

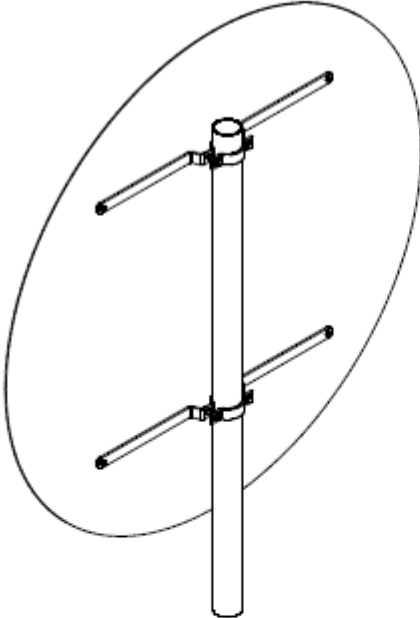
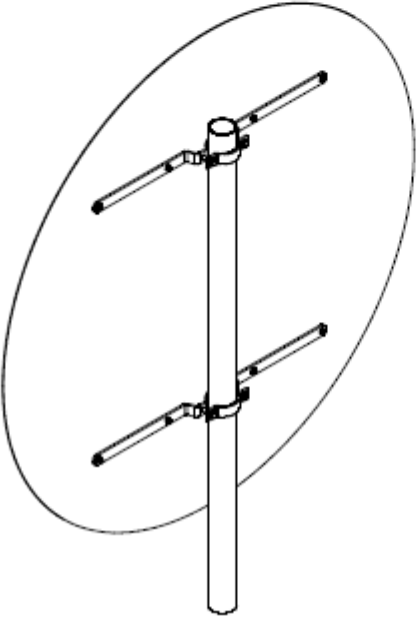
YDEEVNEDEKLARATION

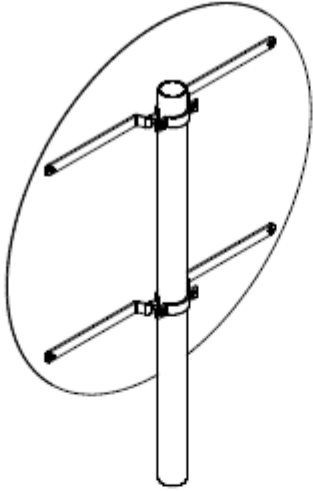
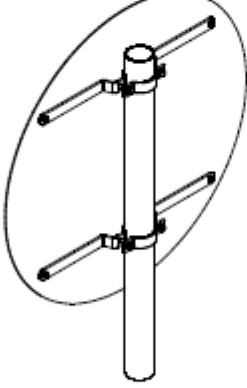
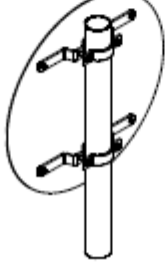
Nr.: SR 00020

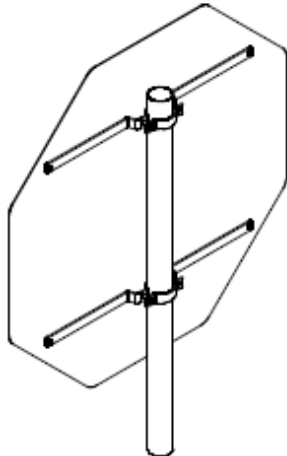
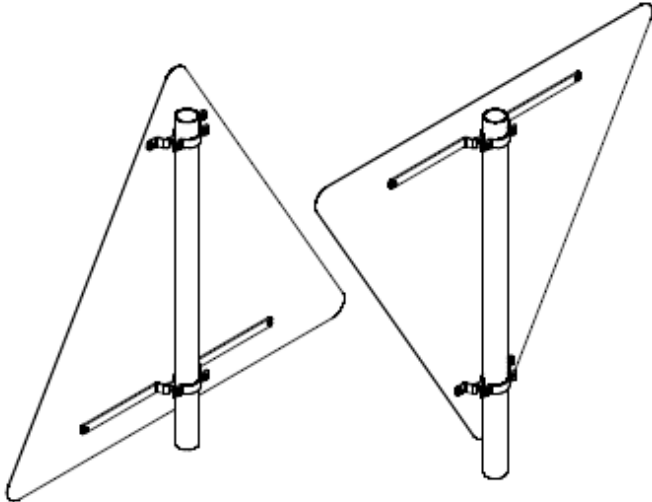
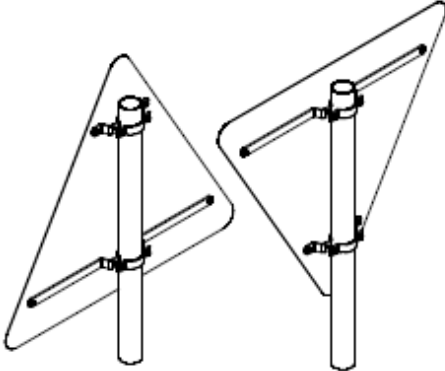
1. Byggevarere type:	Faste lodrette trafikskilte.
2. Byggevarere identifikation:	Lodret trafikskilt med beslag.
3. Byggevarere ns tilsigtede anvendelse:	Tavle med beslag til montage på lige stander.
4. Producentens Navn og adresse:	Saferoad Daluiso A/S Hvidkærvej 33 5250 Odense SV
5. Systemerne til vurdering og kontrol af konstansen af byggevarere ns ydeevne:	1
6. Produktstandard:	EN 12899-1:2007
7. Notificeret Organ:	DBI Certification A/S, Jernholmen 12, DK-2650 Hvidovre nr.: 2531 har udført bestemmelse af varetype, type beregning, indledende og løbende overvågning af fabrikkens egen produktions kontrol (FPC) og udstedt EC Certifikat
8. EC Certifikat of Conformity:	2531-CPR-CSC10020

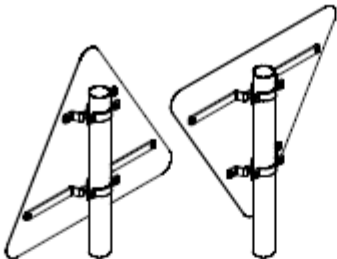
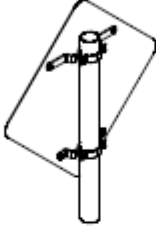
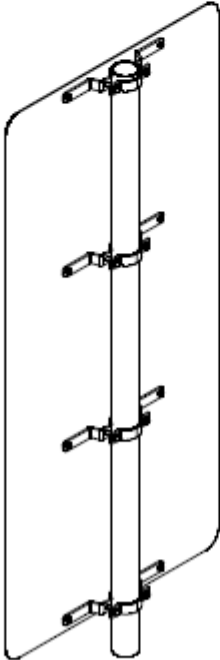
9. Deklareret ydeevne:

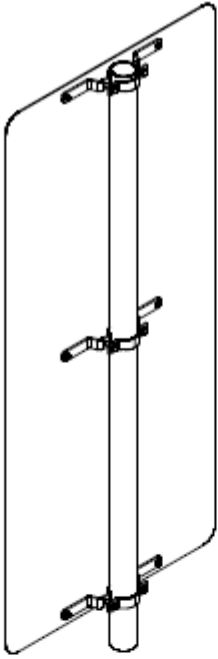
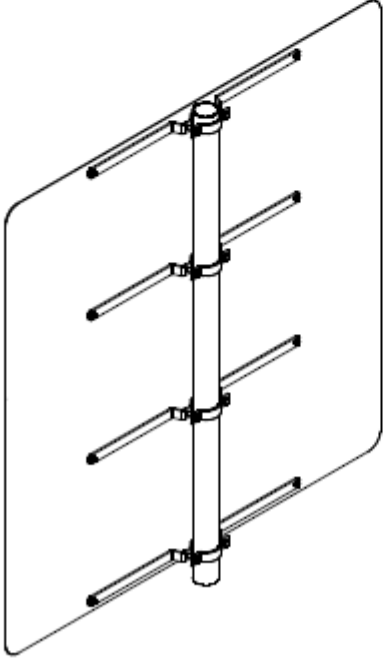
Description and classification:

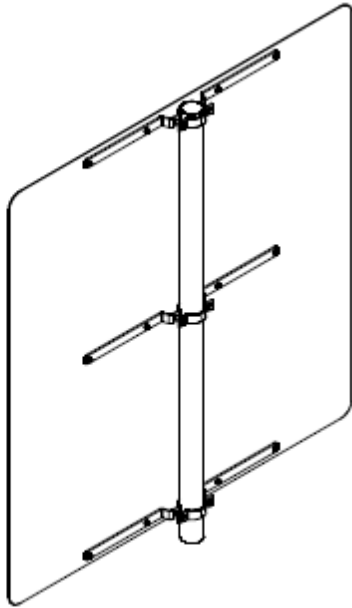
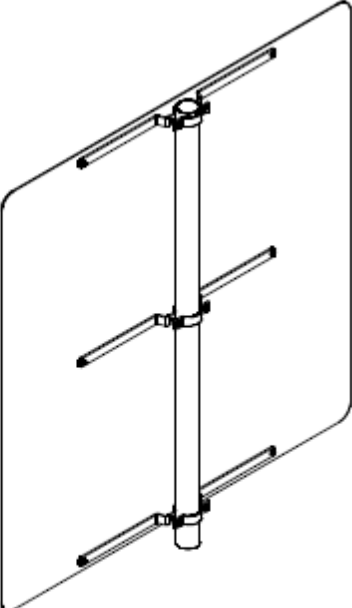
Sign, sizes and mounting system Brackets: Minimum steel quality: S235 Signboard: Minimum aluminium quality: $R_{p0,2} = 180 \text{ MPa}$ Pipe dimension Ø48,3, Ø60,3, Ø76,1 or 88,9 mm Single sided or double sides mounting	Classification according to wind load classes		
	Placed in WL1	Placed in WL2	Placed in WL3
 $d \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $d \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, 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.

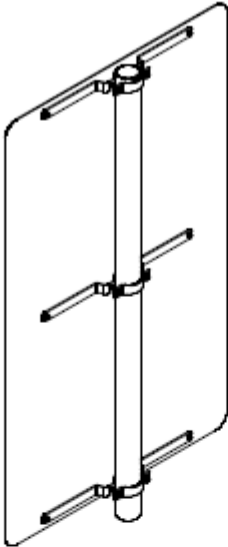
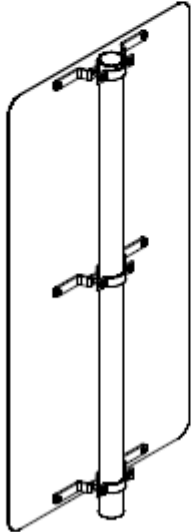
 $d \leq 900 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 1	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 $d \leq 700 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $d \leq 500 \text{ mm}$, $t = 2 \text{ mm}$, 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.

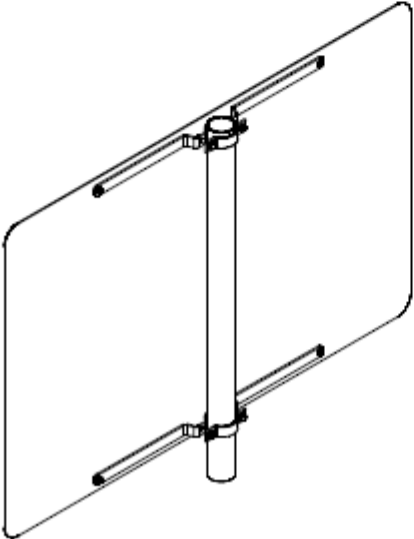
 $h \leq 900 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 1	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 $s = \leq 1250 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $s \leq 900 \text{ mm}$, $t = 2 \text{ mm}$, 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.

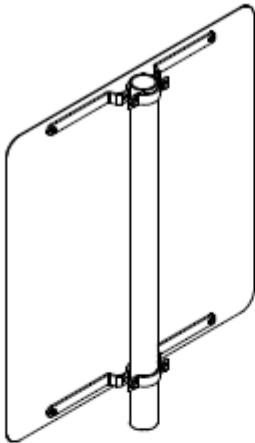
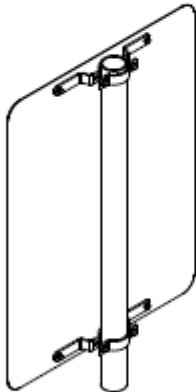
 $S \leq 700 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 1	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 $a \leq 500 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 1450 \times \leq 650 \text{ mm}$, $t = 2 \text{ mm}$, 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.

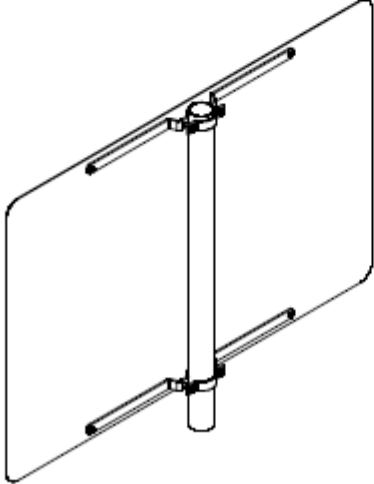
 $h \times b = \leq 1450 \times \leq 650 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 1	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	
 $h \times b = \leq 1250 \times \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, 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.	

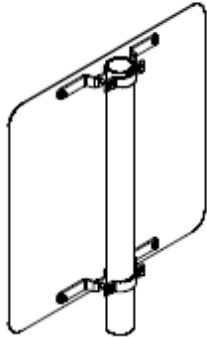
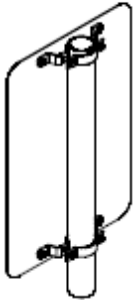
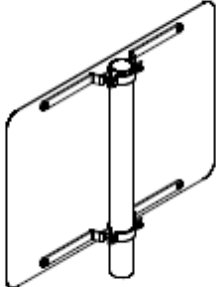
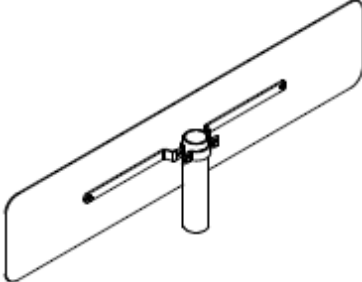
 $h \times b = \leq 1250 \times \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 2	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB6, TDT0, P2, E1 and SP1.
 $h \times b = \leq 1250 \times \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, 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.

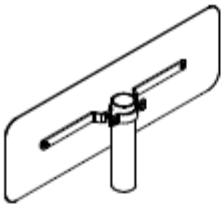
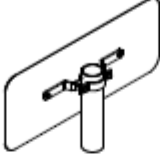
 $h \times b = \leq 1250 \times \leq 750 \text{ mm}$, $t = 2 \text{ mm}$, brackets type 1	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB2, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB3, TDT0, P2, E1 and SP1.
 $h \times b = \leq 1250 \times \leq 600 \text{ mm}$, $t = 2 \text{ mm}$, 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.

 $h \times b = \leq 1250 \times \leq 400 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 1250 \times \leq 250 \text{ mm}$, $t = 2 \text{ mm}$, 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.
	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.

$h \times b = \leq 800 \times \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 1 			
$h \times b = \leq 800 \times \leq 750 \text{ mm}$, $t = 2 \text{ mm}$, 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.
$h \times b = \leq 800 \times \leq 600 \text{ mm}$, $t = 2 \text{ mm}$, 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.
$h \times b = \leq 800 \times \leq 400 \text{ mm}$, $t = 2 \text{ mm}$, 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.

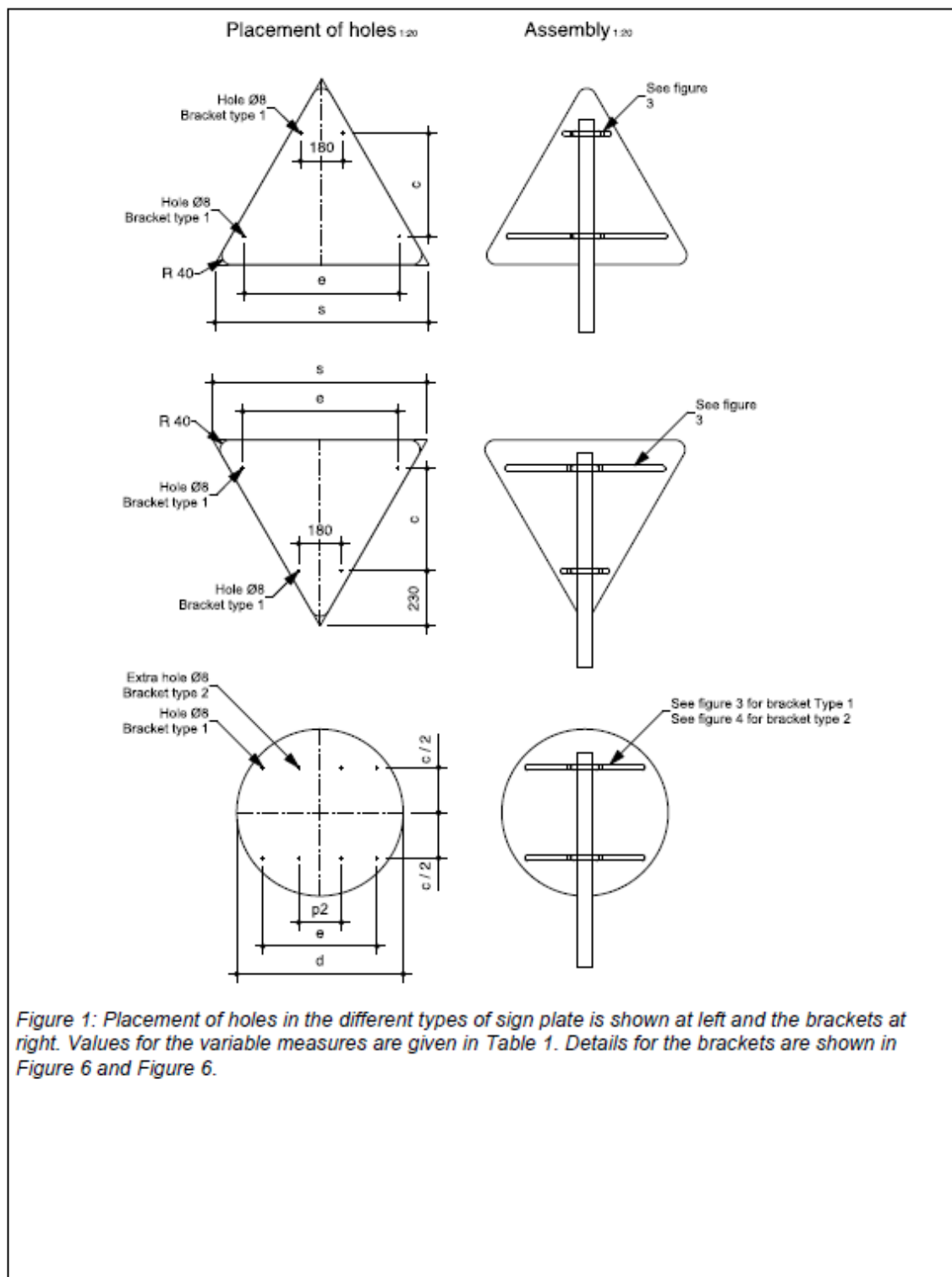
 $h \times b = \leq 800 \times \leq 250 \text{ mm}$, $t = 2 \text{ mm}$, brackets Type 1	Signboard and brackets: PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL2, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.	Signboard and brackets: PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
 $h \times b = \leq 700 \times \leq 250 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 650 \times \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, 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.

 $h \times b = \leq 600 \times \leq 600 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 600 \times \leq 400 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 550 \times \leq 750 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 250 \times \leq 1200 \text{ mm}$, $t = 2 \text{ mm}$, 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.

 $h \times b = \leq 250 \times \leq 750 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 250 \times \leq 600 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 250 \times \leq 400 \text{ mm}$, $t = 2 \text{ mm}$, 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.
 $h \times b = \leq 250 \times \leq 250 \text{ mm}$, $t = 2 \text{ mm}$, 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.



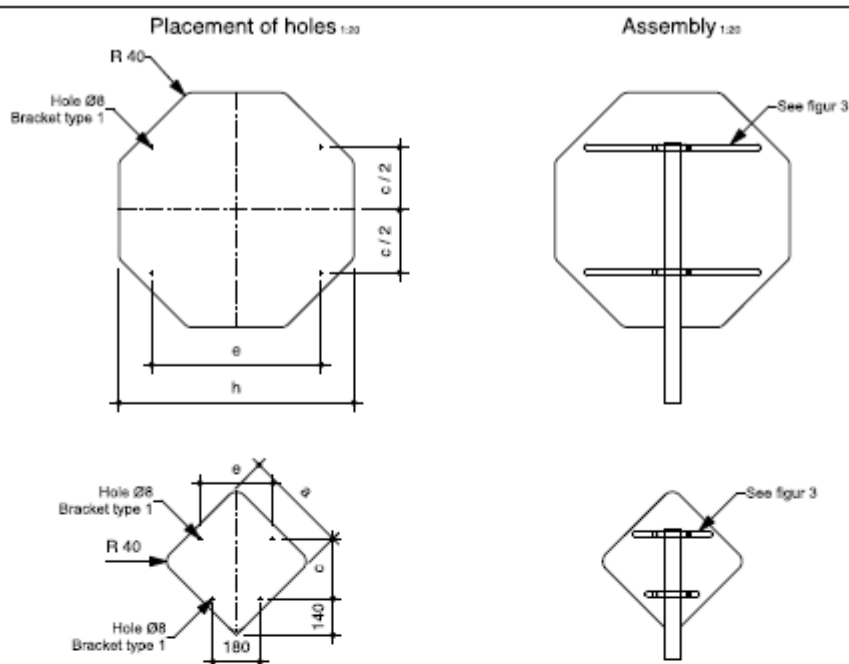
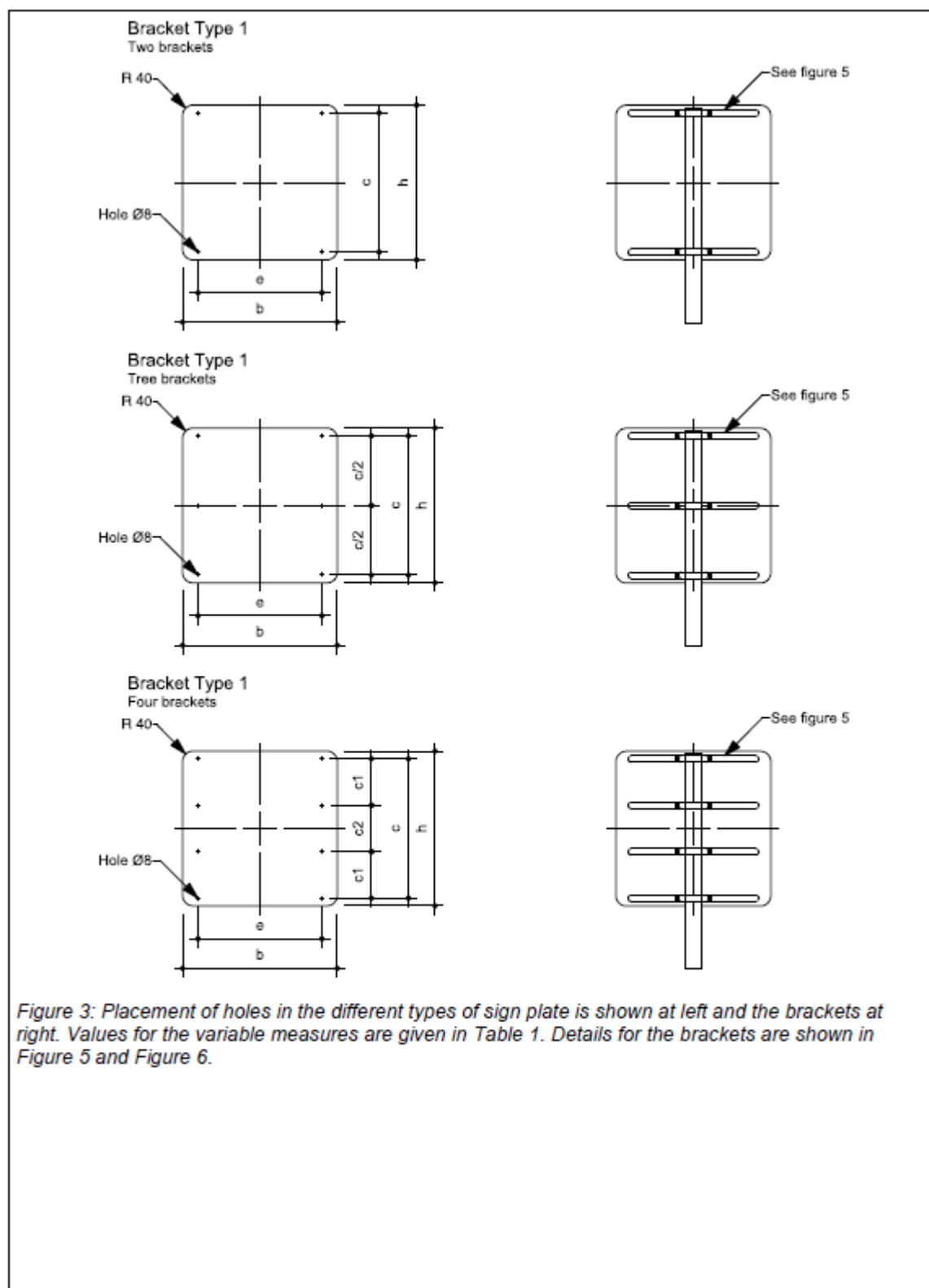
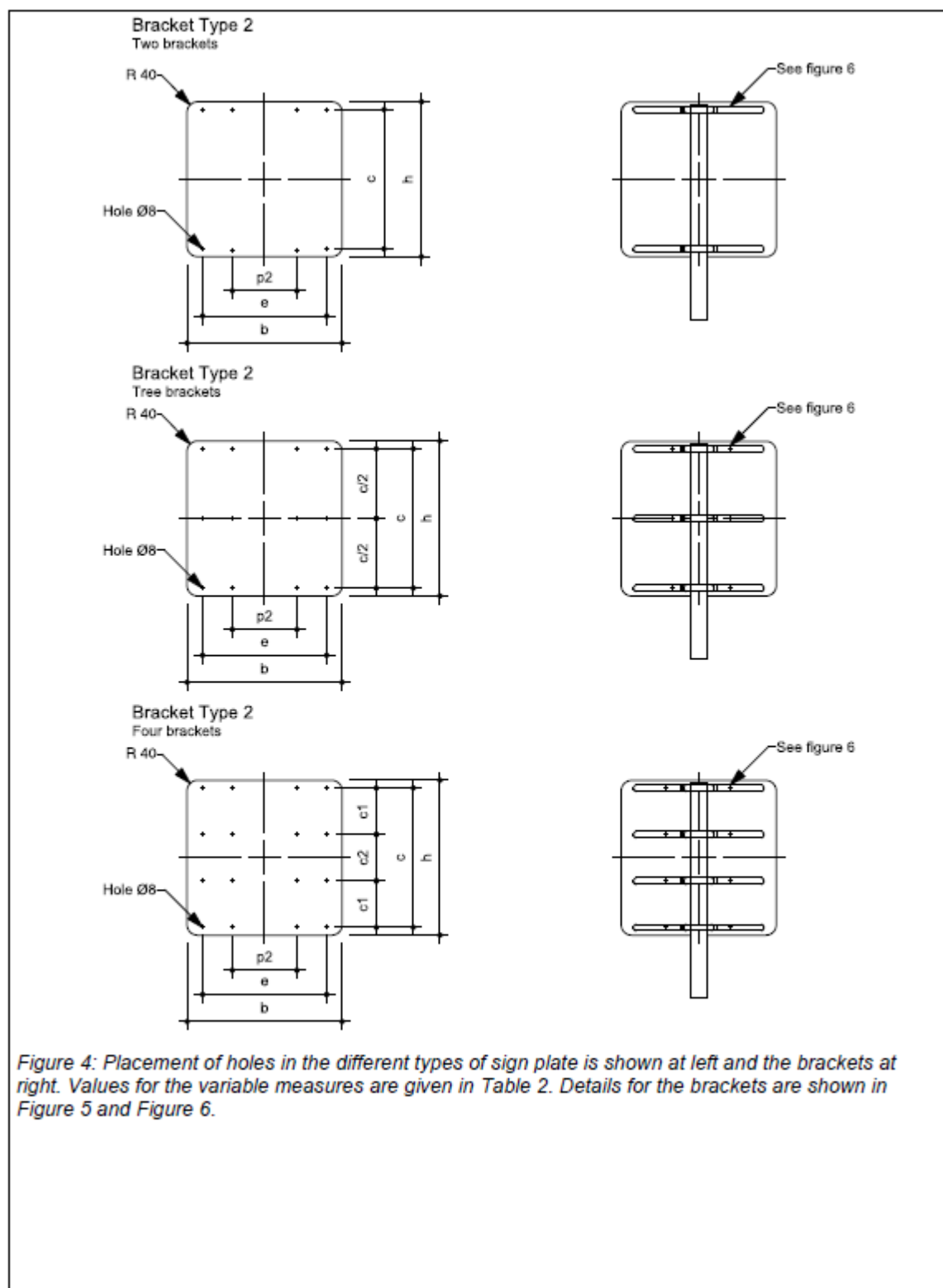


Figure 2: Placement of holes in the different types of sign plate is shown at left and the brackets at right. Values for the variable measures are given in Table 1. Details for the brackets are shown in Figure 5 and Figure 6.

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





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.

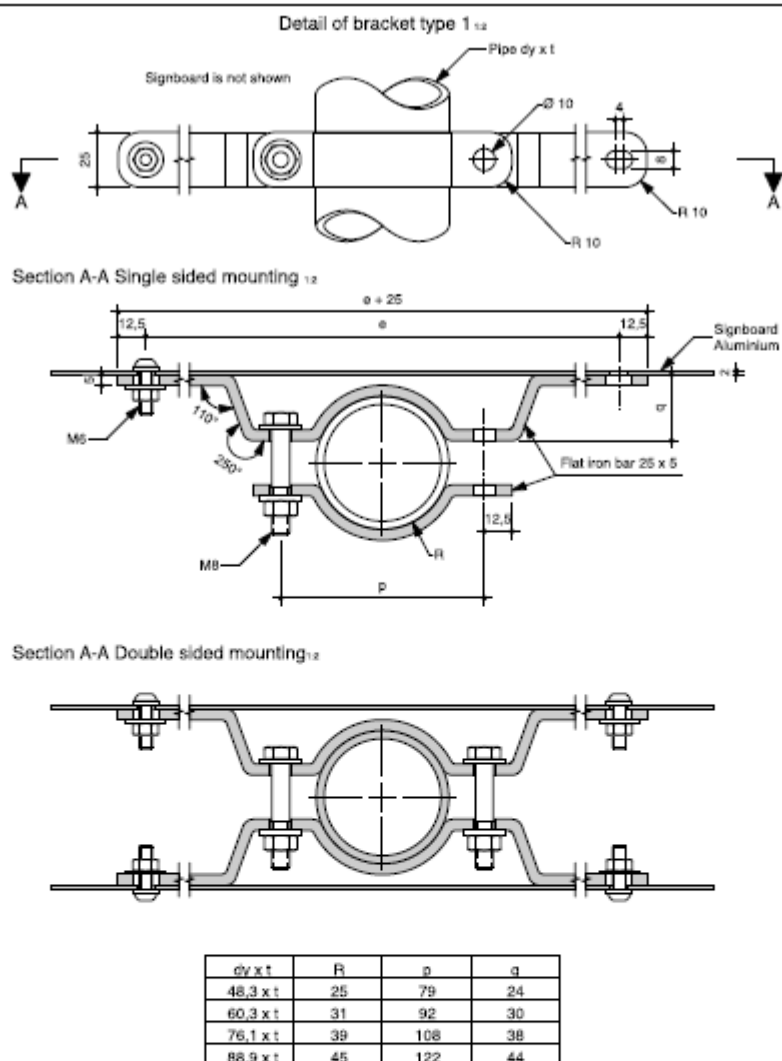


Figure 5: Brackets Type 1.

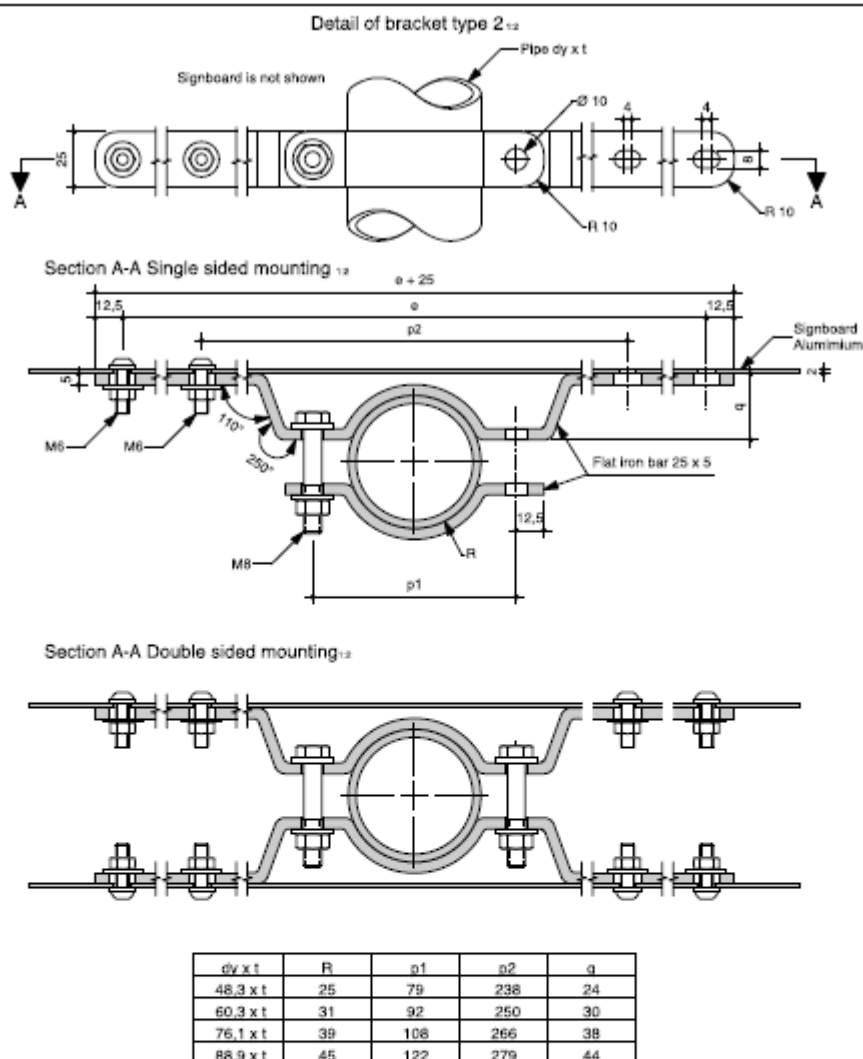


Figure 6: Brackets Type 2.

Fixings:		Pass. Pressure force for tightening: M6: 5 kN M8: 2 kN
Visibility		Value/description/ class/reference
Retroreflective signs: Daylight chromaticity & luminance factor	3M Advanced Engineering Grade Prismatic 7930 3M High Intensity Prismatic 3930 3M Engineering Grade Prismatic 3430 3M Diamond Grade DG	ETA 16/0006, ETA 17/0465 ETA 18/0290 ETA 12/0550 ETA 10/0118 ETA 18/0405
Non retroreflective signs: Daylight chromaticity & luminance factor		NPD
Retroreflective signs: Coefficient of retroreflection R_A	3M Advanced Engineering Grade Prismatic 7930 3M High Intensity Prismatic 3930 3M Engineering Grade Prismatic 3430 3M Diamond Grade DG	ETA 16/0006, ETA 17/0465 ETA 18/0290 ETA 12/0550 ETA 10/0118 ETA 18/0405
External illumination:		
mean illuminance,		NPD
uniformity of illuminance		NPD

Durability		Value/description /class
Impact resistance Sign face material	3M Advanced Engineering Grade Prismatic 7930	Pass ETA 16/0006 ETA 17/0465
	3M High Intensity Prismatic 3930	Pass, ETA 18/0290
	3M Engineering Grade Prismatic 3430	Pass, ETA 12/0550 Pass, ETA 10/0118
	3M Diamond Grade DG	Pass, ETA 18/0405
Resistance to weatering – sign face material: Retroreflective signs	3M Advanced Engineering Grade Prismatic 7930	ETA 16/0006, ETA 17/0465
	3M High Intensity Prismatic 3930	ETA 18/0290
	3M Engineering Grade Prismatic 3430	ETA 12/0550 ETA 10/0118
	3M Diamond Grade DG	ETA 18/0405
Resistance to weatering – sign face material: Non retroreflective signs		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.
Aluminium plate		SP1 Laquered Al-plate on exposed side if any. 3M primer on front side.
Resistance to penetration of dust and water		NPD The product can not be provided with compartments for electrical equipment

Technical basis

Title	Date
Saferoad Daluiso A/S Calculation of minor traffic signs (ITC) Shapes and sizes for signs without protection edge mounted on brackets made of preshaped rectangular steel bars, 1 th Edition.	September 2017
3M Advanced Engineer Grade Prismatic 7930: ETA 16/0006 ETA 17/0465	2016-03-03 2017-07-26
3M High Intensity Prismatic 3930 ETA 18/0290	2018-06-21
3M Engineering Grade Prismatic 3430: ETA 10/0118 ETA 12/0550	2016-02-10 2018-06-06
3M Diamond Grade DG: ETA 18/0405	2018-06-21

10. Underskrevet for fabrikanten og på dennes vegne af:

Ydeevnen for den vare, der er anført i punkt 1 og 2, er i overensstemmelse med den deklarerede ydeevne anført i punkt 9. Denne ydeevnedeklaration er udarbejdet i overensstemmelse med forordning (EU) nr. 305/2011 på eneansvar af den producent, der er anført i punkt 4.

Ydeevnen er underskrevet for og på vegne af producenten af:

Odense den. 22-11-2018



Morten Kirchhoff Lund
Quality and LEAN Manager