Certificate No.: 2531–CPR–CSC10037

CERTIFICATE OF CONSTANCY OF PERFORMANCE

Issued by DBI Certification, notified body No. 2531.

In compliance with *Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011* (the Construction Products Regulation or CPR), this certificate applies to the construction product

Sign plate with protective edge for fixed vertical road traffic signs

Scope: Sign plates with protective edge and sign face materials applied for fixed vertical road traffic signs (ZA.5)

The product fulfils the essential characteristic:

See Annex 1

Intended use: Permanent traffic signs

Placed on the market under the name or trade mark of:

Infra Group Danmark A/S
Industrivej 17
5750 Ringe

and produced in the manufacturing plant:

CPA30005

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 12899-1:2007 : Fixed, vertical road traffic signs-Part 1: Fixed signs

under system 1 for the performance set out in this certificate are applied and that the performance of the construction product is assessed to remain constant.

The attached annexes form part of this certificate.

Date of issue: **2020-12-15**.

This certificate will remain valid as long as neither the harmonized standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly unless suspended or withdrawn by the notified product certification body.

(This certificate supersedes the previous version of this certificate issued)

This certificate was first issued .

Allan Laursen
Responsible for evaluation

Jesper Viggo Quaade
Responsible for certification decision

DANAK
Prod. Reg. Nr. 7023

DBI Certification A/S
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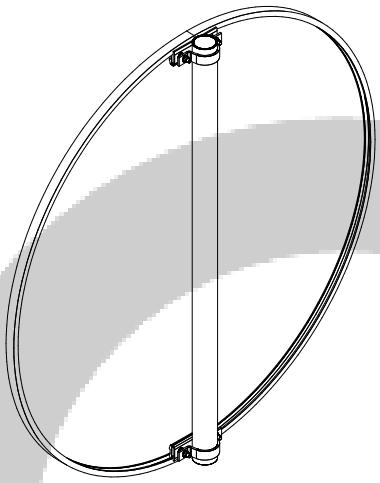
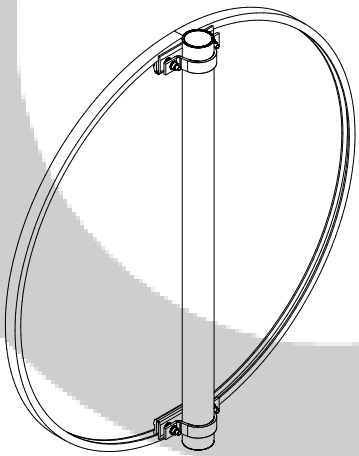
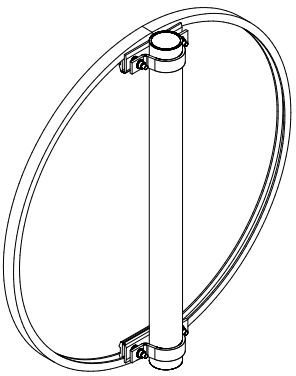
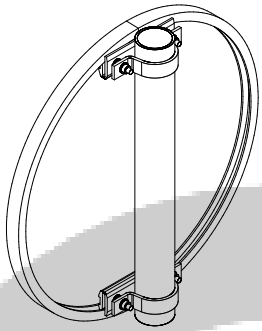
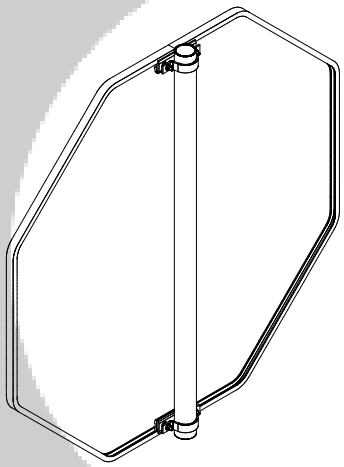
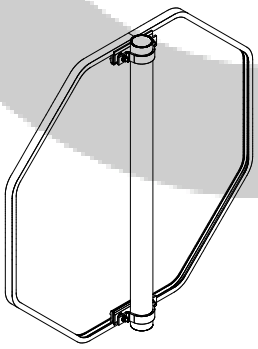
E-mail: info@dbicertification.dk
www.dbicertification.dk

Annex 1
Description and classification:

Sign, sizes and mounting system Protective edge: Minimum aluminium quality: $R_{p0,2}$ = 200 MPa Brackets: Minimum aluminium quality: $R_{p0,2}$ = 200 MPa Sign plate: Minimum aluminium quality: $R_{p0,2}$ = 180 MPa	**Classification according to wind load classes**				
	Placed in WL1	Placed in WL2	Placed in WL3	Placed in WL4	Placed in WL5
 d ≤ 1200 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.
 d ≤ 900 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.
 d ≤ 700 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.

Sign, sizes and mounting system Protective edge: Minimum aluminium quality: $R_{p0,2}$ = 200 MPa Brackets: Minimum aluminium quality: $R_{p0,2}$ = 200 MPa Sign plate: Minimum aluminium quality: $R_{p0,2}$ = 180 MPa	**Classification according to wind load classes**				
	Placed in WL1	Placed in WL2	Placed in WL3	Placed in WL4	Placed in WL5
 d ≤ 500 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.
 h ≤ 1250 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	N/A
 h ≤ 900 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.

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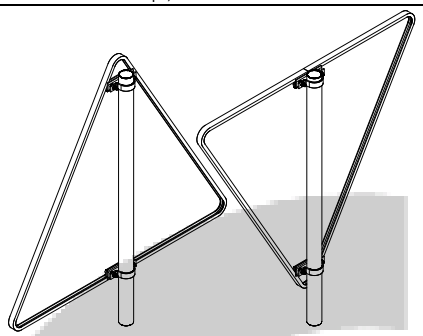
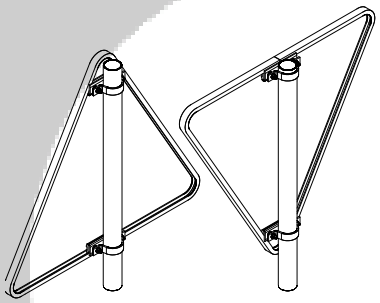
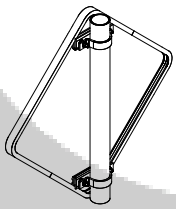
	Placed in WL1	Placed in WL2	Placed in WL3	Placed in WL4	Placed in WL5
 s ≤1250 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.
 s ≤ 900 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.
 a ≤ 500 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.

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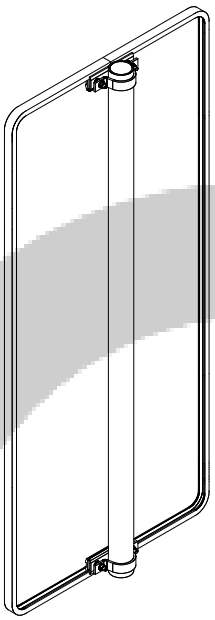
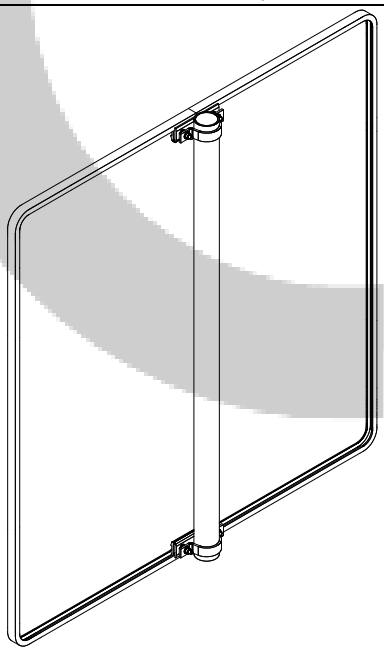
	Placed in WL1	Placed in WL2	Placed in WL3	Placed in WL4	Placed in WL5
 h x b ≤ 1450 x ≤ 650 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.
 h x b ≤ 1250 x ≤ 1200 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.

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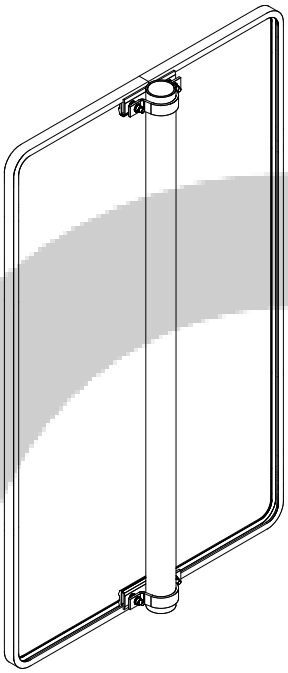
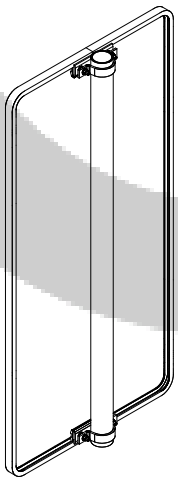
 h x b ≤ 1250 x ≤ 750 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.
 h x b ≤ 1250 x ≤ 600 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.

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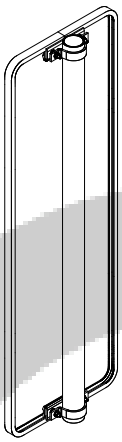
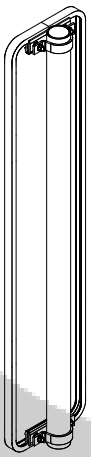
 h x b ≤ 1250 x ≤ 400 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.
 h x b ≤ 1250 x ≤ 250 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.

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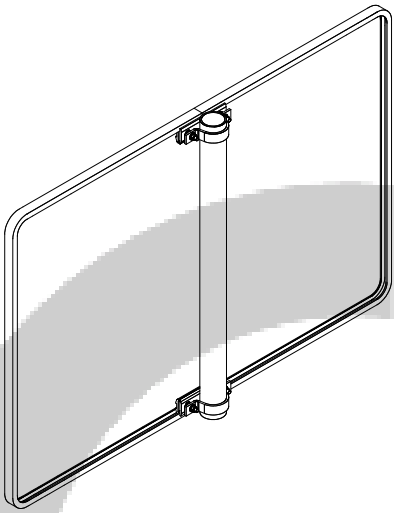
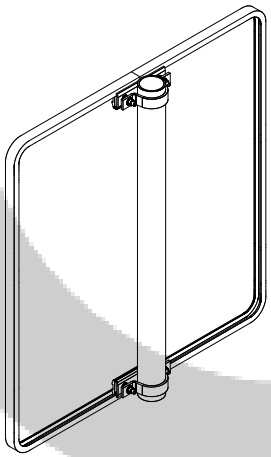
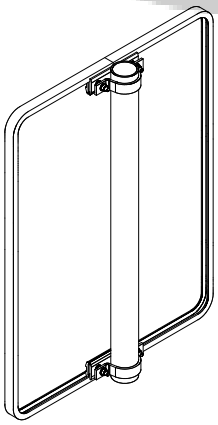
 h x b ≤ 800 x ≤ 1200 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB5, TDT0, P2, E2 and SP1.
 h x b ≤ 800 x ≤ 750 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.
 h x b ≤ 800 x ≤ 600 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.

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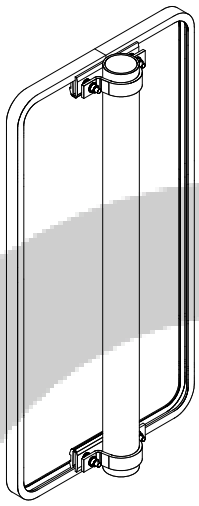
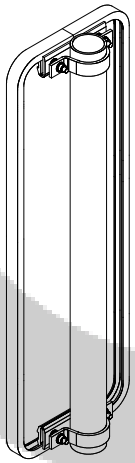
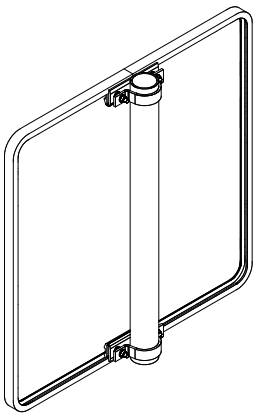
 h x b ≤ 800 x ≤ 400 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.
 h x b ≤ 800 x ≤ 250 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.
 h x b ≤ 700 x ≤ 700 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.

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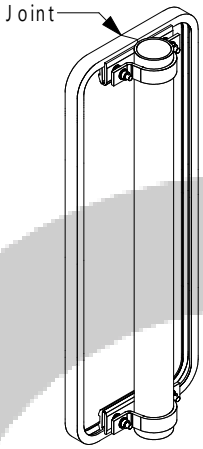
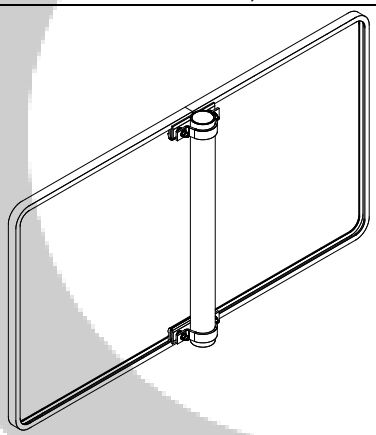
Sign, sizes and mounting system Protective edge: Minimum aluminium quality: $R_{p0,2}$ = 200 MPa Brackets: Minimum aluminium quality: $R_{p0,2}$ = 200 MPa Sign plate: Minimum aluminium quality: $R_{p0,2}$ = 180 MPa	**Classification according to wind load classes**				
	Placed in WL1	Placed in WL2	Placed in WL3	Placed in WL4	Placed in WL5
 h x b ≤ 700 x ≤ 250 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB2, TDT0, P2, E2 and SP1.
 h x b ≤ 650 x ≤ 1200 mm, t = 2 mm	**Sign plate and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL4, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.	**Sign plate and brackets:** PAF1, WL5, DSL0, PL0, TDB4, TDT0, P2, E2 and SP1.

DBI Certification A/S
Jernholmen 12, 2650 Hvidovre
Tlf.: 36 34 90 90
E-mail: info@dbicertification.dk
www.dbicertification.dk

Resistance to horizontal loads		NPD To be declared on the support
Resistance to bending		NPD To be declared on the support
Resistance to torsion		NPD To be declared on the support
Fixings:		Pass. The signs, sizes are intended for mounting at the top of another straight steel pipe. Together the signs and the straight steel is the support for the sign. Glue for fixing the signs into the bracket according to DIN 53504: Load bearing capacity: ≥ 1.5 MPa Elasticity moduls: ≥ 0.65 MPa Charge on broken: ≥ 1.55 MPa Elongation at breaks: ≥ 300 % Shore A hardness: ≥ 40 Themal resistance: -40 to 90°C Pressure force for tightening: 2 kN fot the clamp. 5 kN for the brackets. M8 Screws, nuts and washers are minimum A2, class 70 ($f_{y,b}$ = 450 MPa).
Temporary deflection (supports) -bending -torsion		NPD To be declared on the support
Permanent deflection		NDP
Performance under vehicle impact		NPD To be declared on the support
Corrosion resistance		
Brackets		SP1 Minimum S235 Hot dip galavanized according to EN 1461
Screws, nuts and washers		M8: fy,b≥ 450MPa,minimum A2 or FZV SP1
Aluminum plate		SP1 Laquered AL-plate on exposed side if any.
Resistance to penetration of dust and water		NPD

ORALITE© 5710 Engineering Grade:					
Retroreflective sheeting ORALITE© 5710 Engineering Grade with the following original dyed colours:					
Colour	Name	Visibility charateristics		Durability	
		Daylight Chromaticity & luminance factor 4.1.1.3. For black colours: 7.2.2.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.	Resistance to weathering 4.1.1.5. For black colours: 7.2.2.1.4
White	ORALITE© 5710-010 Engineering Grade	CR2	RA1	pass	pass
Yellow	ORALITE© 5710-020 Engineering Grade	CR2	RA1	pass	pass
Red	ORALITE© 5710-030 Engineering Grade	CR2	RA1	pass	pass
Blue	ORALITE© 5710-050 Engineering Grade	CR2	RA1	pass	pass
Green	ORALITE© 5710-060 Engineering Grade	CR2	RA1	pass	pass
Orange	ORALITE© 5710-035 Engineering Grade	CR1	RA1	pass	pass
Brown	ORALITE© 5710-080 Engineering Grade	CR2	RA1	pass	pass
Retroreflective sheeting ORALITE© 5710 engineering Grade with the following Lettering Film:					
Black	ORALITE© 5071-070 Lettering Film	NR1	-	pass	pass
Retroreflective sheeting ORALITE© 5710 engineering Grade with the following screen printing colours on white retroreflective sheeting:					
Yellow	ORALITE© 5018-020 Screen Printing ink	CR2	RA1	pass	pass
Red	ORALITE© 5018-030 Screen Printing ink	CR2	RA1	pass	pass
blue	ORALITE© 5018-050 Screen Printing ink	CR2	RA1	pass	pass
Green	ORALITE© 5018-060 Screen Printing ink	CR2	RA1	pass	pass
Black	ORALITE© 5018-070 Screen Printing ink	NR1	-	pass	pass
Retroreflective sheeting ORALITE© 5710 engineering Grade with the following screen printing colours on yellow retroreflective sheeting:					
Red	ORALITE© 5018-030 Screen Printing ink	CR2	RA1	pass	pass
Black	ORALITE© 5018-070 Screen Printing ink	NR1	-	pass	pass
Digital printing colours: The digital printing is processed on white retroreflective sheeting with the digital printing system AGFA ANAPURNA M2050 High-Speed-UV-Inkjet-System and is to be laminated with the transparent laminate ORALITE© 5062-000 Transparent Film.					
On white sheeting	ORALITE© 5710-010 Engineering Grade and				
White	ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Yellow	ORALITE© 5019-020 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Red	ORALITE© 5019-030 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Blue	ORALITE© 5019-050 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Green	ORALITE© 5019-060 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Grey	ORALITE© 5019-625 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Black	ORALITE© 5019-070 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	NR1	-	pass	pass
If the colour black is printed solely, this material combination is admitted to be used without the transparent laminate.					
Black	ORALITE© 5019-070 UV Digital Printing Ink	NR1	-	pass	pass

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Digital printing colour ORALITE© 5019i UV Digital Printing Ink					
On white sheeting	ORALITE© 5710-010 Engineering Grade and				
White	ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Yellow	ORALITE© 5019i-020 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Red	ORALITE© 5019i-030 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Blue	ORALITE© 5019i-050 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Green	ORALITE© 5019i-060 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Orange	ORALITE© 5019i-035 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR1	RA1	pass	pass
Brown	ORALITE© 5019i-080 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Black	ORALITE© 5019i-070 UV Digital Printing Ink and ORALITE© 5062-000 Transparent Film	NR1	-	pass	pass
White	ORALITE© 5062-000 Transparent Film	CR2	RA1	pass	pass
Clear protective overlay film: Clear protective overlay films (Anti-Graffiti) are always admitted in combination with retroreflective sheeting and a colouring process.					
Anti-Graffiti: The original dyed retroreflective sheeting with the screen-printing ORALITE© 5018 is accepted to be laminated with the clear protective overlay film ORALITE© 5095 Anti-Graffitti Film for the following colours:					
Original dyed retroreflective sheeting ORALITE© 5710 Enginering Grade with screen-printing ORALITE© 5018.					
Red	ORALITE© 5018-030 Screen Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA1	pass	pass
Blue	ORALITE© 5018-050 Screen Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA1	pass	pass
Black	ORALITE© 5018-070 Screen Printing Ink and ORALITE© 5095 Anti-Graffiti Film	NR1	-	pass	pass

ORALITE© 5810 High Intensity Grade:					
Retroreflective sheeting ORALITE© 5810 High Intensity Grade with the following original dyed colours:					
Colour	Name	Visibility charateristics		Durability	
		Daylight Chromaticity & luminance factor 4.1.1.3. For black colours: 7.2.2.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.	Resistance to weathering 4.1.1.5. For black colours: 7.2.2.1.4
White	ORALITE© 5810-010 High Intensity Grade	CR2	RA2	pass	pass
Yellow	ORALITE© 5810-020 High Intensity Grade	CR2	RA2	pass	pass
Red	ORALITE© 5810-030 High Intensity Grade	CR2	RA2	pass	pass
Blue	ORALITE© 5810-050 High Intensity Grade	CR2	RA2	pass	pass
Green	ORALITE© 5810-060 High Intensity Grade	CR2	RA2	pass	pass
Brown	ORALITE© 5810-080 High Intensity Grade	CR2	RA2	pass	pass
Retroreflective sheeting ORALITE© 5810 High Intensity Grade with the following Lettering Film:					
Black	ORALITE© 5081-070 Lettering Film	NR1	-	pass	pass
Retroreflective sheeting ORALITE© 5810 High Intensity Grade with the following Coloured Laminates:					
Yellow	ORALITE© 5061-020 Transparent Film	CR2	RA2	pass	pass
Red	ORALITE© 5061-030 Transparent Film	CR2	RA2	pass	pass
Blue	ORALITE© 5061-050 Transparent Film	CR2	RA2	pass	pass
Green	ORALITE© 5061-060 Transparent Film	CR2	RA2	pass	pass
Brown	ORALITE© 5061-080 Transparent Film	CR2	RA2	pass	pass
Dark Green	ORALITE© 5061-625 Transparent Film	CR1	RA2	pass	pass
Retroreflective sheeting ORALITE© 5810 High Intensity Grade with the following Screen Printing Colours on white retroreflective sheeting:					
Yellow	ORALITE© 5018-020 Screen Printing Ink	CR2	RA2	pass	pass
Red	ORALITE© 5018-030 Screen Printing Ink	CR2	RA2	pass	pass
Blue	ORALITE© 5018-050 Screen Printing Ink	CR2	RA2	pass	pass
Green	ORALITE© 5018-060 Screen Printing Ink	CR2	RA2	pass	pass
Black	ORALITE© 5018-070 Screen Printing Ink	NR1	-	pass	pass
Retroreflective sheeting ORALITE© 5810 High Intensity Grade with the following Screen Printing Colours on yellow retroreflective sheeting:					
Red	ORALITE© 5018-030 Screen Printing Ink	CR2	RA1	pass	pass
Black	ORALITE© 5018-070 Screen Printing Ink	NR1	-	pass	pass
Digital Printing Colours: **Digital Printing Colour ORALITE© 5019 UV Digital Printing Ink** The digital printing is processed on white retroreflective sheeting with the digital printing system AGFA ANAPURNA M2050 High-Speed-UV-Inkjet-System and is to be laminated with a transparent laminate.					
Digital Printing with protective laminate ORALITE© 5061-000 Transparent Film					
On white sheeting	ORALITE©5810-010 High Intensity Grade and				
White	ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Yellow	ORALITE© 5019-020 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Red	ORALITE© 5019-030 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Blue	ORALITE© 5019-050 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Green	ORALITE© 5019-060 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass

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Brown	ORALITE© 5019-080 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Dark Green	ORALITE© 5019-625 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Grey	ORALITE© 5019-073 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2*	pass	pass
*Coefficient of retroreflection: Value for printed colours 70% of RA2					
Black	ORALITE© 5019-070 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	NR1	-	pass	pass
Digital Printing with protective laminate ORALITE© 5090 Anti-Dew Film:					
On white sheeting	ORALITE©5810-010 High Intensity Grade and				
White	ORALITE© 5090 Anti-Dew Film	CR2	RA2	pass	pass
Yellow	ORALITE© 5019-020 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2	pass	pass
Red	ORALITE© 5019-030 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2	pass	pass
Blue	ORALITE© 5019-050 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2*	pass	pass
Green	ORALITE© 5019-060 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2*	pass	pass
Brown	ORALITE© 5019-080 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2	pass	pass
Dark Green	ORALITE© 5019-625 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2	pass	pass
Grey	ORALITE© 5019-073 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	CR2	RA2	pass	pass
*Coefficient of retroreflection: Value for printed colours 70% of RA2					
Black	ORALITE© 5019-070 UV Digital Printing Ink and ORALITE© 5090 Anti-Dew Film	NR1	-	pass	pass
Digital Printing with protective laminate ORALITE© 5095 Anti-Graffiti Film:					
On white sheeting	ORALITE©5810-010 High Intensity Grade and				
White	ORALITE© 5095 Anti-Graffitti Film	CR2	RA2	pass	pass
Yellow	ORALITE© 5019-020 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Red	ORALITE© 5019-030 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Blue	ORALITE© 5019-050 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2*	pass	pass
Green	ORALITE© 5019-060 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2*	pass	pass
Brown	ORALITE© 5019-080 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Grey	ORALITE© 5019-073 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
*Coefficient of retrorefelction: Value for printed colours 70% of RA2					
Black	ORALITE© 5019-070 UV Digital Printing Ink and ORALITE© 5095 Anti-Graffiti Film	NR1	-	pass	pass
If the colour Black is printed solely, this material combination is admitted to be used without the transparent laminate					
Black	ORALITE© 5019-070 UV Digital Printing Ink	NR1	-	pass	pass
Digital Printing Colour ORALITE© 5019i UV Digital Printing Ink: The digital printing is processed on white retroreflective sheeting with the digital printing system AGFA ANAPURNA M2050 High-Speed-UV-Inkjet-System and is to be laminated with the transparent laminate ORALITE© 5061-000 Transparent Film					

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On white sheeting	ORALITE© 5810-010 High Intensity Grade and				
White	ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Yellow	ORALITE© 5019i-020 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Red	ORALITE© 5019i-030 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Blue	ORALITE© 5019i-050 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Green	ORALITE© 5019i-060 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Brown	ORALITE© 5019i-080 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Dark Green	ORALITE© 5019i-625 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Grey	ORALITE© 5019i-073 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	CR2	RA2	pass	pass
Black	ORALITE© 5019i-070 UV Digital Printing Ink and ORALITE© 5061-000 Transparent Film	NR1	-	pass	pass
Clear overlay film with special function: Clear overlay films with special function (anti-dew and anti-graffiti) are always admitted in combination with a dyed sheeting and a colouring process.					
Anti Dew: The dyed sheeting and the combination with coloured laminates is accepted to be processed with the clear overlay film anti-dew function ORALITE© 5090 Andi-Dew film for the following colours:					
Dyed Retroreflective Sheeting:					
White	ORALITE© 5810-010 High Intensity Grade and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Yellow	ORALITE© 5810-020 High Intensity Grade and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Red	ORALITE© 5810-030 High Intensity Grade and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Blue	ORALITE© 5810-050 High Intensity Grade and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Dyed Retrofeflective Sheeting ORALITE© 5810 High Intensity Grade with Coloured Laminate:					
Yellow	ORALITE© 5061-020 Transparent Film and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Red	ORALITE© 5061-030 Transparent Film and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Blue	ORALITE© 5061-050 Transparent Film and ORALITE© 5090 Anti-Dew film	CR2	RA2	pass	pass
Dyed Retroreflective Sheeting ORALITE© 5810 High Intensity Grade with Lettering film:					
Black	ORALITE© 5081-070 Lettering Film and ORALITE© 5090 Anti-Dew film	NR1	-	pass	pass
Anti-Graffiti: The dyed sheeting and the combination with coloured laminates is accepted to be processed with the clear overlay film with anti-graffiti function ORALITE© 5095 Anti Graffiti Film for the following colours.					

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Dyed Retroreflective Sheeting:					
White	ORALITE© 5810-010 High Intensity Grade and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Yellow	ORALITE© 5810-020 High Intensity Grade and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Red	ORALITE© 5810-030 High Intensity Grade and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Blue	ORALITE© 5810-050 High Intensity Grade and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Dyed Retroreflective Sheeting ORALITE© 5810 High Intensity Grade with Coloured Laminate:					
Yellow	ORALITE© 5061-020 Transparent Film and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Red	ORALITE© 5061-030 Transparent Film and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Blue	ORALITE© 5061-050 Transparent Film and ORALITE© 5095 Anti-Graffiti Film	CR2	RA2	pass	pass
Dyed Retroreflective Sheeting ORALITE© 5810 High Intensity Grade with Lettering Film:					
Black	ORALITE© 5081-070 Lettering Film and ORALITE© 5095 Anti-Graffiti Film	NR1	-	pass	pass
External illumination:					
mean illuminance,				NPD	
uniformity of illuminance				NPD	

Annex 2

TECHNICAL BASIS

Accredited Laboratory	Report no.	Date
None	Infra Group Calculation of minor traffic signs (ITC) Shapes and sizes for signs with protection edge mounted on brackets made of an extruded aluminium profile.	December 2020, rev. 4
	Orafol Retroreflective Sheeting Oralite© 5710 Engineering grade: 0913-CPD-2009/001 Annex	2009-03-17 2018-02-28
	Orafol Retroreflective Sheeting Oralite© 5810 High Intensity grade: 0913-CPD-2009/035 Annex	2012-06-27 2018-02-28