

## 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

### Gallows with mounted signboards type BS and GS

Scope: Fixed vertical road traffic signs (ZA.6)

The product fulfils the essential characteristic:

#### See Annex 1

Intended use: Complete assemblies of fixed vertical road traffic signs, to be mounted at the top of a straight steel pipe

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

**Infra Group Danmark ApS**  
**Industrivej 27**  
**5750 Ringe**  
**Danmark**

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: **2018-04-18**

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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly unless suspended or withdrawn by the notified product certification body.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 2018-02-14)

This certificate was first issued 2017-11-21.



Per Lyster  
Responsible for evaluation



Merete Poulsen  
Responsible for certification decision

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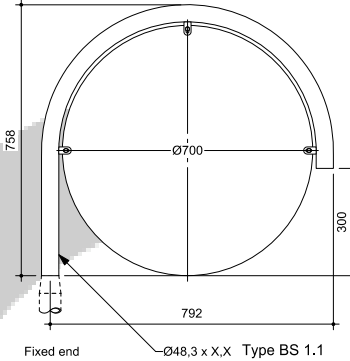
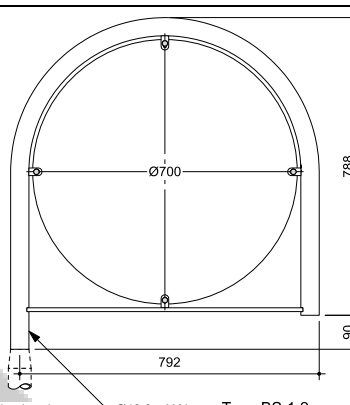
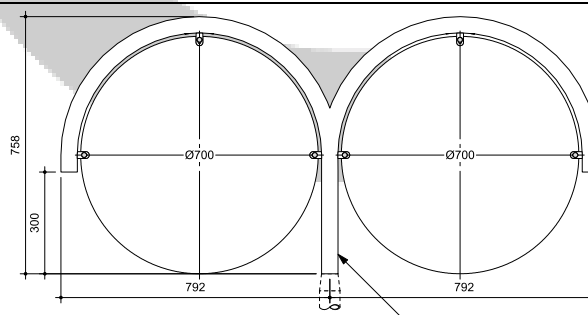
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## Annex 1

### EXTENT

#### Description and classification:

Sign sizes are maximum sizes ( $\emptyset$ , h and w)

<b>Sizes of signboards and different types of gallows</b> Pipes: Minimum steel quality: S235 in dimension $\emptyset 48,3 \times 2,9$ , $\emptyset 48,3 \times 3,0$ and $\emptyset 48,3 \times 3,2$ mm Signboard: Minimum aluminium quality: $R_{p0,2} = 180$ MPa, min. 2 mm thickness	<b>Classification according to wind load classes</b>		
	Placed in WL1	Placed in WL2	Placed in WL3
	<b>Signboard:</b> PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL1, DSL0, PL0, TDB1, TDT4 and SP1.	<b>Signboard:</b> PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB1, TDT4 and SP1.	<b>Signboard:</b> PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL3, DSL0, PL0, TDB1, TDT5 and SP1.
		<b>Signboard:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB1, TDT4 and SP1.	<b>Signboard:</b> PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL3, DSL0, PL0, TDB2, TDT4 and SP1.
	<b>Signboard:</b> PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL1, DSL0, PL0, TDB1, TDT4 and SP1.	<b>Signboard:</b> PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB1, TDT4, and SP1.	<b>Signboard:</b> PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.  <b>Gallows:</b> PAF1, WL3, DSL0, PL0, TDB2, TDT4 and SP1.

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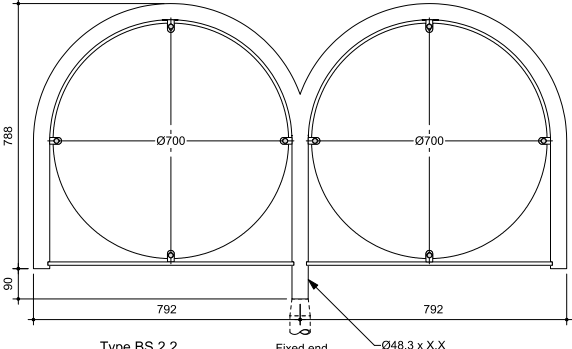
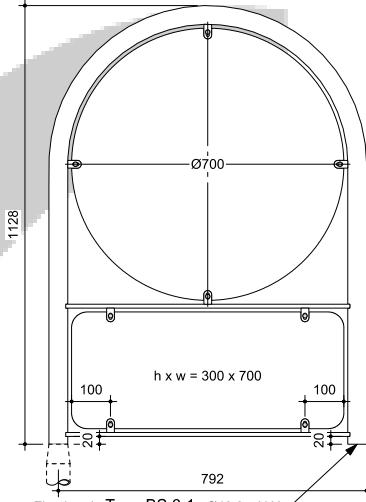
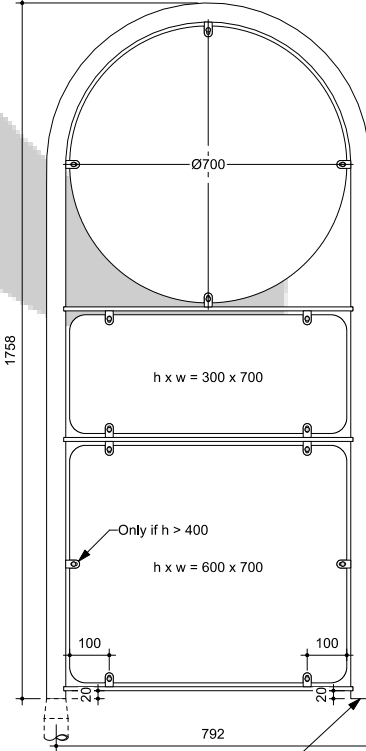
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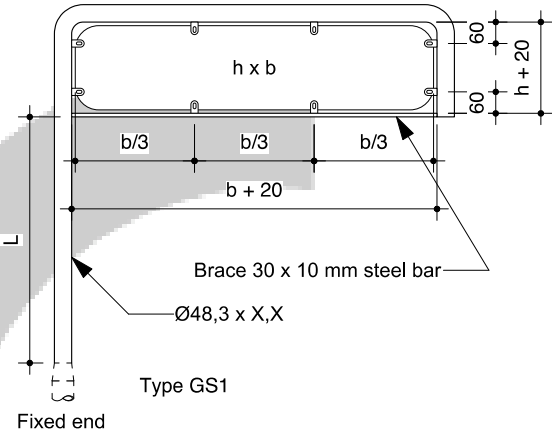
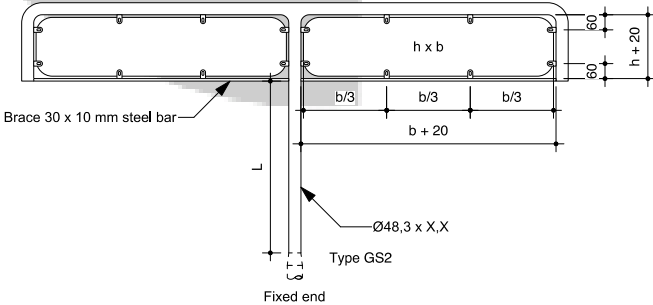
 <p>Type BS 2.2</p>		<p><b>Signboard:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB1, TDT3 and SP1.</p>	<p><b>Signboard:</b> PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL3, DSL0, PL0, TDB2, TDT4 and SP1.</p>
 <p>Type BS 3.1</p>	<p><b>Circular signboard:</b> PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>300 x 700 mm signboard:</b> PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL1, DSL0, PL0, TDB1, TDT4 and SP1.</p>	<p><b>Circular signboard:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>300 x 700 mm signboard:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB2, TDT4 and SP1.</p>	<p><b>Circular signboard:</b> PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>300 x 700 mm signboard:</b> PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL3, DSL0, PL0, TDB2, TDT5 and SP1.</p>
 <p>Type BS 3.2</p>	<p><b>Circular signboard:</b> PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>300 x 700 mm signboard:</b> PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>600 x 700 mm signboard:</b> PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL1, DSL0, PL0, TDB3, TDT5 and SP1.</p>	<p><b>Signboard:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>300 x 700 mm signboard:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.</p> <p><b>600 x 700 mm signboard:</b> PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB3, TDT6 and SP1.</p>	<p>-</p>

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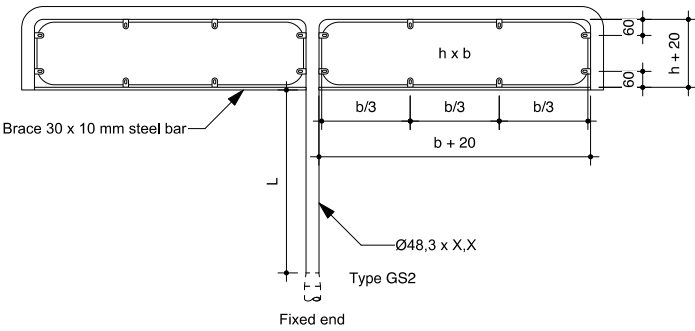
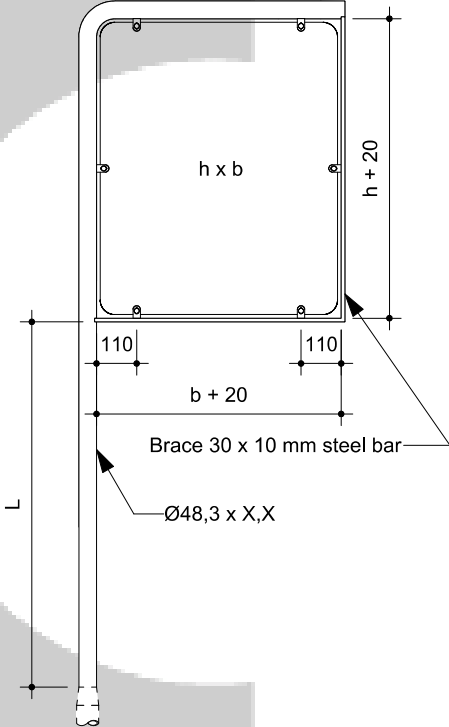
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<b>Sign, sizes and mounting system</b> Pipes: Minimum steel quality: S235 in dimension $\varnothing 48,3 \times 2,9$ , $\varnothing 48,3 \times 3,0$ , $\varnothing 48,3 \times 3,2$ , $\varnothing 60,3 \times 3,6$ and $\varnothing 60,3 \times 4,5$ mm Signboard: Minimum aluminium quality: $R_{p0,2} = 180$ MPa, min. 2 mm thickness		<b>Classification according to wind load classes</b>		
		Placed in WL1	Placed in WL2	Placed in WL3
 <p>Upper part, single sign</p>		$h \leq 235$ mm and $b \leq 1500$ mm $L \leq 1200$ mm		
		PAF1, WL1, DSL0, PL0, TDB2, TDT4, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.
		$h \leq 235$ mm and $b \leq 1750$ mm $L \leq 1200$ mm		
		PAF1, WL1, DSL0, PL0, TDB2, TDT5, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.
 <p>Upper part, double sign</p>		$h \leq 235$ mm and $b \leq 1500$ mm $L \leq 800$ mm		
		PAF1, WL1, DSL0, PL0, TDB2, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB2, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.
		$h \leq 235$ mm and $b \leq 1750$ mm $L \leq 800$ mm		
		PAF1, WL1, DSL0, PL0, TDB2, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1.

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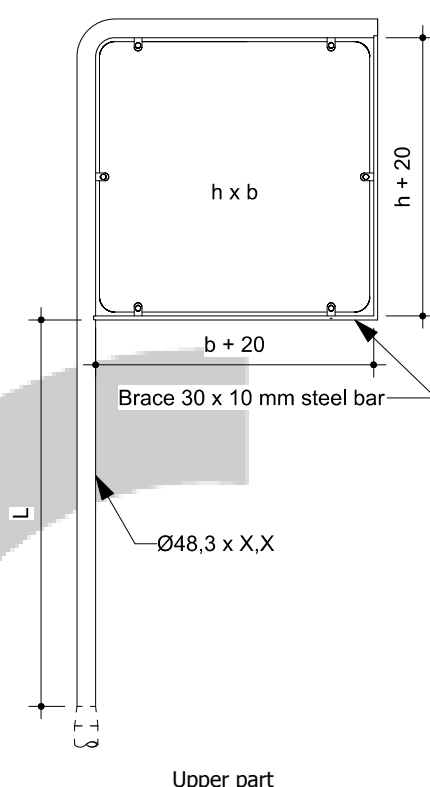
 <p>Upper part, double sign</p>	$h \leq 235 \text{ mm}$ and $b \leq 2000 \text{ mm}$ $L \leq 800 \text{ mm}$		
 <p>Upper part</p>	$h \leq 800 \text{ mm}$ and $b \leq 650 \text{ mm}$ $L \leq 1000 \text{ mm}$		

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		$h \leq 700 \text{ mm}$ and $b \leq 700 \text{ mm}$ $L \leq 1000 \text{ mm}$		
		PAF1, WL1, DSL0, PL0, TDB3, TDT1, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, TDT2, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB4, TDT3, P2, E1 and SP1.

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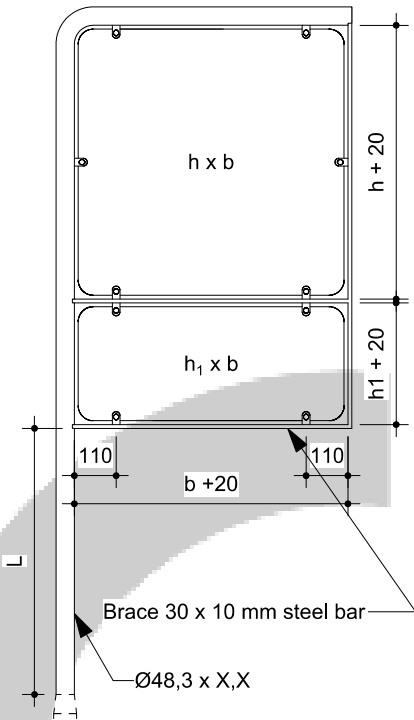
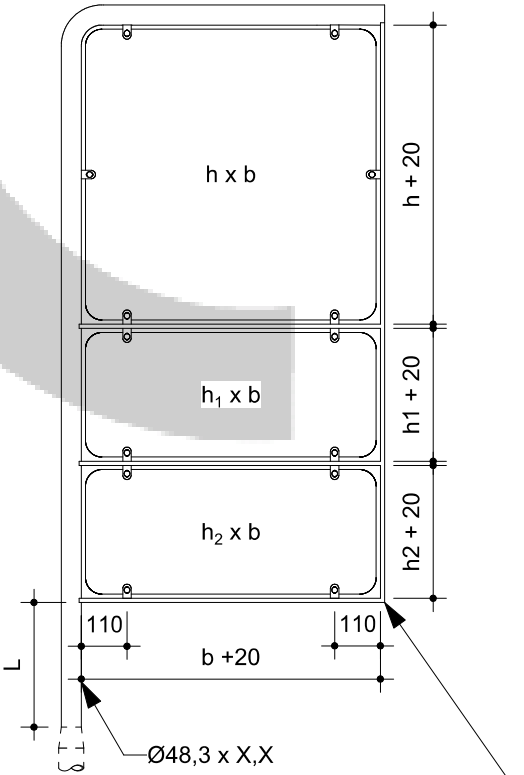
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 <p>Upper part</p>	$h \leq 700 \text{ mm}$ , $h_1 \leq 300 \text{ mm}$ and $b \leq 700 \text{ mm}$ $L \leq 700 \text{ mm}$		
 <p>Upper part</p>	$h \leq 700 \text{ mm}$ , $h_1 \leq 300 \text{ mm}$ $h_2 \leq 300 \text{ mm}$ and $b \leq 700 \text{ mm}$ $L \leq 300 \text{ mm}$		
	PAF1, WL1, DSL0, PL0, TDB3, TDT2, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, TDT2, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB4, TDT3, P2, E1 and SP1.
	PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.

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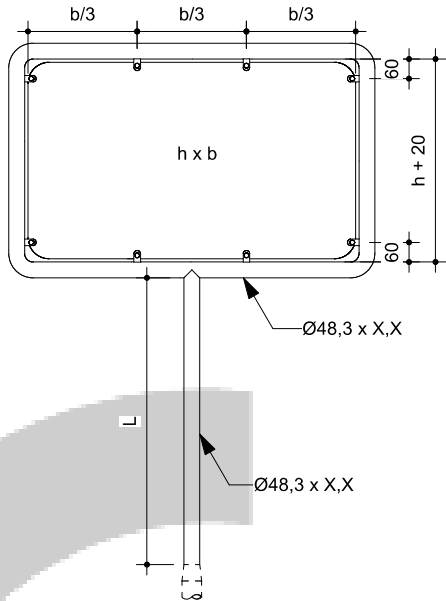
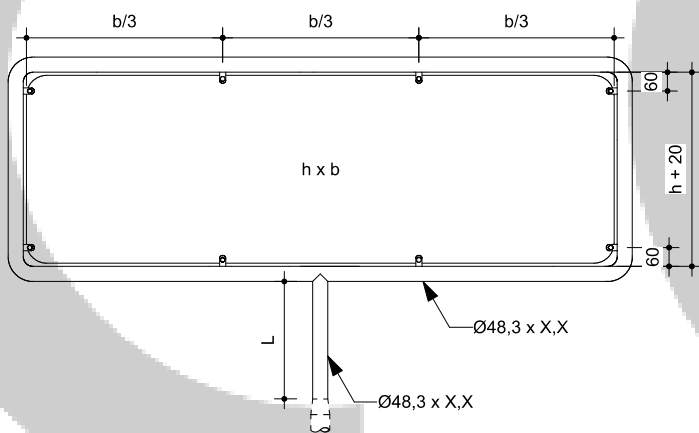
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 <p>Upper part</p>	<p><math>h \leq 600 \text{ mm}</math>, <math>b \leq 1000 \text{ mm}</math> and <math>L \leq 875 \text{ mm}</math></p> <table><tr><td>PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.</td><td>PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.</td><td>PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.</td></tr></table>			PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.
PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.				
 <p>Upper part</p>	<p><math>h \leq 600 \text{ mm}</math>, <math>b \leq 1750 \text{ mm}</math> and <math>L \leq 375 \text{ mm}</math></p> <table><tr><td>PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.</td><td>PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.</td><td>PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.</td></tr></table>			PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.
PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.				

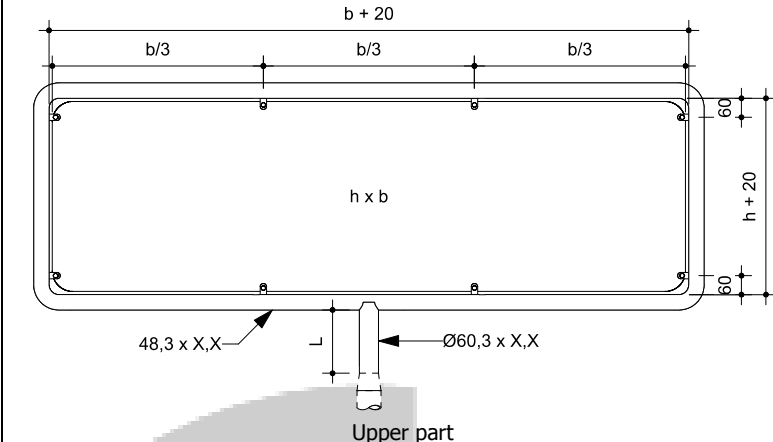
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		$h \leq 600 \text{ mm}, b \leq 2000 \text{ mm}$ and $L \leq 175 \text{ mm}$
		PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
		PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
		PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
Resistance to 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 and galls are intended for mounting at the top of another straight steel pipe. Together the galls and the straight steel is the support for the sign.  M6 screws, nuts and washers are minimum A2, class 70 ( $f_{y,b} = 450 \text{ MPa}$ ).  Pressure force for tightening: 2 kN.
Temporary deflection (supports) -bending -torsion		NPD To be declared on the support
Permanent deflection		NPD
Performance under vehicle impact		NPD To be declared on the support

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**ORALITE® 5710 Engineering Grade:****Retroreflective sheeting ORALITE® 5710 Engineering Grade with the following original dyed colours:**

Colour	Name of product	Visibility characteristics		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
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**Retroreflective sheeting ORALITE® 5710 engineering Grade with the following screen printing colours:**

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

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## 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.

### Digital Printing Colour ORALITE® 5019 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® 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

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## 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<sup>®</sup> 5018 is accepted to be laminated with the clear protective overlay film ORALITE<sup>®</sup> 5095 Anti-Graffiti Film for the following colours:

Original dyed retroreflective sheeting ORALITE<sup>®</sup> 5710 Engineering Grade with screen-printing ORALITE<sup>®</sup> 5018

Red	ORALITE <sup>®</sup> 5018-030 Screen Printing Ink and ORALITE <sup>®</sup> 5095 Anti-Graffiti Film	CR2	RA1	pass	pass
Blue	ORALITE <sup>®</sup> 5018-050 Screen Printing Ink and ORALITE <sup>®</sup> 5095 Anti-Graffiti Film	CR2	RA1	pass	pass
Black	ORALITE <sup>®</sup> 5018-070 Screen Printing Ink and ORALITE <sup>®</sup> 5095 Anti-Graffiti Film	NR1	-	pass	pass

## ORALITE<sup>®</sup> 5810 High Intensity Grade:

Retroreflective sheeting ORALITE<sup>®</sup> 5810 High Intensity Grade with the following original dyed colours:

Colour	Name of product	Visibility characteristics		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 <sup>®</sup> 5810-010 High Intensity Grade	CR2	RA2	pass	pass
Yellow	ORALITE <sup>®</sup> 5810-020 High Intensity Grade	CR2	RA2	pass	pass
Red	ORALITE <sup>®</sup> 5810-030 High Intensity Grade	CR2	RA2	pass	pass
Blue	ORALITE <sup>®</sup> 5810-050 High Intensity Grade	CR2	RA2	pass	pass
Green	ORALITE <sup>®</sup> 5810-060 High Intensity Grade	CR2	RA2	pass	pass
Brown	ORALITE <sup>®</sup> 5810-080 High Intensity Grade	CR2	RA2	pass	pass

## Retroreflective sheeting ORALITE<sup>®</sup> 5810 High Intensity Grade with the following Lettering Film:

Black	ORALITE <sup>®</sup> 5081-070 Lettering Film	NR1	-	pass	pass
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## Retroreflective sheeting ORALITE<sup>®</sup> 5810 High Intensity Grade with the following Coloured Laminates:

Yellow	ORALITE <sup>®</sup> 5061-020 Transparent Film	CR2	RA2	pass	pass
Red	ORALITE <sup>®</sup> 5061-030 Transparent Film	CR2	RA2	pass	pass
Blue	ORALITE <sup>®</sup> 5061-050 Transparent Film	CR2	RA2	pass	pass
Green	ORALITE <sup>®</sup> 5061-060 Transparent Film	CR2	RA2	pass	pass
Brown	ORALITE <sup>®</sup> 5061-080 Transparent Film	CR2	RA2	pass	pass
Dark Green	ORALITE <sup>®</sup> 5061-625 Transparent Film	CR1	RA2	pass	pass

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<b>Retroreflective sheeting ORALITE® 5810 High Intensity Grade with the following Screen Printing Colours:</b>					
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
<b>Digital Printing Colours:</b>					
<b>Digital Printing Colour ORALITE® 5019 UV Digital Printing Ink</b>					
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.					
<b>Digital Printing with protective laminate ORALITE® 5061-000 Transparent Film</b>					
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
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

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Issue date: 2018-04-18

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-Graffiti 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	
Braun	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	

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## 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

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 Anti-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 Retroreflective 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

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<b>Dyed Retroreflective Sheeting ORALITE® 5810 High Intensity Grade with Lettering film:</b>					
Black	ORALITE® 5081-070 Lettering Film and ORALITE® 5090 Anti-Dew film	NR1	-	pass	pass
<b>Anti-Graffiti:</b>					
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.					
<b>Dyed Retroreflective Sheeting:</b>					
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
<b>Dyed Retroreflective Sheeting ORALITE® 5810 High Intensity Grade with Coloured Laminate:</b>					
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
<b>Dyed Retroreflective Sheeting ORALITE® 5810 High Intensity Grade with Lettering Film:</b>					
Black	ORALITE® 5081-070 Lettering Film and ORALITE® 5095 Anti-Graffiti Film	NR1	-	pass	pass
External illumination:					
mean illuminance,				NPD	
uniformity of illuminance				NPD	
Corrosion resistance					
Steel pipes and fins				Minimum s235 SP1 The pipe and fins are after manufacturing hot dip galvanized to a minimum of 60µm	
Screws, nuts and washers				SP2 Minimum A2, Class 70	
Aluminum plate				SP1 Lacquered Al-plate on exposed side if any	
Resistance to penetration of dust and water				NPD The product can not be provided with compartments for electrical equipment	

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Annex 2

## TECHNICAL BASIS

Title	Date
Infra Goup Danmark ApS Calculation of minor traffic signs (ITC) Type BS, upper part Ø48,3 x 2,9, Ø48,3 x 3,0, and Ø48,3 x 3.2 mm steel pipes.	September 2016
Infra Group danmark ApS Calculation of minor traffic signs (ITC) Shapes and sizes for signs mounted in gallows type GS Revision 01	January 2018
Retroreflective Sheetings 5710 Engineering grade: 0913-CPD-2009/001 Annex	2009-03-17 2016-03-31
Retroreflective Sheeting Oralite 5810 High Intensity grade: 0913-CPD-2009/035 Annex	2012-06-27 2016-03-31

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