

**Attachment to Certificate of constancy of performance 0913 - CPR - 2017 / 05
(12 pages)**

The descriptions in this attachment refer to the ETA (Assessment)

- ETA-12/0478 from 2017-07-24,
- ETA-16/0465 from 2016-07-18,
- ETA-16/0466 from 2016-07-18,
- ETA-16/0612 from 2016-11-16,
- ETA-17/0282 from 2017-07-24,
- ETA-18/0598 from 2018-09-06
- ETA-19/0084 from 2019-03-29,
- ETA-19/0085 from 2019-03-29.

The above certified microprismatic retroreflective sheeting ORALITE® 5910 High Intensity Prismatic Grade to be used for fixed, vertical road traffic signs is admitted for the following original dyed colours:

Original dyed retroreflective sheeting:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor ETA 12/0478 tab. A.1 | Coefficient of retroreflection ETA 12/0478 tab. A.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 12/0478 tab. A.4 and A.5 |
| White | ORALITE® 5910-010 High Intensity Prismatic Grade | pass | pass | pass | pass |
| Yellow | ORALITE® 5910-020 High Intensity Prismatic Grade | pass | pass | pass | pass |
| Red | ORALITE® 5910-030 High Intensity Prismatic Grade | pass | pass | pass | pass |
| Blue | ORALITE® 5910-050 High Intensity Prismatic Grade | pass | pass | pass | pass |
| Green | ORALITE® 5910-060 High Intensity Prismatic Grade | pass | pass | pass | pass |
| Brown | ORALITE® 5910-080 High Intensity Prismatic Grade | pass | pass | pass | pass |

The above certified microprismatic retroreflective sheeting ORALITE® 5910 High Intensity Prismatic Grade to be used for fixed, vertical road traffic signs is accepted to be coloured by the below listed materials:

Lettering Film:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|----------------------------------|---|---|--|---|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| Black | ORALITE® 5081-070 Lettering Film | NR1 | - | pass | pass |

Screen Printing Colours:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|---|---|---|---|
| | | Daylight chromaticity & luminance factor ETA 12/0478 tab. B.1 | Coefficient of retroreflection ETA 12/0478 tab. B.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 12/0478 tab. B.4 and B.5 |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Yellow | ORALITE® 5018-020 Screen Printing Ink | pass | pass | pass | pass |
| Red | ORALITE® 5018-030 Screen Printing Ink | pass | pass | pass | pass |
| Blue | ORALITE® 5018-050 Screen Printing Ink | pass | pass | pass | pass |
| Green | ORALITE® 5018-060 Screen Printing Ink | pass | pass | pass | pass |
| Orange | ORALITE® 5018-035 Screen Printing Ink | pass | pass | pass | pass |

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Black | ORALITE® 5018-070 Screenprinting Ink | NR1 | - | pass | pass |

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------------------|---|--|--|---|--|
| | | Daylight chromaticity & luminance factor ETA 18/0598 annex A | Coefficient of retroreflection ETA 18/0598 annex A | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 18/0598 annex A |
| on yellow sheeting | ORALITE® 5910-020 High Intensity Prismatic Grade and | | | | |
| Red | ORALITE® 5018-030 Screen Printing Ink | pass | pass | pass | pass |

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------------------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| on yellow sheeting | ORALITE® 5910-020 High Intensity Prismatic Grade and | | | | |
| Black | ORALITE® 5018-070 Screenprinting Ink | NR1 | - | pass | pass |

Screen Printing Colours with transparent protective laminate ORALITE® 5097-000 Astifol® Anti-Sticker Film:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|--|---|---|--|---|
| | | Daylight chromaticity & luminance factor ETA 19/0085 tab. A.1 | Coefficient of retroreflection ETA 19/0085 tab. A.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 19/0085 tab. A.4 and A.5 |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Yellow | ORALITE® 5018-020 Screen Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Red | ORALITE® 5018-030 Screen Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Blue | ORALITE® 5018-050 Screen Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Green | ORALITE® 5018-060 Screen Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Orange | ORALITE® 5018-035 Screen Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Brown | ORALITE® 5018-080 Screen Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |

Coloured Laminates:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor ETA 12/0478 tab. C.1 | Coefficient of retroreflection ETA 12/0478 tab. C.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 12/0478 tab. C.4 and C.5 |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Transparent | ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Yellow | ORALITE® 5061-020 Transparent Film | pass | pass | pass | pass |
| Red | ORALITE® 5061-030 Transparent Film | pass | pass | pass | pass |
| Blue | ORALITE® 5061-050 Transparent Film | pass | pass | pass | pass |
| Green | ORALITE® 5061-060 Transparent Film | pass | pass | pass | pass |
| Orange | ORALITE® 5061-035 Transparent Film | pass | pass | pass | pass |
| Brown | ORALITE® 5061-080 Transparent Film | pass | pass | pass | pass |

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|--|--|--|--|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 16/0465 annex A | Coefficient of retroreflection evaluation according to ETA 16/0465 annex A | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 16/0465 annex A |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Darkgreen | ORALITE® 5061-625 Transparent Film | pass | pass | pass | pass |

Digital Printing:

The digital printing is processed on white retroreflective sheeting with the digital printing systems ORALITE® UV Digital Traffic Sign Printer or AGFA ANAPURNA M2050 High-Speed-UV-Inkjet-System or AGFA ANAPURNA M2050i High-Speed-UV-Inkjet-System and is to be laminated with a transparent protective laminate.

ORALITE® 5019 UV Digital Printing Ink:

Transparent protective laminate ORALITE® 5061-000 Transparent Film:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|--|---|---|--|---|
| | | Daylight chromaticity & luminance factor ETA 17/0282 tab. A.1 | Coefficient of retroreflection ETA 17/0282 tab. B.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 17/0282 tab. C.1 and D.1 |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Yellow | ORALITE® 5019-020 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Red | ORALITE® 5019-030 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019-050 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Green | ORALITE® 5019-060 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019-035 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019-080 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Grey | ORALITE® 5019-073 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |

Transparent protective laminate ORALITE® 5090-000 Anti-Dew Film:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|--|--|--|--|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 16/0466 annex A | Coefficient of retroreflection evaluation according to ETA 16/0466 annex A | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 16/0466 annex A |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Yellow | ORALITE® 5019-020 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Red | ORALITE® 5019-030 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019-050 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019-035 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019-080 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Grey | ORALITE® 5019-073 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |

Transparent protective laminate ORALITE® 5095-000 Anti-Graffiti Film:

| Colour on white sheeting | Name of the product | Visibility characteristics | | Durability | |
|--------------------------------|--|--|--|--|--|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 16/0466 annex B | Coefficient of retroreflection evaluation according to ETA 16/0466 annex B | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 16/0466 annex B |
| Yellow | ORALITE® 5019-020 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Red | ORALITE® 5019-030 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019-050 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Green | ORALITE® 5019-060 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019-035 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019-080 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Darkgreen | ORALITE® 5019-625 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Grey | ORALITE® 5019-073 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |

Transparent protective laminate ORALITE® 5097-000 Astifol® Anti-Sticker Film:

| Colour on white sheeting | Name of the product | Visibility characteristics | | Durability | |
|--------------------------------|--|---|---|--|---|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 19/0084 tab. A.1 | Coefficient of retroreflection evaluation according to ETA 19/0084 tab. A.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 19/0084 tab. A.4 and A.5 |
| Yellow | ORALITE® 5019-020 UV Digital Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Red | ORALITE® 5019-030 UV Digital Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019-050 UV Digital Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Green | ORALITE® 5019-060 UV Digital Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019-035 UV Digital Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019-080 UV Digital Printing Ink and ORALITE® 5097-000 Astifol® Anti-Sticker Film | pass | pass | pass | pass |

Digital Printing Black:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|--|---|---|--|---|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| Black | ORALITE® 5019-070 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | NR1 | - | pass | pass |
| Black | ORALITE® 5019-070 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | NR1 | - | pass | pass |
| Black | ORALITE® 5019-070 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | NR1 | - | pass | pass |
| Black | ORALITE® 5019-070 UV Digital Printing Ink * | NR1 | - | pass | pass |

* If the colour Black is printed solely, this material combination is admitted to be used without the transparent laminate.

As a variant of black (not retroreflective), a print of pattern can be printed to produce greyscale (retroreflective).

ORALITE® 5019i UV Digital Printing Ink:

Transparent protective laminate ORALITE® 5061-000 Transparent Film:

| Colour on white sheeting | Name of the product | Visibility characteristics | | Durability | |
|--------------------------------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 16/0612 annex A | Coefficient of retroreflection evaluation according to ETA 16/0612 annex A | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 16/0612 annex A |
| Yellow | ORALITE® 5019i-020 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Red | ORALITE® 5019i-030 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019i-050 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Green | ORALITE® 5019i-060 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019i-035 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019i-080 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Darkgreen | ORALITE® 5019i-625 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |
| Grey | ORALITE® 5019i-073 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | pass | pass | pass | pass |

Transparent protective laminate ORALITE® 5090-000 Anti-Dew Film:

| Colour on white sheeting | Name of the product | Visibility characteristics | | Durability | |
|--------------------------------|--|---|---|--|---|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 16/0612 annex B | Coefficient of retroreflection evaluation according to ETA 16/0612 annex B | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 16/0612 annex B |
| Yellow | ORALITE® 5019i-020 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Red | ORALITE® 5019i-030 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019i-050 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Green | ORALITE® 5019i-060 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019i-035 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019i-080 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Darkgreen | ORALITE® 5019i-625 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |
| Grey | ORALITE® 5019i-073 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | pass | pass | pass | pass |

Transparent protective laminate ORALITE® 5095-000 Anti-Graffiti Film:

| Colour on white sheeting | Name of the product | Visibility characteristics | | Durability | |
|--------------------------------|--|---|---|--|---|
| | | Daylight chromaticity & luminance factor evaluation according to ETA 16/0612 annex C | Coefficient of retroreflection evaluation according to ETA 16/0612 annex C | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering evaluation according to ETA 16/0612 annex C |
| Yellow | ORALITE® 5019i-020 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Red | ORALITE® 5019i-030 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Blue | ORALITE® 5019i-050 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Green | ORALITE® 5019i-060 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Orange | ORALITE® 5019i-035 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Brown | ORALITE® 5019i-080 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Darkgreen | ORALITE® 5019i-625 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |
| Grey | ORALITE® 5019i-073 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | pass | pass | pass | pass |

Digital Printing Black:

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|--|--|--|---|--|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| Black | ORALITE® 5019i-070 UV Digital Printing Ink and ORALITE® 5061-000 Transparent Film | NR1 | - | pass | pass |
| Black | ORALITE® 5019i-070 UV Digital Printing Ink and ORALITE® 5090-000 Anti-Dew Film | NR1 | - | pass | pass |
| Black | ORALITE® 5019i-070 UV Digital Printing Ink and ORALITE® 5095-000 Anti-Graffiti Film | NR1 | - | pass | pass |

As a variant of black (not retroreflective), a print of pattern can be printed to produce greyscale (retroreflective).

Clear protective overlay film:

Clear protective overlay films (Anti-Dew and Anti-Graffiti) are always admitted in combination with retroreflective sheeting and a colouring process.

Anti-Dew:

The original dyed retroreflective sheeting is accepted to be laminated with the clear protective overlay film ORALITE® 5090 Anti-Dew Film for the following colours.

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|--|---|---|---|---|
| | | Daylight chromaticity & luminance factor ETA 12/0478 tab. D.1 | Coefficient of retroreflection ETA 12/0478 tab. D.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 12/0478 tab. D.4 and D.5 |
| White | ORALITE® 5910-010 High Intensity Prismatic Grade and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Yellow | ORALITE® 5910-020 High Intensity Prismatic Grade and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Red | ORALITE® 5910-030 High Intensity Prismatic Grade and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Blue | ORALITE® 5910-050 High Intensity Prismatic Grade and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Green | ORALITE® 5910-060 High Intensity Prismatic Grade and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Brown | ORALITE® 5910-080 High Intensity Prismatic Grade and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |

The original dyed white retroreflective sheeting is accepted to be laminated with the coloured transparent laminate ORALITE® 5061 Transparent Film and the clear protective overlay film ORALITE® 5090 Anti-Dew Film for the following colours.

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade and coloured transparent laminate ORALITE® 5061 Transparent Film

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor ETA 12/0478 tab. F.1 | Coefficient of retroreflection ETA 12/0478 tab. F.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 12/0478 tab. F.4 and F.5 |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Yellow | ORALITE® 5061-020 Transparent Film and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Red | ORALITE® 5061-030 Transparent Film and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Blue | ORALITE® 5061-050 Transparent Film and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |
| Green | ORALITE® 5061-060 Transparent Film and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade and Lettering-Film

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| Black | ORALITE® 5081-070 Lettering Film and ORALITE® 5090 Anti-Dew Film | NR1 | - | pass | pass |

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade and coloured transparent laminate ORALITE® 5061 Transparent Film

| Colour | Name of the product | Visibility characteristics | | Durability | |
|-------------------|---|--|--|--|--|
| | | Daylight chromaticity & luminance factor ETA 16/0465 annex B | Coefficient of retroreflection ETA 16/0465 annex B | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 16/0465 annex B |
| on white sheeting | ORALITE® 5910-010 High Intensity Prismatic Grade and | | | | |
| Darkgreen | ORALITE® 5061-625 Transparent Film and ORALITE® 5090 Anti-Dew Film | pass | pass | pass | pass |

Anti-Graffiti:

The original dyed retroreflective sheeting is accepted to be laminated with the clear protective overlay film ORALITE® 5095 Anti- Graffiti Film for the following colours.

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor ETA 12/0478 tab. E.1 | Coefficient of retroreflection ETA 12/0478 tab. E.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 12/0478 tab. E.4 and E.5 |
| White | ORALITE® 5910-010 High Intensity Prismatic Grade and ORALITE® 5095 Anti-Graffiti Film | pass | pass | pass | pass |
| Yellow | ORALITE® 5910-020 High Intensity Prismatic Grade and ORALITE® 5095 Anti-Graffiti Film | pass | pass | pass | pass |
| Red | ORALITE® 5910-030 High Intensity Prismatic Grade and ORALITE® 5095 Anti-Graffiti Film | pass | pass | pass | pass |
| Blue | ORALITE® 5910-050 High Intensity Prismatic Grade and ORALITE® 5095 Anti-Graffiti Film | pass | pass | pass | pass |
| Green | ORALITE® 5910-060 High Intensity Prismatic Grade and ORALITE® 5095 Anti-Graffiti Film | pass | pass | pass | pass |
| Brown | ORALITE® 5910-080 High Intensity Prismatic Grade and ORALITE® 5095 Anti-Graffiti Film | pass | pass | pass | pass |

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade and Lettering-Film

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|---|---|---|--|---|
| | | Daylight chromaticity & luminance factor EN 12899-1 7.2.2.1.3 | Coefficient of retroreflection EN 12899-1 4.1.1.4 | Impact resistance EN 12899-1 4.1.2 | Resistance to weathering EN 12899-1 4.1.1.5 |
| Black | ORALITE® 5081-070 Lettering Film and ORALITE® 5095 Anti-Graffiti Film | NR1 | - | pass | pass |

Anti-Sticker:

The original dyed retroreflective sheeting is accepted to be laminated with the clear protective overlay film ORALITE® 5097 Astifol® Anti-Sticker Film for the following colours.

Original dyed retroreflective-sheeting ORALITE® 5910 High Intensity Prismatic Grade

| Colour | Name of the product | Visibility characteristics | | Durability | |
|--------|--|---|---|--|--|
| | | Daylight chromaticity & luminance factor ETA 19/0085 tab. B.1 | Coefficient of retroreflection ETA 19/0085 tab. B.2 | Impact resistance evaluation according to EN 12899-1 | Resistance to weathering ETA 19/0085 tab. B.4 and B.5 |
| White | ORALITE® 5910-010 High Intensity Prismatic Grade and ORALITE® 5097 Astifol® Anti-Sticker Film | pass | pass | pass | pass |

The manufacturer of the fixed vertical road traffic sign is responsible for conformity with the mandated characteristics according to EN 12899-1 by using these materials.

Hagen, 29 July 2021



Christian Bargaen
Dipl.-Ing.
Leiter StrAus-Zert