Certificate No.: 2531–CPR–CSC10021

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 plates for fixed vertical road traffic signs

Scope: Sign plates with 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 ApS
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: **2019-08-22**.

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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly unless suspended or withdrawn by the notified product certification body.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 2018-11-21)

This certificate was first issued 2017-11-30.

Per Lyster Andersen
Responsible for evaluation

Allan Laursen
Responsible for certification decision

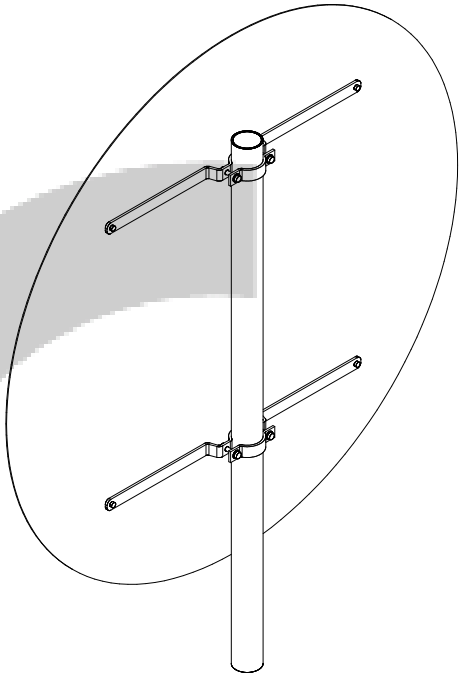
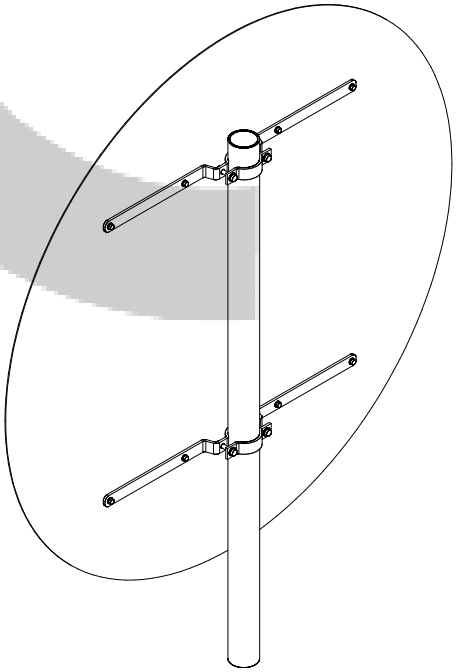
Prod. Reg. Nr. 7023

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

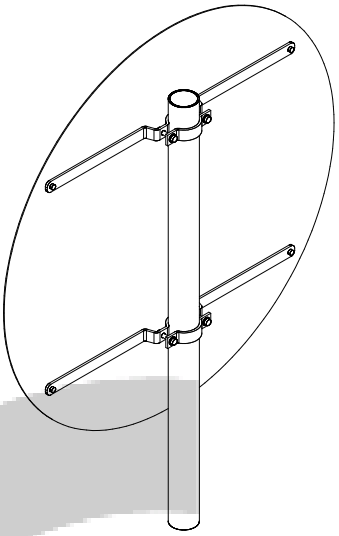
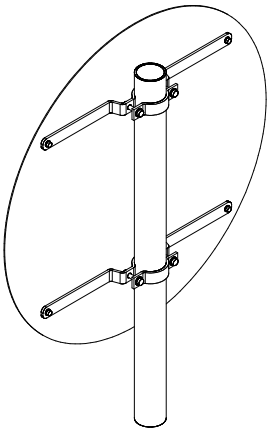
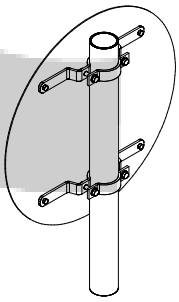
Annex 1

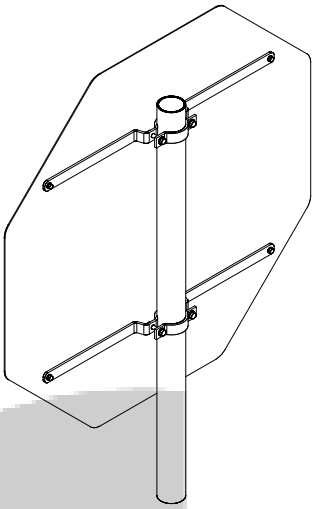
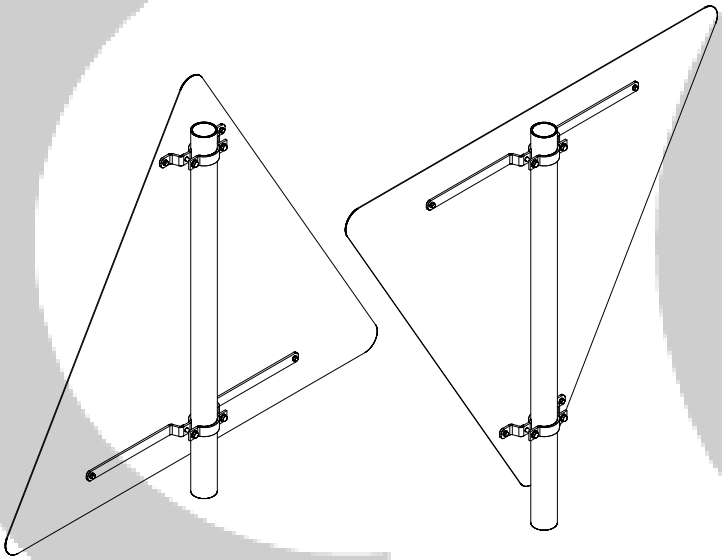
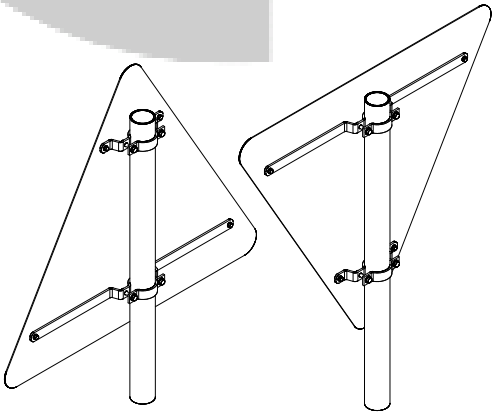
EXTENT

Description and classification:

Sign, sizes and mounting system Brackets: Minimum steel quality: S235 Signboard: Minimum aluminium quality: $R_{p0,2}$ = 180 MPa Pipe dimension Ø48,3, Ø60,3, Ø76,1 or 88,9 mm Single sided or double sides mounting	**Classification according to wind load classes**		
	Placed in WL1	Placed in WL2	Placed in WL3
 d ≤ 1200 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.
 d ≤ 1200 mm, t = 2 mm, brackets Type 2	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.

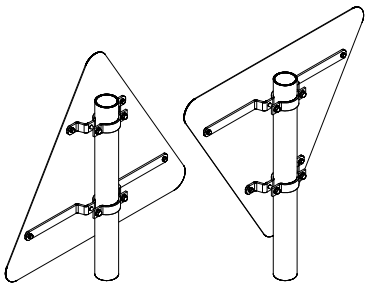
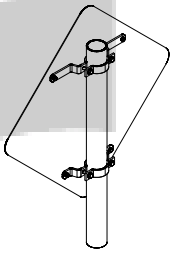
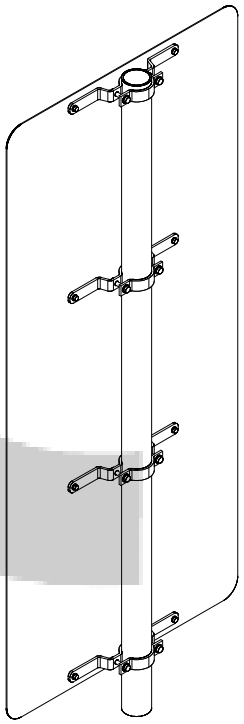
DBI Certification A/S
Jernholmen 12, 2650 Hvidovre
Tlf.: 36 34 90 90
E-mail: info@dbicertification.dk
www.dbicertification.dk

 d ≤ 900 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 d ≤ 700 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.
 d ≤ 500 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.

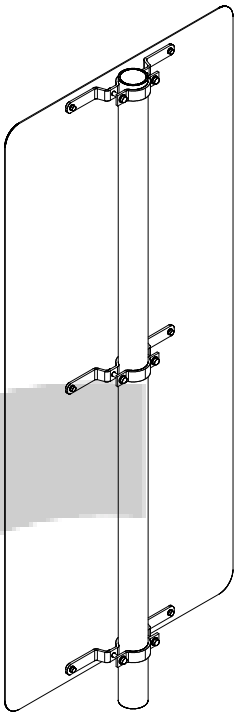
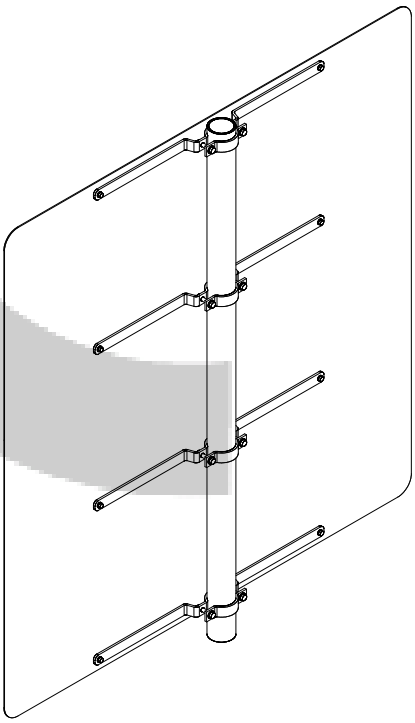
 h ≤ 900 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 s = ≤1250 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 s ≤ 900 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.

Prod. Reg. Nr. 7023

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

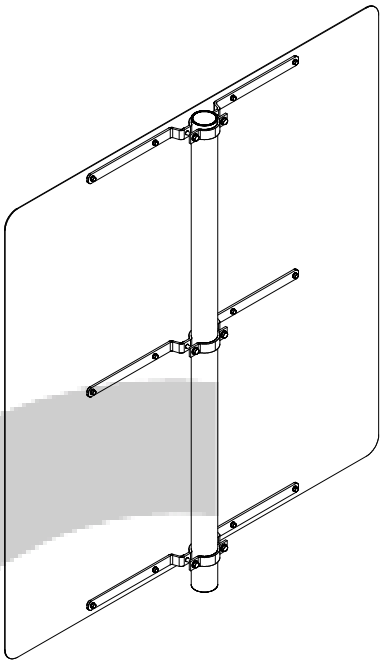
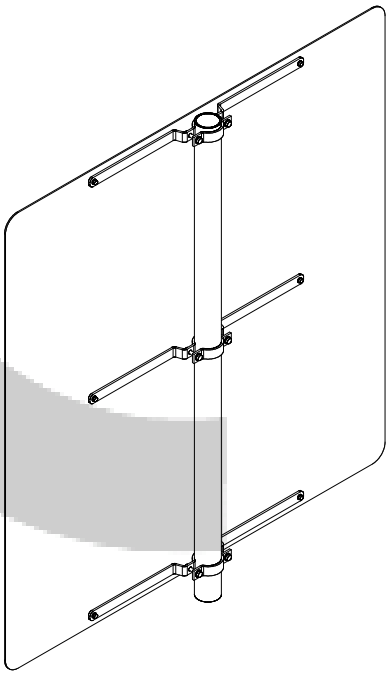
 S ≤ 700 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 a ≤ 500 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 h x b = ≤ 1450 x ≤ 650 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.

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

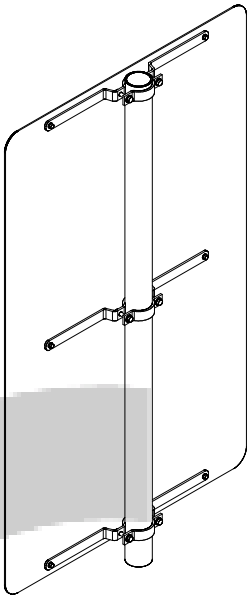
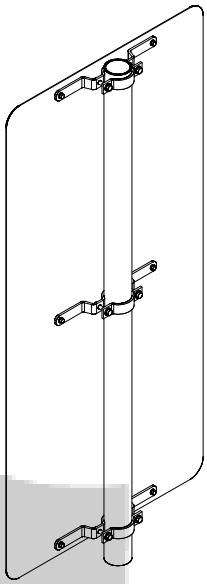
 h x b = ≤ 1450 x ≤ 650 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 1250 x ≤ 1200 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.

Prod. Reg. Nr. 7023

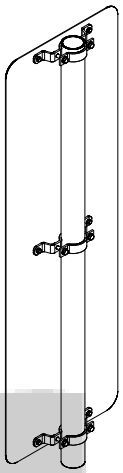
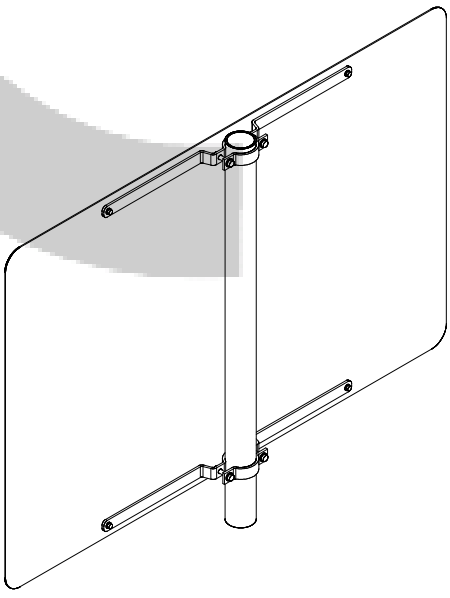
DBI Certification A/S
Jernholmen 12, 2650 Hvidovre
Tlf.: 36 34 90 90
E-mail: info@dbicertification.dk
www.dbicertification.dk

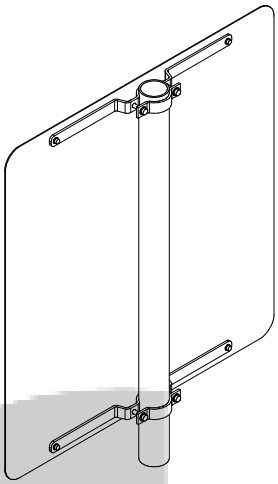
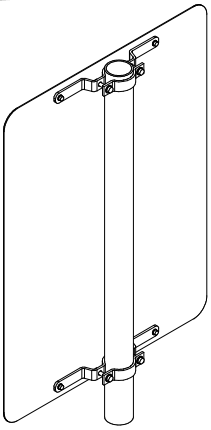
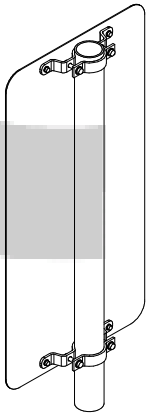
 h x b = ≤ 1250 x ≤ 1200 mm, t = 2 mm, brackets Type 2	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB6, TDT0, P2, E1 and SP1.
 h x b = ≤ 1250 x ≤ 1200 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB6, TDT0, P2, E1 and SP1.

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

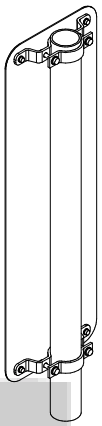
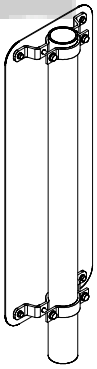
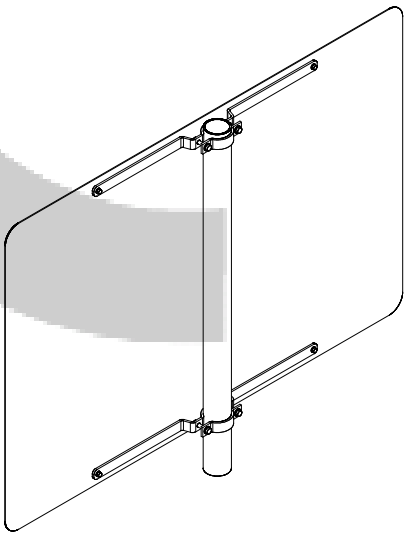
 h x b = ≤ 1250 x ≤ 750 mm, t = 2 mm, brackets type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 h x b = ≤ 1250 x ≤ 600 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.

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

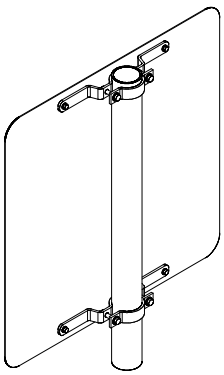
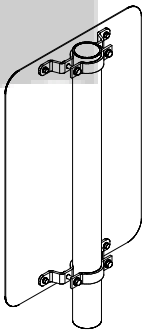
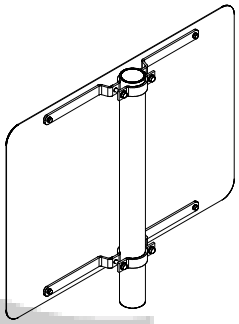
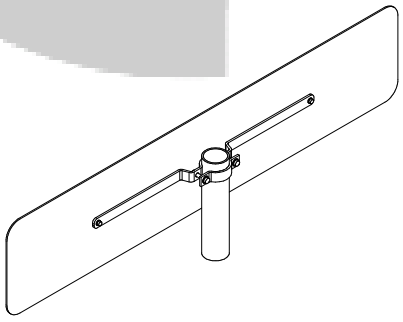
 h x b = ≤ 1250 x ≤ 400 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 1250 x ≤ 250 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 800 x ≤ 1200 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.

 h x b = ≤ 800 x ≤ 750 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 800 x ≤ 600 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 800 x ≤ 400 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.

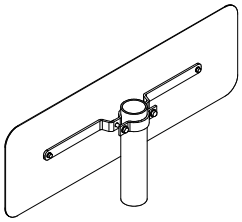
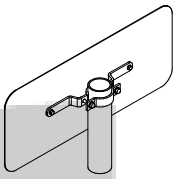
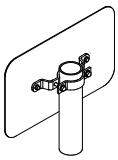
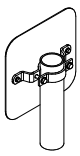
DBI Certification A/S
Jernholmen 12, 2650 Hvidovre
Tlf.: 36 34 90 90
E-mail: info@dbicertification.dk
www.dbicertification.dk

 h x b = ≤ 800 x ≤ 250 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 700 x ≤ 250 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 650 x ≤ 1200 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.

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

 h x b = ≤ 600 x ≤ 600 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 600 x ≤ 400 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 h x b = ≤ 550 x ≤ 750 mm, t = 2 mm, brackets Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 h x b = ≤ 250 x ≤ 1200 mm, t = 2 mm, bracket Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.

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

 h x b = ≤ 250 x ≤ 750 mm, t = 2 mm, bracket Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 h x b = ≤ 250 x ≤ 600 mm, t = 2 mm, bracket Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.
 h x b = ≤ 250 x ≤ 400 mm, t = 2 mm, bracket Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.
 h x b = ≤ 250 x ≤ 250 mm, t = 2 mm, bracket Type 1	**Signboard and brackets:** PAF1, WL1, DSL0, PL0, TDB1, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	**Signboard and brackets:** PAF1, WL3, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.

The different types, shapes and sizes of minor traffic signs including mounting system are shown in Figure 1 and Figure 2.

The variation of the sizes for the individual types and shapes inclusive mounting system are shown in Figure 1 to Figure 6 and in Table 1.

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

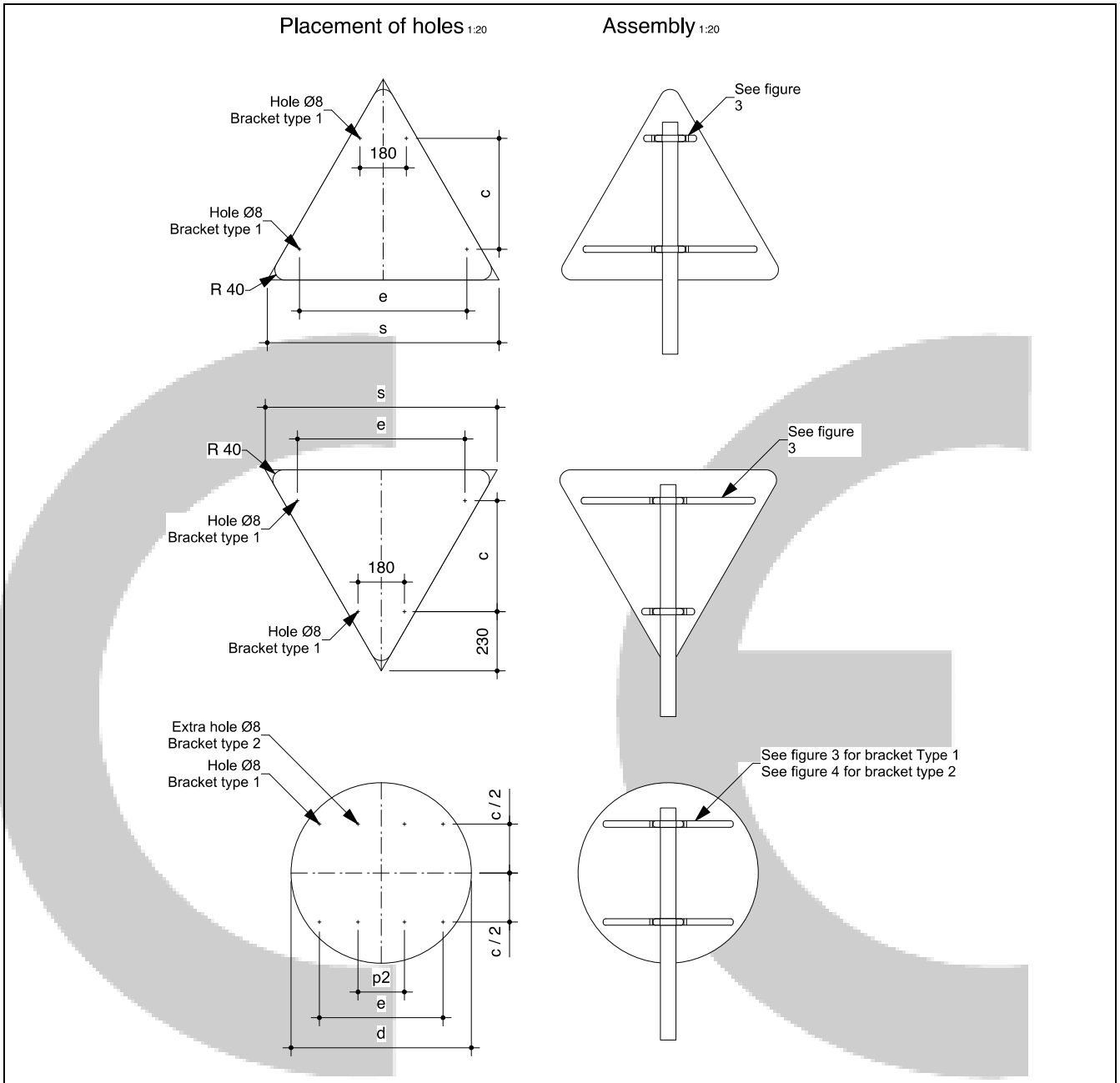


Figure 1: Placement of holes in the different types of sign plate is shown at left and the brackets at right. Values for the variable measures are given in Table 1. Details for the brackets are shown in Figure 6 and Figure 6.

Prod. Reg. Nr. 7023

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

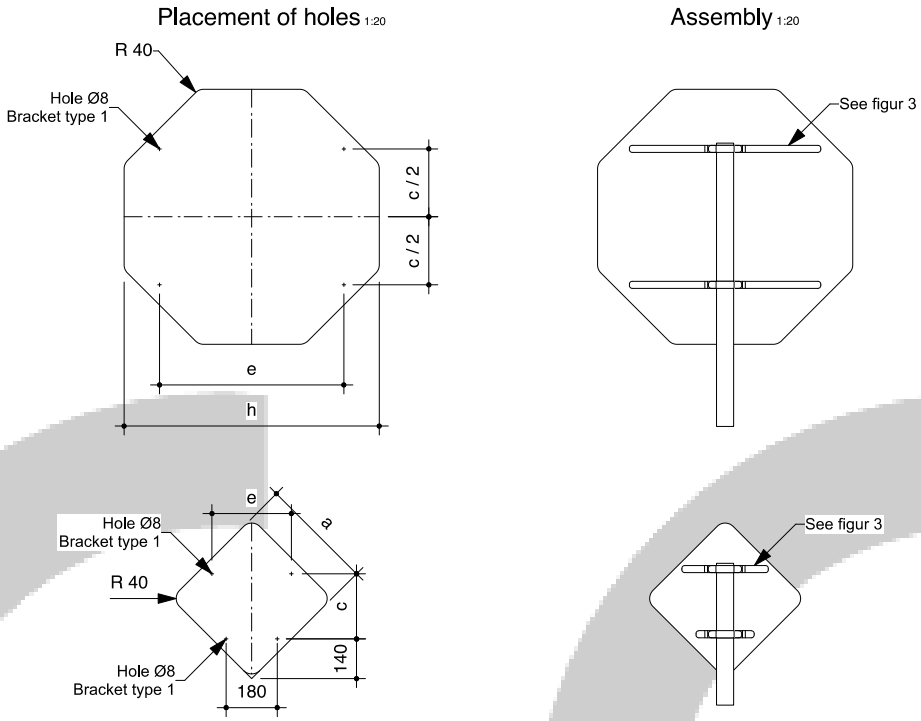


Figure 2: Placement of holes in the different types of sign plate is shown at left and the brackets at right. Values for the variable measures are given in Table 1. Details for the brackets are shown in Figure 5 and Figure 6.

Shape	Size	Variable measures		Minimum numbers of brackets			
		c	e	e = 180	e = 280	e = 480	e = 650
s	s = 700	255	480	1		1	
	s = 900	430	650	1			1
	s = 1250	750	650	1			1
d	d = 500	290	280		2		
	d = 700	390	480			2	
	d = 900	480	650				2
	d = 1200	640	650				2
h	h = 900	490	650				
a	a = 500	370	280	1	1		

Table 1: Variable measures of the different sign types and their numbers of brackets to be used for the sign plates shown in Figure 1 and Figure 2.

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

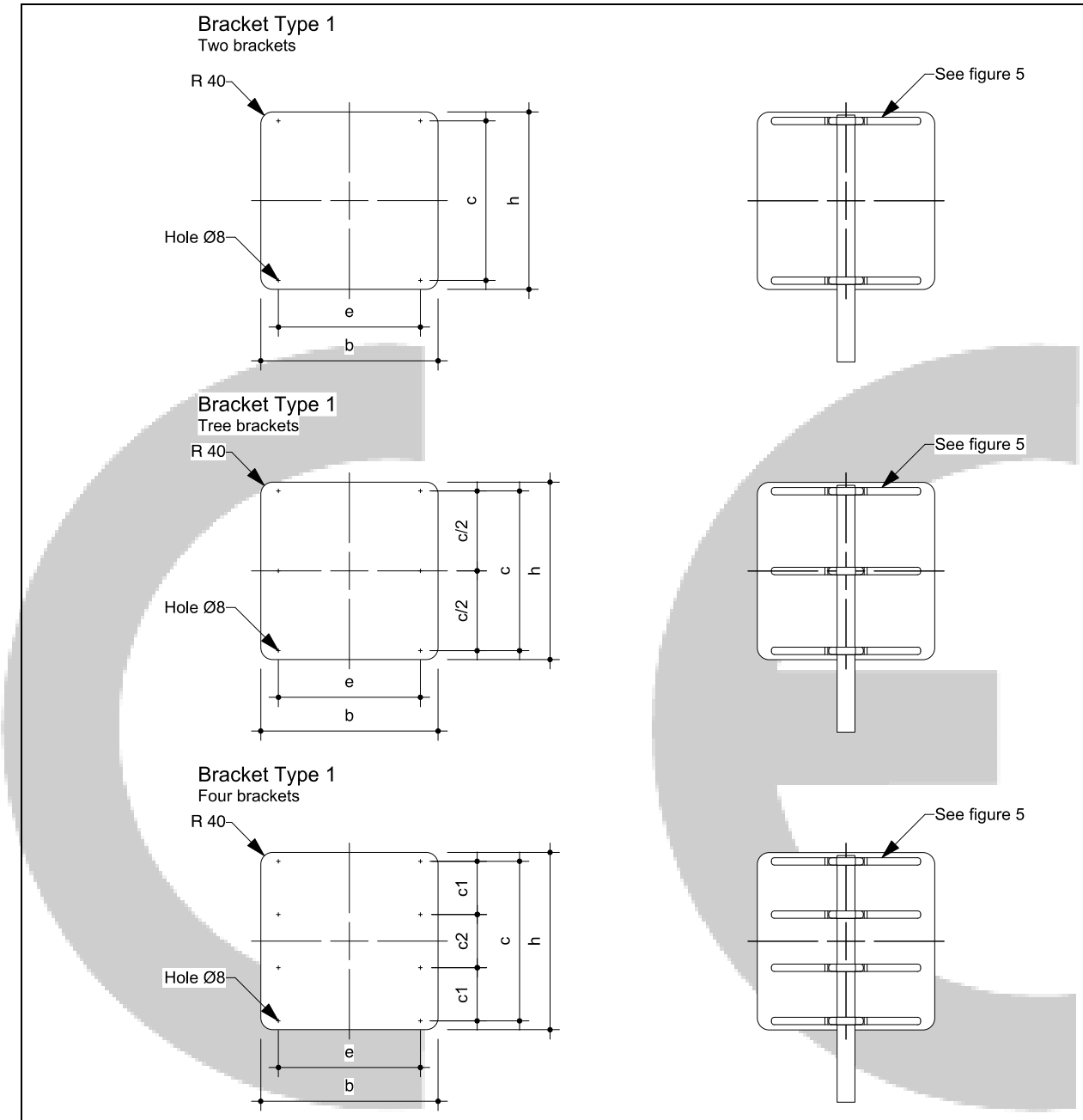


Figure 3: Placement of holes in the different types of sign plate is shown at left and the brackets at right. Values for the variable measures are given in Table 1. Details for the brackets are shown in Figure 5 and Figure 6.

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

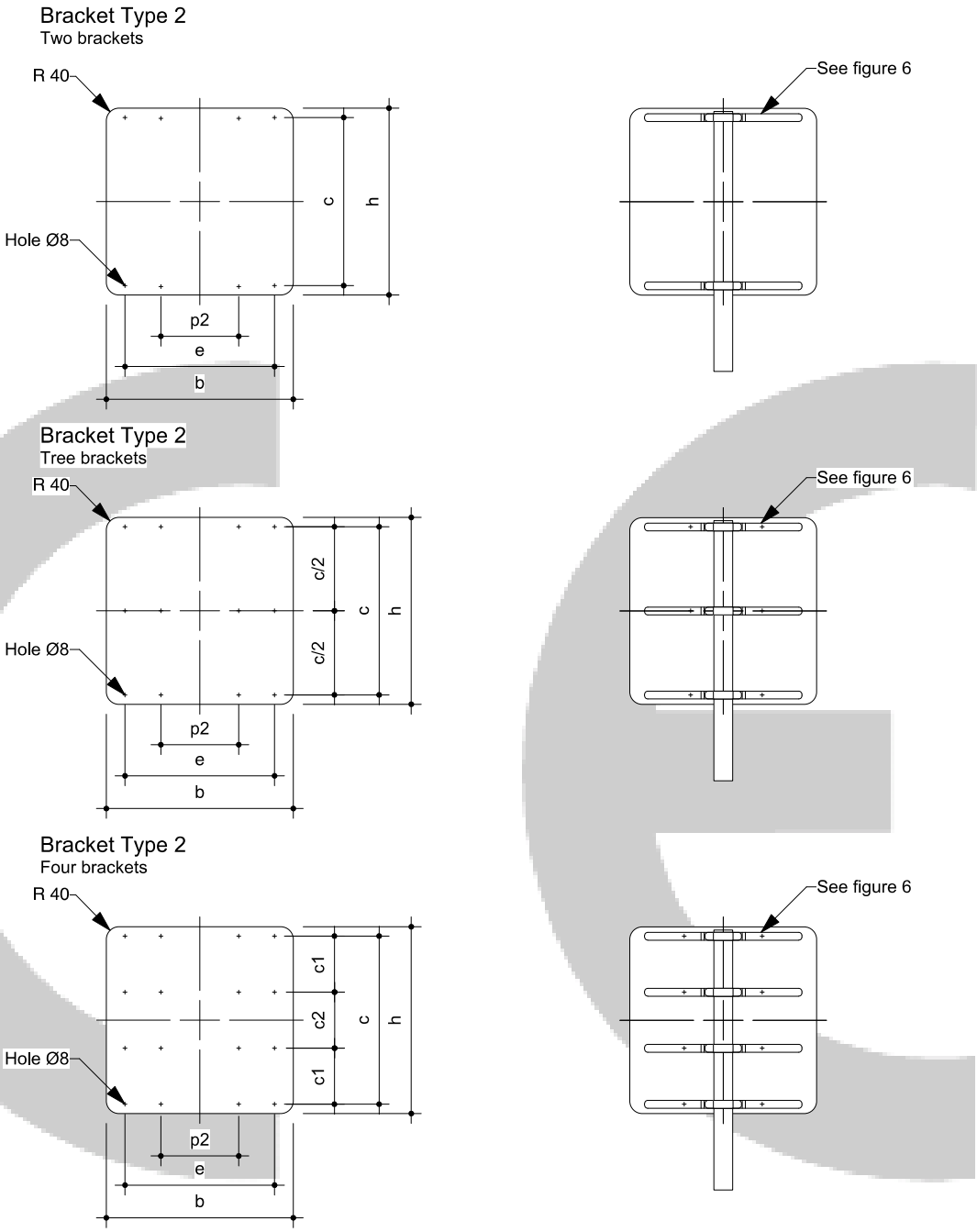


Figure 4: Placement of holes in the different types of sign plate is shown at left and the brackets at right. Values for the variable measures are given in Table 2. Details for the brackets are shown in Figure 5 and Figure 6.

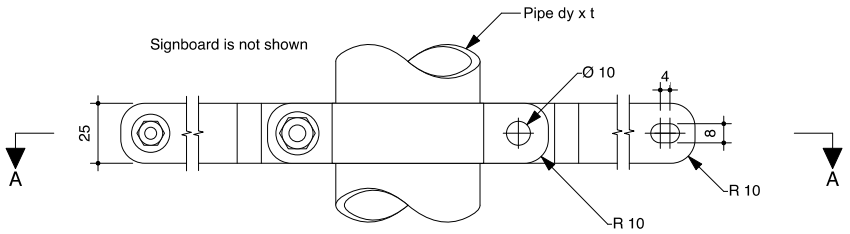
DBI Certification A/S
Jernholmen 12, 2650 Hvidovre
Tlf.: 36 34 90 90
E-mail: info@dbicertification.dk
www.dbicertification.dk

h	b	c	c1	c2	e	Minimum numbers of brackets
1450	650	1389	463	463	280	4
1450	650	1390	-	-	280	3
1250	1200	1190	395	400	650	4
1250	1200	1190	-	-	650	3
1250	750	1190	-	-	480	3
1250	600	1190	-	-	280	3
1250	400	1190	-	-	180	3
1250	250	1190	-	-	180	3
800	1200	740	-	-	650	2
800	750	740	-	-	480	2
800	600	740	-	-	280	2
800	400	740	-	-	180	2
800	250	740	-	-	180	2
700	250	640	-	-	180	2
650	1200	590	-	-	650	2
600	600	540	-	-	280	2
600	400	540	-	-	180	2
550	750	490	-	-	480	2
250	1200	-	-	-	650	1
250	750	-	-	-	480	1
250	600	-	-	-	280	1
250	400	-	-	-	180	1
250	250	-	-	-	180	1

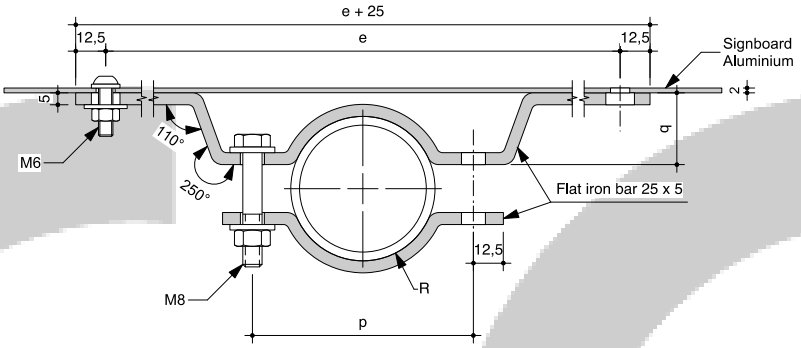
Table 2: Variable measures of the different sign types and their numbers of brackets to be used for the sign plates shown in Figure 3 and Figure 4.

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

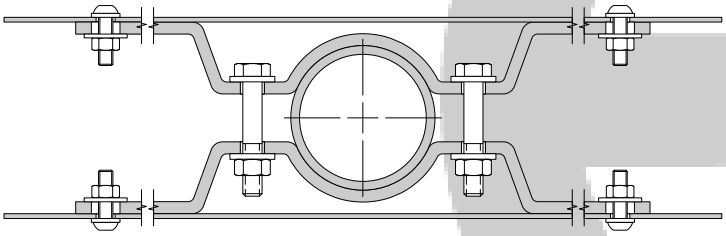
Detail of bracket type 1 1:2



Section A-A Single sided mounting 1:2



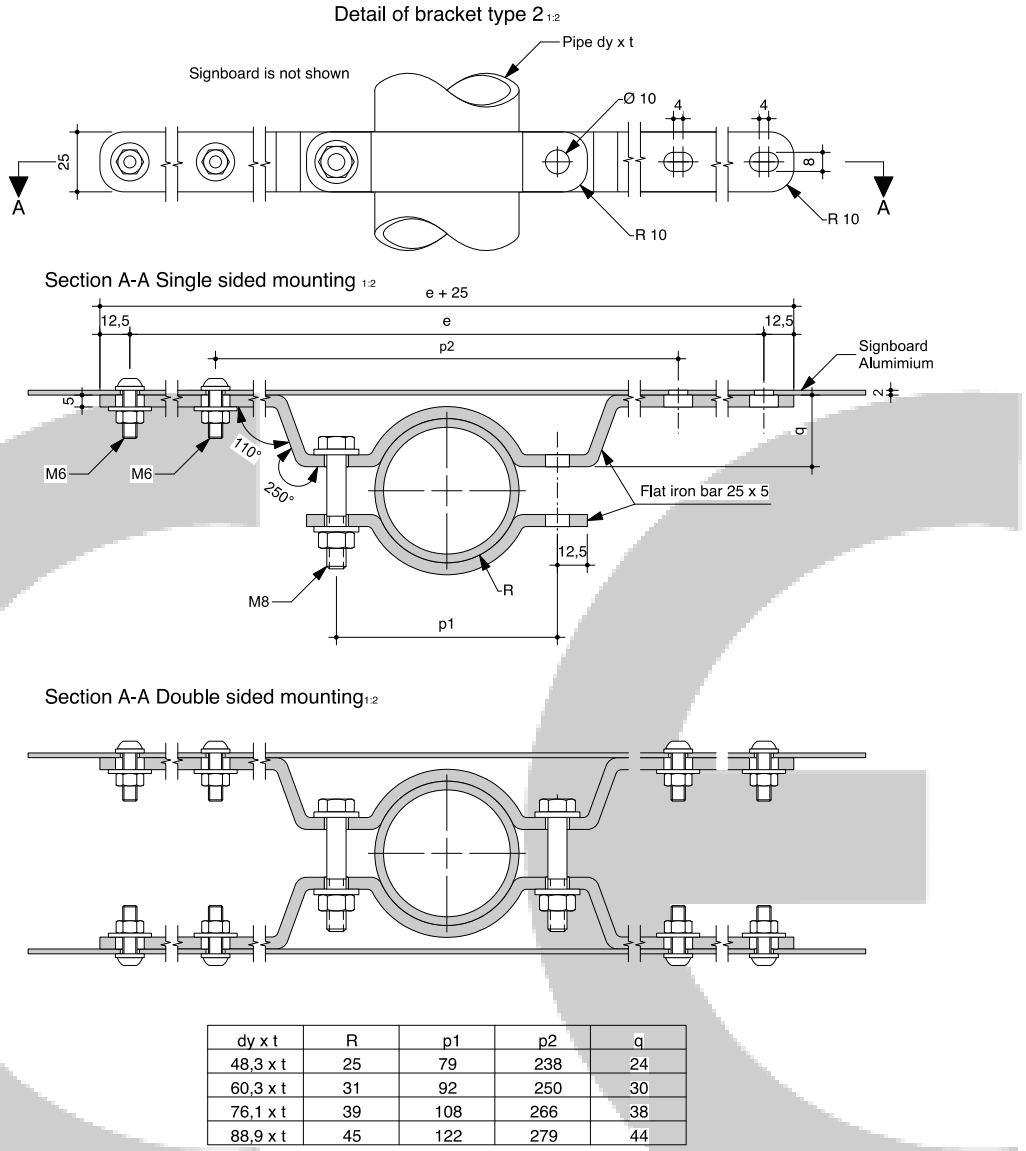
Section A-A Double sided mounting 1:2



dy x t	R	p	q
48,3 x t	25	79	24
60,3 x t	31	92	30
76,1 x t	39	108	38
88,9 x t	45	122	44

Figure 5: Brackets Type 1.

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



dy x t	R	p1	p2	q
48,3 x t	25	79	238	24
60,3 x t	31	92	250	30
76,1 x t	39	108	266	38
88,9 x t	45	122	279	44

Figure 6: Brackets Type 2.

Fixings:		Pass. M6: $f_y \geq 370$ MPa M8: $f_y \geq 400$ MPa Pressure force for tightening: M6: 5 kN M8: 2 kN

Prod. Reg. Nr. 7023

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

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
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.					
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

Prod. Reg. Nr. 7023

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

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
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
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 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© 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				
WBhite	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

Prod. Reg. Nr. 7023

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

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
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

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.

Prod. Reg. Nr. 7023

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

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
Corrosion resistance		
Brackets		Minimum S235 Hot dip galvanized to a minimum of 60µm. SP1
Screws, nuts and washers		M6: $f_y \geq 370$ MPa, SP1 or SP2 according to material. M8: $f_y \geq 400$ MPa, SP1 or SP2 According to material.
Aluminum plate		SP1 Laquered 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

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

Annex 2

TECHNICAL BASIS

Title	Date
Infra Gropu Danmark ApS Calculation of minor traffic signs (ITC) Shapes and sizes for signs without protection edge mounted on brackets made of presharped rectangular steel bars, 1th Edition.	September 2017
Orafol Retroreflective Sheeting Oralite© 5710 Engineering grade: 0913-CPD-2009/001 Annex	 2009-03-17 2018-02-23
Orafol Retroreflective Sheeting Oralite© 5810 High Intensity grade: 0913-CPD-2009/035 Annex	 2012-06-27 2018-02-23

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