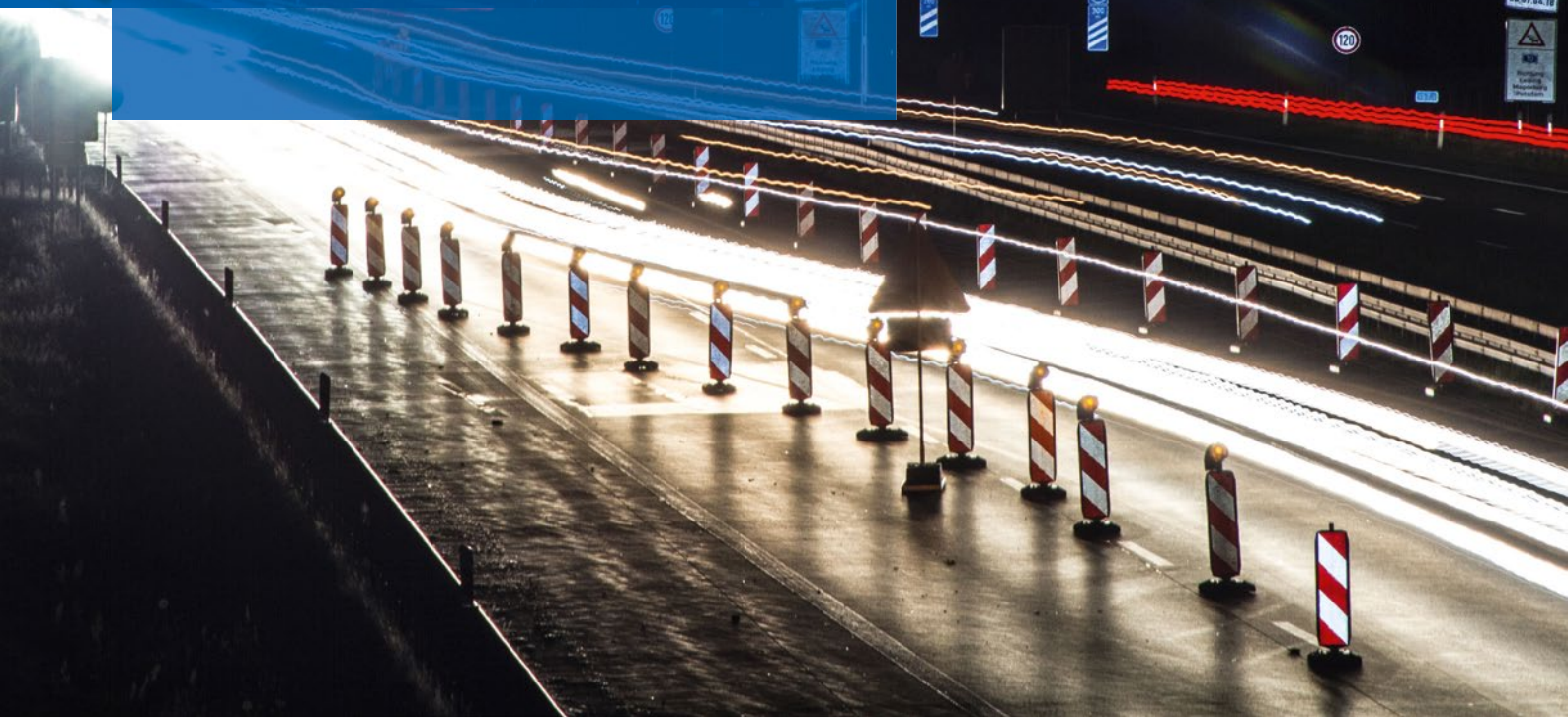Reflective Solutions

Traffic Signs & Construction Zones

Engineered to Save Lives™

ORAFOL

ORAFOL Europe GmbH

Headquarters and production facility

ORAFOL is one of the world's leading manufacturers of innovative self-adhesive graphic films, reflective materials and adhesive tape systems. The international ORAFOL GROUP is headquartered just outside the city gates of Berlin, in Oranienburg.

ORAFOL's Worldwide Locations

ORAFOL Canada
Oakville

ORAFOL Americas
Rochester, USA

Kay Automotive Graphics
Lake Orion, USA

ORAFOL Americas
Black Creek, USA

Kay Gráficas Automotrices
Saltillo, Mexico

NUPRO Advanced TPU Films
South Deerfield, USA

ORAFOL Americas
Avon, USA

ROWLAND Advanced Polymer Films
Wallingford, USA

ORAFOL Europe
Waterford, Ireland

Kay Premium Marking Films
Newport, UK

ORAFOL Turkey
Istanbul

ORAFOL Russia
Pskov

ORAFOL Europe, Headquarters
Oranienburg, Germany

ORAFOL Fresnel Optics
Apolda, Germany

ORAFOL India
New Delhi

ORAFOL Middle East
Dubai

ORAFOL China
Xiamen

ORAFOL Japan
Tokyo

ORAFOL Taiwan
Taipei

ORAFOL Safety Systems
Johannesburg, South Africa

ORAFOL Australia
Perth

ORAFOL Australia
Adelaide

ORAFOL Australia
Melbourne

ORAFOL Australia
Sydney

ORAFOL Australia
Brisbane

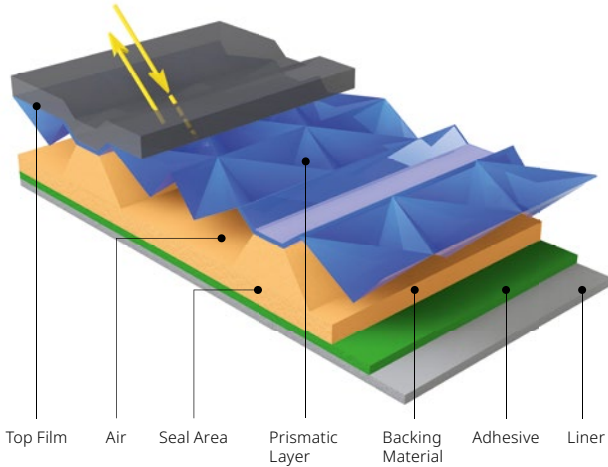# Reflective Solutions for Traffic Signs & Construction Zones

Find the right solution for your needs
ORAFOL offers a complete product range for the manufacture of traffic signs. The range includes all grades in both prismatic and glass bead materials.
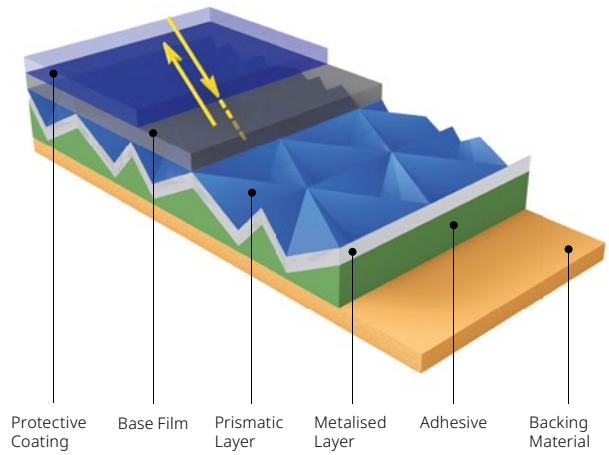
Principles of Retroreflection

Prismatic Air-backed Construction
Design C

| Top Film | Air | Seal Area | Prismatic Layer | Backing Material | Adhesive | Liner |

Prismatic Metalised Construction
Design C

| Protective Coating | Base Film | Prismatic Layer | Metalised Layer | Adhesive | Backing Material |

Embedded Glass Bead Construction
Design A

Top Film Holding Layer

| Glass Bead | Adhesive | Space Coating | Metalised Layer | Liner |
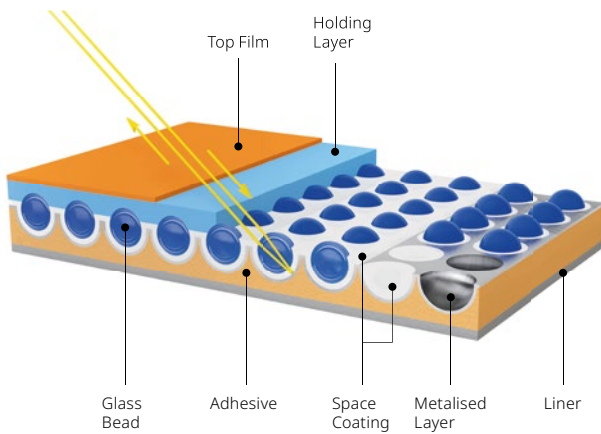
Encapsulated Glass Bead Construction
Design B

Top Film

| Glass Bead | Air | Holding Layer | Seal Area | Backing Material | Metalised Layer | Adhesive | Liner |
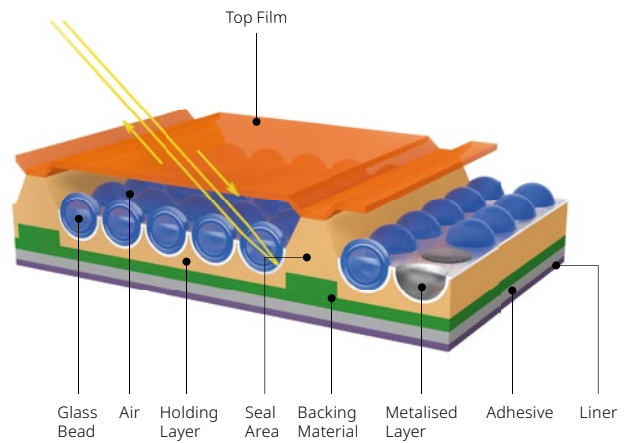
Prismatic Films for Traffic Signs

Product	Specification	Class	Design	Certification	Service Life	Standard Colours	Fluorescent Colours	Translucent
ORALITE® 6910	EN 12899-1	RA3B	C	CE	12 years **			-
ORALITE® 6910T	EN 12899-1	RA3B	C	-	12 years **			✓
ORALITE® 7900	ASTM D4956	type IX	C	-	12 years **			-
ORALITE® 7910	ASTM D4956	type IX	C	-	12 years **			-
ORALITE® 9910	EN 12899-1 ASTM D4956	type XI	C	CE	12 years **			-
ORALITE® 5910	EN 12899-1	RA2	C	CE	10 years		*	-
ORALITE® 5900	EN 12899-1 ASTM D4956	RA2 type IV	C	-	10 years			-
ORALITE® 6710	EN 12899-1 ASTM D4956	RA1 type I	C	CE	7 years		-	-

*Colour 029 fluorescent yellow-green is not CE certified
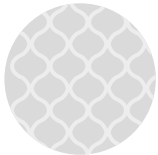** Non-fluorescent colours only

Pattern Guide

ORALITE® 9910 Brilliant Grade Premium
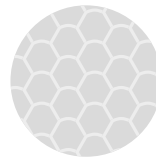
ORALITE® 5910 High Intensity Prismatic Grade
ORALITE® 5900 High Intensity Prismatic Grade

ORALITE® 6910 Brilliant Grade
ORALITE® 6910T Brilliant Grade Translucent
ORALITE® 7900 Brilliant Grade
ORALITE® 7910 Brilliant Grade

ORALITE® 6710 Engineer Prismatic Grade

Engineered to Save Lives™

ORALITE® reflective films
for all types of permanent traffic signs

ORAFOL is one of the world's preferred and trusted suppliers of quality reflective sheeting – Made in Germany.

With the introduction of ORALITE® 9910 Brilliant Grade Premium the range now includes materials for production of all types of permanent traffic signs, regardless of whether the requirement calls for European CE approval or American ASTM.

ORALITE® 9910 Brilliant Grade Premium has been specifically designed and developed to meet the requirements of ASTM Type XI, which also in many countries outside of the US is the standard for large highway and gantry signs.

NEW!
ORALITE® PRODUCT

Brilliant Grade Premium

ORALITE® 9910

ASTM D4956 approved ORALITE® prismatic grade for permanent traffic signs.

Product benefits include:
· High reflective performance
· Highest degree of weather resistance
· 12 years outdoor service life*
· Available in fluorescent colours for enhanced daytime visibility
· Surface of UV stabilised acrylic film
· Compliance to ASTM D4956 type XI
· CE certified following the European Assessment Document EAD 120001-01-0106 for the manufacturing of permanent fixed vertical road traffic signs according EN 12899-1

· Excellent printability
  Screen printing with ORALITE® 5018
  UV digital printing on ORALITE® UV Traffic Sign Printer, with ORALITE® 5019i Digital Printing Ink
· Lettering film: ORALITE® 5081
· Transparent film: ORALITE® 5061
· ORALITE® 9910 comes with a watermark

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 9910	White, yellow, orange, red, green, blue, brown, fluorescent yellow, fluorescent yellow-green, fluorescent orange	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m Special widths available	12 Years*

* Non-fluorescent colours only

7

Brilliant Grade

ORALITE® 6910

For traffic signs for long-term outdoor exposure.

CE

Product benefits include:

· High reflective performance
· Highest degree of weather resistance
· Up to 12 years outdoor service life*
· Available in fluorescent colours for enhanced daytime visibility
· Surface of high performance acrylic film
· Compliance to EN 12899-1, DIN 67520-4, Table 5
· ORALITE® 6910 is CE-certified

· Class RA3, design C
· Excellent printability
  Screen printing with ORALITE® 5018
  UV digital printing on ORALITE® UV Traffic Sign
  Printer, with ORALITE® 5019i Digital Printing Ink
· Lettering Film: ORALITE® 5081
· Transparent Film: ORALITE® 5061

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 6910	White, yellow, orange, red, green, blue, brown, fluorescent yellow, fluorescent yellow-green, fluorescent orange	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m Special widths available	12 Years*

* Non-fluorescent colours only

Brilliant Grade Translucent

ORALITE® 6910T

Product benefits include:

· Highly translucent and with perfect light scattering
· High reflective performance
· Up to 12 years outdoor service life (10 years for fluorescent colours)
· Surface of UV stabilised acrylic front film
· Reflective properties according to DIN 67520

· Class RA3B, design C
· Excellent printability
  Screen printing with ORALITE® 5018
  UV digital printing on ORALITE® Traffic Sign Printer,
  with ORALITE® 5019i Digital Printing Ink
· Transparent film: ORALITE® 5061

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 6910T	White, yellow, fluorescent yellow, fluorescent yellow-green	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m Special widths available	12 Years*

* Non-fluorescent colours only

Brilliant Grade

ORALITE® 7900 / 7910

ASTM D4956 approved ORALITE® prismatic grade for permanent traffic signs.

Product benefits include:

· High reflective performance
· Highest degree of weather resistance
· 12 years outdoor service life*
· Available in fluorescent colours for enhanced daytime visibility
· Surface of UV stabilised acrylic film
· Compliance to ASTM D4956 type IX

· Excellent printability
  Screen printing with ORALITE® 5018
  UV digital printing on ORALITE® UV Traffic Sign
  Printer, with ORALITE® 5019i Digital Printing Ink
· Lettering film: ORALITE® 5081
· Transparent film: ORALITE® 5061
· ORALITE® 7910 comes with a watermark

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 7900 / 7910	White, yellow, orange, red, green, blue, brown, fluorescent yellow, fluorescent yellow-green, fluorescent orange	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m Special widths available	12 Years*

* Non-fluorescent colours only

High Intensity Prismatic (HIP) Grade

ORALITE® 5900 / 5910

For long term outdoor applications.

Product benefits include:
· High reflective performance
· Weather resistant
· Surface of high performance acrylic film
· Compliance to EN 12899-1 and
  5900: ASTM D4956 type IV

· ORALITE® 5910 is CE-certified
· Class RA2, design C
· Excellent printability (Screen printing, UV printing and
  Eco solvent printing)
· Lettering Film: ORALITE® 5081
· Transparent Film: ORALITE® 5061

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5900	White, yellow, orange, red, green, blue, brown, fluorescent yellow, fluorescent yellow-green	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m Special widths available	10 Years*
ORALITE® 5910	White, yellow, orange, red, green, blue, brown, fluorescent yellow, fluorescent yellow-green* With watermark	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i) Eco Solvent Printing (ink: ORALITE® 5017)	1235 mm x 50 m 610 mm x 50 m Special widths available	10 Years*

* Colour 029 fluorescent yellow-green is not CE certified

Engineer Prismatic Grade

ORALITE® 6710

Product benefits include:
· Equivalent to Engineer Grade brightness
· High degree of weather resistance
· 7 years service life
· Surface of UV stabilised acrylic
· Compliance to EN 12899-1 (R1), DIN 67520 (RA1), and
  ASTM D4956 type I

· ORALITE® 6710 is CE-certified
· Class RA1, design C
· Excellent printability
  Screen printing with ORALITE® 5018
  UV digital printing on ORALITE® Traffic Sign Printer,
  with ORALITE® 5019i Digital Printing Ink

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 6710	White, yellow, orange, red, green, blue, brown	Screen Printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m Special widths available	7 Years

ORALITE® prismatic films
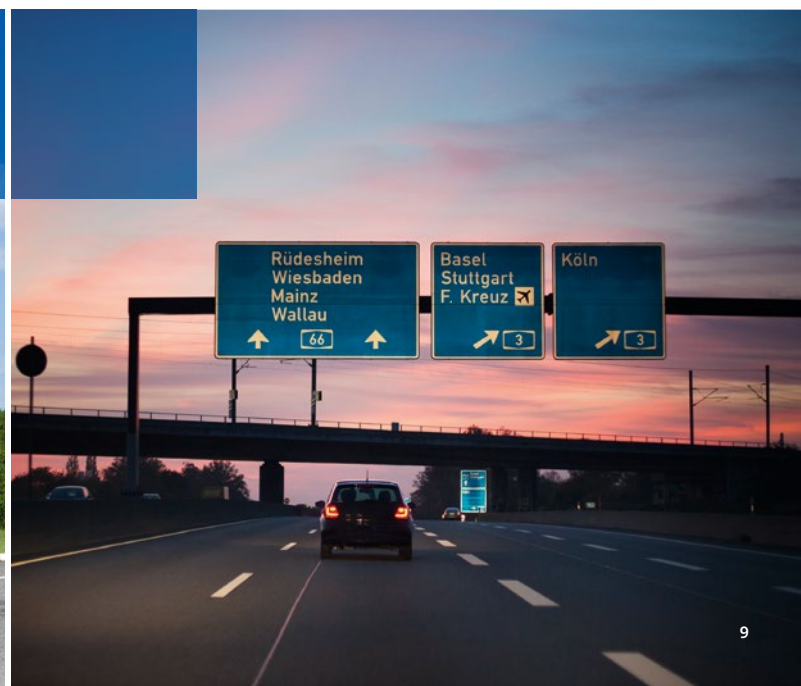
Glass Bead Films for Traffic Signs

Product	Specification	Class	Design	Certification	Service Life	Colours
ORALITE® 5810	EN 12899-1	RA2	B	CE	10 years	
ORALITE® 5800	EN 12899-1 ASTM D4956	RA2 type III	B	-	10 years	
ORALITE® 5710	EN 12899-1	RA1	A	CE	7 years	
ORALITE® 5700	EN 12899-1 ASTM D4956	RA1 type I	A	-	7 years	
ORALITE® 5510	EN 12899-1	RA1	A	CE	7 years	
ORALITE® 5500	EN 12899-1 ASTM D4956	RA1 type I	A	-	7 years	
ORALITE® 5400	EN 12899-1 ASTM D4956	RA1 type I	A	-	4 years	
ORALITE® 5300	EN 12899-1 ASTM D4956	RA1 type I	A	-	7 years	
ORALITE® 5200*	-	-	A	-	3 years	

*) Also available with *Rapid*Air® (ORALITE® 5200RA)

Pattern Guide
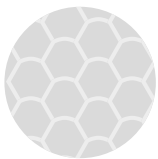
ORALITE® 5810 High Intensity Grade
ORALITE® 5800 High Intensity Grade
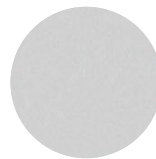
ORALITE® 5710 Engineer Grade Premium
ORALITE® 5700 Engineer Grade Premium
ORALITE® 5510 Engineer Grade
ORALITE® 5500 Engineer Grade
ORALITE® 5400 Commercial Grade
ORALITE® 5300 Commercial Grade
ORALITE® 5200 / 5200RA Economy Grade

Engineered to Save Lives™

High Intensity Grade

ORALITE® 5800 / 5810

Long term outdoor applications

Product benefits include:
· High performance acrylic film
· Weather resistant
· Compliance to EN 12899-1 and 5800: ASTM D4956 type III
· ORALITE® 5810 is CE-certified
· Class RA2, design B

· Excellent printability (Screen printing)
· Excellent adhesion to metallic surfaces (e.g. aluminium and galvanised steel)
· Lettering Film: ORALITE® 5081
· Transparent Film: We recommend ORALITE® 5061

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5800	White, yellow, orange, red, green, blue, brown	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i) Eco Solvent Printing (ink: ORALITE® 5017)	1235 mm x 50 m 610 mm x 50 m Special widths available	10 Years
ORALITE® 5810	White, yellow, orange, red, green, blue, brown With watermark	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i) Eco Solvent Printing (ink: ORALITE® 5017)	1235 mm x 50 m 610 mm x 50 m Special widths available	10 Years

Engineer Grade Premium

ORALITE® 5700 / 5710

Long term outdoor applications

Product benefits include:
· Equivalent to Engineer Grade brightness
· High degree of weather resistance
· 7 years service life
· Surface of UV stabilised acrylic
· Compliance to EN 12899-1 (R1), DIN 67520 (RA1), and ASTM D4956 type I
· ORALITE® 5710 is CE-certified

· Class RA1, design C
· Excellent printability
  Screen printing with ORALITE® 5018
  UV digital printing on ORALITE® Traffic Sign Printer, with ORALITE® 5019i Digital Printing Ink

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5700 **PREMIUM**	White, yellow, orange, red, green, blue, brown, black	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i) Eco Solvent Printing (ink: ORALITE® 5017)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m Special widths available	7 Years
ORALITE® 5710 **PREMIUM**	White, yellow, orange, red, green, blue, brown With watermark	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i) Eco Solvent Printing (ink: ORALITE® 5017)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m Special widths available	7 Years

Engineer Grade
ORALITE® 5500 / 5510

Long term outdoor applications

CE

Product benefits include:
· Alkyd resin surface
· Weather resistant
· Compliance to EN 12899-1 and 5500: ASTM D4956 type I
· ORALITE® 5510 is CE-certified
· Class RA1, design A

· Excellent adhesion to metallic surfaces (e.g. aluminium and galvanised steel)
· Lettering Film: ORALITE® 5071
· Transparent Film: We recommend ORALITE® 5051

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5500	White, yellow, orange, red, green, blue, brown, black	Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m Special widths available	7 Years
ORALITE® 5510	White*, yellow*, orange, red, green, blue, brown With watermark	Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m Special widths available	7 Years

Commercial Grade
ORALITE® 5400 / 5300

Medium term outdoor applications

Product benefits include:
· Ideal 'allround' reflective films
· Weather resistant
· Excellent adhesion to metallic surfaces (e.g. aluminium and galvanised steel)
· Class RA1, design A
· Excellent printability (Screen printing)

· ORALITE® 5400 - PVC top surface for max. flexibility, ink jet printing (e.g. UV digital and Eco Solvent printable) and excellent cutting properties
· Compliance to ASTM D4956 type I
· ORALITE® 5300 - Alkyd resin surface

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5400	White, yellow, orange, red, green, blue	Ink jet printing Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 610 mm x 50 m	4 Years
ORALITE® 5300	White, yellow, orange, red, green, blue	Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m	7 Years

Commercial Grade
ORALITE® 5200 / 5200RA

For sign boards, lettering, markings, symbols and graphic applications

Product benefits include:
· With a basic level of reflective performance
· Short term outdoor use
· Cast PVC polymer blend surface
· Flexible
· Excellent printability (Screen printing and ink jet printing)

· Excellent adhesion to metallic surfaces (e.g. aluminium and galvanised steel)
· ORALITE® 5200RA comes with *Rapid*Air® for extra easy application

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5200 / 5200RA	White, yellow, orange, red, green, blue	Screen printing (ink: ORALITE® 5018) Ink jet printing	1235 mm x 50 m 610 mm x 50 m	3 Years

ORALITE® UV Traffic Sign Printing System

UV digital printing with the H1650i LED, H 2050i LED, RTR 3200i LED and ORALITE® 5019i Ink

Digital printing technology with UV curing inks:
· For printing on various material surfaces
· Environmental friendly operation
· No solvent evaporation
· Digital printing for optimised print-on-demand manufacturing as well as for high volume printing

Key benefits of the LED solutions:
· Lower energy consumption
· Constant UV output over the operating life
· Lower service and consumable costs
· Fast drying of ink

ORALITE® *ECO* Traffic Printer

Based on OKI ColorPainter M-64S

The ORALITE® *ECO* Traffic Printer is the eco-friendly printing system for the production of road traffic signs – both for temporary and permanent applications. The system consists of the OKI Color-Painter M-64s and the Greenguard Gold certified OKI low odor eco solvent SX inks. In combination with ORAFOL's printing profiles especially developed for the traffic sign application the ORALITE® *ECO* Traffic Printer addresses the diverse requirements of the outdoor signage industry.

The versatile, large format ORALITE® *ECO* Traffic Printer system is the first choice of the cost-conscious sign maker and combines high quality, high density, high durability results with fast print speeds.

Accessories for Sign Making

Product	Product Type	Durability	Colours	Other
ORALITE® 5081	Lettering film	10 years	●	Gloss + matt
ORALITE® 5071	Lettering film	7 years	●	Gloss + matt
ORALITE® 5061	Transparent film	10 years	○●●●●●●	Gloss
ORALITE® 5062	Transparent film	7 years	○	Gloss
ORALITE® 5051	Transparent film	7 years	○●●●	Gloss
ORALITE® 5090	Anti-Dew film	10* years	○	Gloss
ORALITE® 5095	Anti-Graffiti film	10 years	○	Gloss
ORALITE® 5097	Astifol® Anti-Sticker film	10 years	○	-
ORALITE® 5017	Eco solvent printing ink	-	●●●●●●●	-
ORALITE® 5018	Screen printing ink	-	●●●●●●●	-
ORALITE® 5019i	UV digital printing ink	-	-	-
ORALITE® MT95	Application tape	-	-	-
ORALITE® MT72	Application tape	-	-	-
ORALITE® LT72	Application tape	-	-	-

* 5 years functionality, 10 years durability

Lettering Films
ORALITE® 5081 / 5071

Product	Colour range	Recommended for use on	Roll sizes	Service Life
ORALITE® 5081	Black (Gloss+Matt) With watermark	ORALITE® 9910 · ORALITE® 7910 · ORALITE® 6910 ORALITE® 5910/5900 · ORALITE® 5810/5800	1220 mm x 50 m 610 mm x 50 m	10 Years
ORALITE® 5071	Black (Gloss+Matt) With watermark	ORALITE® 6710 · ORALITE® 5710/5700 ORALITE® 5510/5500	1220 mm x 50 m 610 mm x 50 m	7 Years

Clear Transparent Films - for UV Digital Printing
ORALITE® 5061 / 5062 / 5051

Product	Colour range	Recommended for use on	Roll sizes	Service Life
ORALITE® 5061*	Clear	ORALITE® 9910 · ORALITE® 7910 · ORALITE® 6910 ORALITE® 5910/5900 · ORALITE® 5810/5800	1235 mm x 50 m	10 Years
ORALITE® 5062*	Clear	ORALITE® 5710/5700 · ORALITE® 6710	1235 mm x 50 m	7 Years
ORALITE® 5051	Clear	ORALITE® 5510/5500 · ORALITE® 5300/5400	1235 mm x 50 m	Up to 3 Years

*The film is approved for application on CE certified ORALITE® films

Coloured Transparent Films
ORALITE® 5061 / 5051

Product	Colour range	Recommended for use on	Roll sizes	Service Life
ORALITE® 5061*	Yellow, orange, red, green, blue, brown With watermark	ORALITE® 9910 · ORALITE® 7910 · ORALITE® 6910 ORALITE® 5910/5900 · ORALITE® 5810/5800	1235 mm x 50 m 610 mm x 50 m	10 Years
ORALITE® 5051	Yellow, red, blue other colours on request	ORALITE® 6710 · ORALITE® 5710/5700 ORALITE® 5510/5500	1235 mm x 50 m 610 mm x 50 m	7 Years

*The film is approved for application on CE certified ORALITE® films

Inks and Application Tapes

Screen Printing ink

ORALITE® 5018

Product	Type	Description	Bottle sizes
ORALITE® 5018	Screen printing Ink	One-component Screen printing ink, suitable for printing on all ORALITE® reflective films.	800 ml, 2400 ml, 3750 ml, 5000 ml

UV Digital Printing Ink

ORALITE® 5019i

Product	Type	Description	Bottle sizes
ORALITE® 5019i	UV Digital Printing Ink	For use with the ORALITE® UV Traffic Sign Printer, on all ORALITE® grade films.	2 x 750 ml

Eco solvent printing ink

ORALITE® 5017

Product	Type	Description	Bottle sizes
ORALITE® 5017	Eco Solvent printing Ink	For use with the ORALITE® *ECO* Traffic Printer	1500 ml

Application Tapes

ORATAPE® MT95 / MT72 / LT72

Product	Type	Description	Bottle sizes
ORATAPE® MT95	Application Tape	Highly transparent polyethylene-based transfer film.	1220 mm x 50 m / 100 m 1000 mm x 50 m / 100 m 500 mm x 50 m / 100 m
ORATAPE® MT72 / LT72	Application Tape	Semi-transparent transfer paper.	1220 mm x 50 m / 100 m 1000 mm x 50 m / 100 m 500 mm x 50 m / 100 m

Engineered to Save Lives™

Special Films

Dew on traffic signs?
We have the solution!

With ORALITE® 5090 Anti-Dew Film applied to road signs, dew will no longer stand in the way of visibility in the early morning hours.

With Anti-Dew Film

Without Anti-Dew Film

Anti-Dew Film

ORALITE® 5090

Product	Type	Description	Roll sizes	Service Life
ORALITE® 5090	Anti-Dew Film	Self adhesive transparent specially treated acrylic film. Correctly applied, the film guarantees undisturbed equal retroreflection even in wet conditions.	1235 mm x 50 m	5 Years Functionality, 10 Years Durability

With Anti-Graffiti Film

Without Anti-Graffiti Film

Graffiti on traffic signs?
We have the solution!

Removal of graffiti vandalism on traffic signs is difficult, time consuming and expensive. With ORALITE® 5095 the removal process gets easier and can be done with less harmful cleaning fluids.

Anti-Graffiti Film

ORALITE® 5095

Product	Type	Description	Roll sizes	Service Life
ORALITE® 5095	Anti-Graffiti Film**	Self adhesive transparent fluoropolymer film developed to protect printed and unprinted ORALITE® reflective films against graffiti.	1235 mm x 50 m	10 Years

**For optimal processing the film is delivered with an application tape

NEW!
ORALITE® PRODUCT

A common problem that can be solved

Unfortunately it has become popular to place stickers on road signs. What began in stadiums, service stations and pit-stop-areas next to highways, can nowadays be seen in any city center: Stickers that have been applied onto signs.

To encounter this danger to traffic safety, these stickers have to be removed from the traffic signs quickly. However, this task is easier said than done. Have you ever experienced how much time and effort that is required by roadworkers in order to clean traffic signs for stickers?

In many cases, toxic substances are used to combat the sticky glue of the stickers. This may not only be ineffective and cause irreversible damage to the top- aminate of the road sign.

With Astifol®
Anti-StickerFilm

Without Astifol®
Anti-StickerFilm

Stickers on traffic signs? We have the solution!

ORALITE® 5097 Astifol® Anti-Sticker Film, now available to all sign makers for application to the surface of traffic signs upon customer request, will free road workers from the nasty cleaning task.

Stickers simply do not stick to signs fitted with the anti-sticker film.

Astifol® Anti-Sticker Film
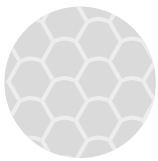
ORALITE® 5097

Self-adhesive, transparent fluoropolymeric anti-sticker film for protection of printed as well as unprinted ORALITE® materials.

Product	Type	Description	Roll sizes	Service Life
ORALITE® 5097	Fluoropolymeric film	Protective anti-sticker film for ORALITE® films	1240 mm x 50 m	10 Years

Films for Temporary Signs

Product	Class	Design	Service life	Standard Colours	Fluorescent Colours	Construction	Other
ORALITE® 5931	RA2	C	5 years			Prismatic	-
ORALITE® 5931M	RA2	C	5 years		-	Prismatic	Metalised
ORALITE® 5831	RA2	B	5 years		-	Glass Bead	-
ORALITE® 5431	RA1	A	4 years		-	Glass Bead	-
ORALITE® 5930	RA2	C	5 years			Prismatic	-
ORALITE® 5930MFlex	RA2	C	5 years		-	Prismatic	Flexible/Metalised
ORALITE® 5930M	RA2	C	5 years		-	Prismatic	Metalised
ORALITE® 5830	RA2	B	5 years		-	Glass Bead	-
ORALITE® 5430	RA1	A	4 years		-	Glass Bead	-
ORALITE® 5960	RA2	C	5 years			Prismatic	-
ORALITE® 5860	RA2	B	5 years		-	Glass Bead	-

Pattern Guide

ORALITE® 5931 Prismatic Construction Grade
ORALITE® 5831 High Intensity Construction Grade
ORALITE® 5930 Prismatic Construction Grade
ORALITE® 5830 High Intensity Construction Grade
ORALITE® 5960 High Intensity Prismatic Construction Grade
ORALITE® 5860 High Intensity Construction Grade
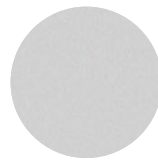
ORALITE® 5431 Construction Grade
ORALITE® 5430 Construction Grade

ORALITE® 5930MFlex Premium Construction Grade
ORALITE® 5931M Prismatic Construction Grade
ORALITE® 5930M Prismatic Construction Grade

Engineered to Save Lives™

Prismatic Construction Grade

ORALITE® 5931

Short and medium term outdoor applications.

Product benefits include:
· Highly reflective prismatic film, preprinted
· Surface of specially treated PVC film
· Compliance to the requirements for barricades and
  guiding elements

· Class RA2, C
· Excellent adhesion to polyolefinic substrates

Product	Colour range	Printing	Service Life
ORALITE® 5931	White / red*, Yellow / red, Fluorescent yellow-green / red Fluorescent yellow / red, Fluorescent orange / black Preprinted	246 mm x 50 m Also available converted as blanks	5 Years

*Approved by BASt

Prismatic Construction Grade

ORALITE® 5931M

Short and medium term outdoor applications.

Product benefits include:
· Highly reflective prismatic film, preprinted
· Single layer construction with no risk of
  dirt ingress at the edges
· Metalised
· Surface of specially treated PVC film

· Compliance to the requirements for barricades and
  guiding elements
· Class RA2, C
· Excellent adhesion to polyolefinic substrates

Product	Colour range	Printing	Service Life
ORALITE® 5931M	White / red*, White / black Preprinted	246 mm x 50 m	5 Years

*Approved by BASt

High Intensity Construction Grade

ORALITE® 5831

Short and medium term outdoor applications.

Product benefits include:
· Flexible reflective film, preprinted
· Surface of modified acrylic film
· Compliance to the requirements for barricades and
  guiding elements

· Class RA2, B
· Excellent adhesion to polyolefinic substrates

Product	Colour range	Printing	Service Life
ORALITE® 5831	White / red*, Yellow / red, Yellow / black Preprinted	246 mm x 50 m Also available converted as blanks	5 Years

*Approved by BASt

Construction Grade

ORALITE® 5431

Short and medium term outdoor applications.

Product benefits include:
· Flexible reflective film, preprinted
· With a surface of cast PVC copolymer
· Compliance to the requirements for barricades and
  guiding elements

· Class RA1, A
· Excellent adhesion to polyolefinic substrates

Product	Colour range	Printing	Service Life
ORALITE® 5431	White / red*, Yellow / red, Yellow / black Preprinted	246 mm x 50 m Also available converted as blanks	4 Years

*Approved by BASt

Premium Construction Grade

ORALITE® 5930MFlex

The extraordinary flexibility allows conforming around edges and tolerates overlapped application.

Product benefits include:
· Highly reflective prismatic film
· Highly flexible

· Metalised, single layer
· Compliance to EN 12899-1 and DIN 67520:2013-10
· Class RA2, design C

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5930MFlex	White	Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 610 mm x 50 m	5 Years

Prismatic Construction Grade

ORALITE® 5930

Short and medium term outdoor applications.

Product benefits include:
· Highly reflective prismatic film
· Fluorescent colours available
· Compliance to requirements for barricades and delineators
· Excellent adhesion to polyolefinic substrates
· Class RA2, design C

Prismatic Construction Grade

ORALITE® 5930M

Short and medium term outdoor applications.

Product benefits include:
· Highly reflective prismatic film
· Single layer construction with no risk of dirt ingress at the edges
· Compliance to requirements for barricades and delineators
· Class RA2, design C
· Metalised

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5930	White, yellow, red, orange, fluorescent yellow, fluorescent yellow-green, fluorescent orange	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m	5 Years
ORALITE® 5930M	White, yellow, red, green	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 610 mm x 50 m	5 Years

High Intensity Construction Grade

ORALITE® 5830

Short and medium term outdoor applications.

Product benefits include:
· Flexible reflective film
· Surface of modified acrylic film

· Digitally printable
· Compliance to requirements for barricades and delineators
· Excellent adhesion to polyolefinic substrates

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5830	White, yellow, orange, red, green, blue	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m	5 Years

Construction Grade

ORALITE® 5430

Short and medium term outdoor applications

Product benefits include:
· Flexible reflective film
· With watermark and a surface of cast PVC copolymer

· Compliance to requirements for barricades and delineators
· Excellent adhesion to polyolefinic substrates

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5430	White, yellow, orange, red, green, blue	Screen printing (ink: ORALITE® 5018) UV Digital Printing (ink: ORALITE® 5019i)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m	4 Years

High Intensity Prismatic (HIP) Construction Grade

ORALITE® 5960

Short and medium term outdoor applications.

Product benefits include:
· High reflective prismatic film
· Weather resistant
· Surface of acrylic film
· Compliance to the requirements for barricades and guiding elements

· Class RA2, design C
· Excellent adhesion to metallic surfaces (e.g. aluminium and galvanised steel)

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5960	White, yellow, orange, red, green, blue, brown, fluorescent yellow-green, fluorescent orange	UV Printing (ink: ORALITE® 5019i) or Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 610 mm x 50 m Special widths available	5 Years

High Intensity Construction Grade

ORALITE® 5860

Short and medium term outdoor applications

Product benefits include:
· Weather resistant
· Surface of modified acrylic film
· Compliance to the requirements for barricades and guiding elements
· Class RA2, design B

· Excellent printability (Screen printing)
· Excellent adhesion to metallic surfaces (e.g. aluminium and galvanised steel)

Product	Colour range	Printing	Roll sizes	Service Life
ORALITE® 5860	White, yellow, orange, red, green, blue	Screen printing (ink: ORALITE® 5018)	1235 mm x 50 m 920 mm x 50 m 760 mm x 50 m 610 mm x 50 m Special widths available	5 Years

Economy Cal

ORALITE® 5021

Easily removable soft PVC film with glossy surface, especially for temporary application onto ORALITE® 5910/5810/5710 reflective film.

Product	Type	Description	Colour	Roll sizes
ORALITE® 5021	PVC film	Easily removable and for temporary applications	Black	1260 mm x 50 m

Containers and Dumpsters

ORALITE® 5951

High performance prismatic film.

Product benefits include:

· Highly reflective prismatic film
· Preprinted
· Weatherproof
· Surface of special treated PVC film

· Compliance to DIN 67520 and DIN 30710
· Class RA2, design C
· BASt approved
· Excellent adhesion to painted surfaces

Product	Colour range	Sheet sizes	Service Life
ORALITE® 5951	White / red	141 mm x 705 mm	5 Years

NEW

Flexible Prismatic Container Marking Grade

ORALITE® 5951M

Flexible high performance prismatic film.

Product benefits include:

· Flexible highly reflective prismatic film
· Preprinted
· Weatherproof

· Compliance to DIN 67520 and DIN 6171
· Class RA2, design C
· BASt approved

Product	Colour range	Sheet sizes	Service Life
ORALITE® 5951M	White / red	141 mm x 705 mm	5 Years

High Intensity Container Marking Grade

ORALITE® 5851

Glass bead construction.

Product benefits include:

· Pre-printed film
· Weatherproof
· Surface of modified acrylic film

· Compliance to DIN 67520 and DIN 30710
· Class RA2, design B
· BASt approved
· Excellent adhesion to painted surfaces

Product	Colour range	Sheet sizes	Service Life
ORALITE® 5851	White / red	141 mm x 705 mm	5 Years

The products are available in packs of pre-cut sheets. Each pack includes 10 full sets (with each set consisting of 4 x left and 4 x right sheets).
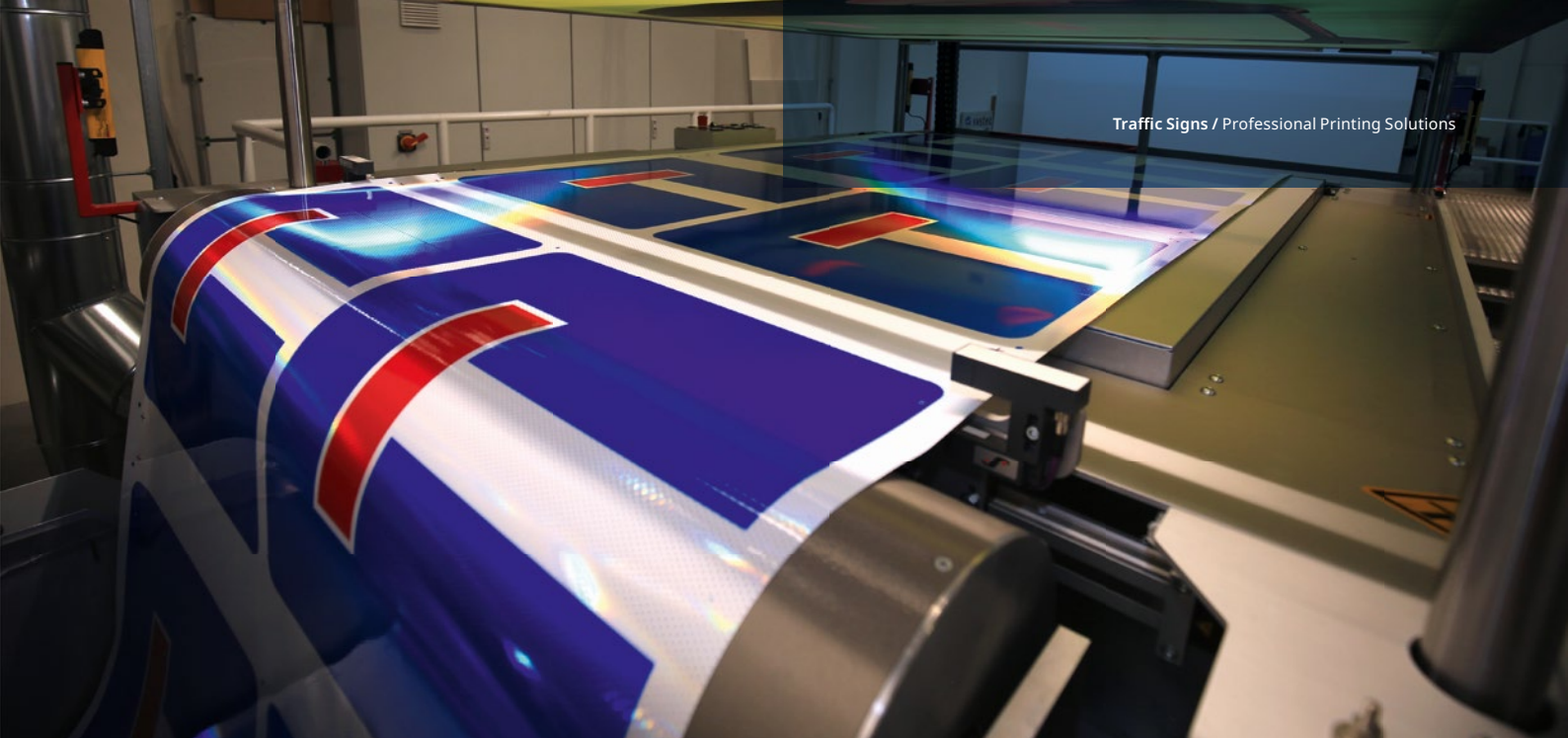
Roll Screen Printing of Sign Faces

Tired of the hassle and high costs of regular screen printing?

Get your pre-printed rolls directly from ORAFOL: Quick. Clean. Efficient.
Large-scale manufacture of traffic sign faces.

Screen printing is the classic, traditional, proven and reliable technology for manufacture of prints on reflective sheeting for traffic signs. Screen printing is most efficient when used for high volume print runs of 100% identical designs.

The alternative to screen printing is digital printing. With digital printing technology you get the special benefits of efficient production together with smaller print runs of the same design, easy access to multiple coloured prints (used in e.g., directional signs, and design prints) and the option of employing functional laminates (such Anti-Dew, Anti-Sticker, Anti-Graffiti). Digital printing offers sign makers the greatest degree of flexibility and eliminates the hassles from screen production.

Each of the two technologies has its own specific strengths, and most sign makers make use of both in their manufacturing process.

Get to know the different options

Product	Type	Print type	Overlay Film
	Roll	No print	Order separately
	Roll	Screen printed	without
	Roll	Digitally printed	Optional: Anti-Dew, Anti-Graffiti, Anti-Sticker
	Pre-cut sign faces	Screen printed partial design (monochrome only)	None
	Pre-cut sign faces	Screen printed full design (multiple colours)	None
	Pre-cut sign faces	Screen printed full design	Optional: Anti-Dew, Anti-Graffiti, Anti-Sticker

Engineered to Save Lives™

Traffic Signs & Construction Zones

ORAFOL Europe GmbH
Orafolstraße 1, D-16515 Oranienburg, Germany

Tel: +49 (0)3301 864-0 / reflective.solutions@orafol.de

Find out more about our products at:
www.orafol.com · www.orafoleurope.com