

**YDEEVNEDEKLARATION**

Nr.: SR 00016

1. Byggevaretype:	<b>Faste lodrette trafikskilte.</b>
2. Byggevaridentifikation:	<b>Rørgalger til montage af færdselstavler.</b>
3. Byggevarens tilsigtede anvendelse:	
4. Producentens Navn og adresse:	<b>Saferoad Danmark A/S Hvidkærvej 33 5250 Odense SV</b>
5. Systemerne til vurdering og kontrol af konstansen af byggevarens ydeevne:	<b>1</b>
6. Produktstandard:	<b>EN 12899-1:2007</b>
7. Notificeret Organ:	<b>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</b>
8. EC Certifikat of Conformity:	<b>2531-CPR-CSC10016</b>

## 9. Deklareret ydeevne:

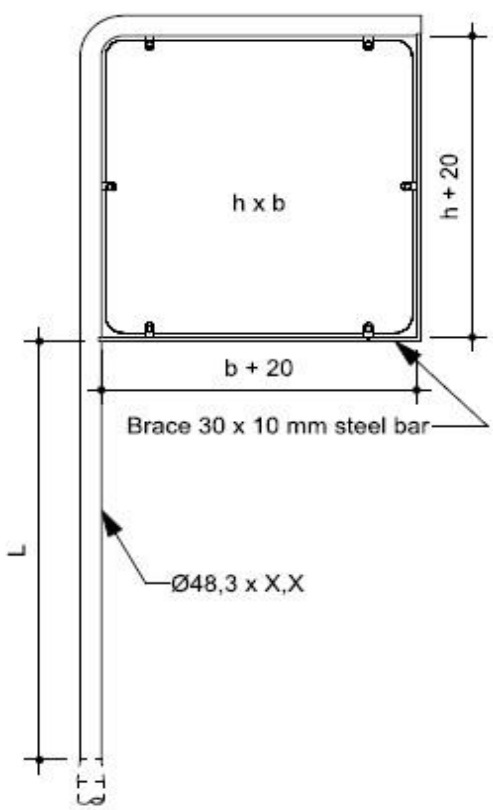
<b>Sizes of signboards and different types of gallows</b> Pipes: Minimum steel quality: S235 in dimension Ø48,3 x 2,9, Ø48,3 x 3,0 and Ø48,3 x 3,2 mm Signboard: Minimum aluminum quality: R <sub>p0,2</sub> = 180 MPa, min. 2 mm thickness	<b>Classification according to wind load classes</b>		
	Placed in 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.

<p>Fixed end Ø48,3 x X,X Type BS 1.2</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, TDT4 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 2.1 Fixed end Ø48,3 x X,X</p>	<p><b>Signboard:</b> PAF1, WL1, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL1, DSL0, PL0, TDB1, TDT4 and SP1.</p>	<p><b>Signboard:</b> PAF1, WL2, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL2, DSL0, PL0, TDB1, TDT4, and SP1.</p>	<p><b>Signboard:</b> PAF1, WL3, DSL0, PL0, TDB5, TDT0, P2, E1 and SP1.</p> <p><b>Gallows:</b> PAF1, WL3, DSL0, PL0, TDB2, TDT4 and SP1.</p>
<p>Type BS 2.2 Fixed end Ø48,3 x X,X</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>Fixed end Type BS 3.1 Ø48,3 x X,X</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><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 style="text-align: center;">-</p>																						
<p style="text-align: center;"><b>Sign, sizes and mounting system</b></p> <p>Pipes: Minimum steel quality: S235 in dimension  <math>\text{Ø}48,3 \times 2,9</math>, <math>\text{Ø}48,3 \times 3,0</math>, <math>\text{Ø}48,3 \times 3,2</math>, <math>\text{Ø}60,3 \times 3,6</math> and <math>\text{Ø}60,3 \times 4,5</math> mm                  Signboard: Minimum aluminium quality: <math>R_{p0,2} = 180</math> MPa,                  min. 2 mm thickness</p>		<p style="text-align: center;"><b>Classification according to wind load classes</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Placed in WL1</th> <th style="width: 33%;">Placed in WL2</th> <th style="width: 33%;">Placed in WL3</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;"><math>h \leq 235</math> mm and <math>b \leq 1500</math> mm <math>L \leq 1200</math> mm</td> </tr> <tr> <td>PAF1, WL1, DSL0, PL0, TDB2, TDT4, P2, E1 and SP1.</td> <td>PAF1, WL2, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.</td> <td>PAF1, WL3, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.</td> </tr> <tr> <td colspan="3" style="text-align: center;"><math>h \leq 235</math> mm and <math>b \leq 1750</math> mm <math>L \leq 1200</math> mm</td> </tr> <tr> <td>PAF1, WL1, DSL0, PL0, TDB2, TDT5, P2, E1 and SP1.</td> <td>PAF1, WL2, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.</td> <td>PAF1, WL3, DSL0, PL0, TDB3, TDT5, P2, E1 and SP1.</td> </tr> <tr> <td colspan="3" style="text-align: center;"><math>h \leq 235</math> mm and <math>b \leq 2000</math> mm <math>L \leq 1200</math> mm</td> </tr> <tr> <td>PAF1, WL1, DSL0, PL0, TDB3, TDT6, P2, E1 and SP1.</td> <td>PAF1, WL2, DSL0, PL0, TDB4, TDT6, P2, E1 and SP1.</td> <td>PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.</td> </tr> </tbody> </table>			Placed in WL1	Placed in WL2	Placed in WL3	$h \leq 235$ 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.	$h \leq 235$ mm and $b \leq 2000$ mm $L \leq 1200$ mm			PAF1, WL1, DSL0, PL0, TDB3, TDT6, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB4, TDT6, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB4, TDT0, P2, E1 and SP1.
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<p>Upper part, double sign</p>	$h \leq 235 \text{ mm}$ and $b \leq 1500 \text{ mm}$ $L \leq 800 \text{ mm}$		
	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
<p>Upper part, double sign</p>	$h \leq 235 \text{ mm}$ and $b \leq 1750 \text{ mm}$ $L \leq 800 \text{ mm}$		
	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
<p>Upper part, double sign</p>	$h \leq 235 \text{ mm}$ and $b \leq 2000 \text{ mm}$ $L \leq 800 \text{ mm}$		
	PAF1, WL1, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL2, DSL0, PL0, TDB3, P2, E1 and SP1.	PAF1, WL3, DSL0, PL0, TDB3, P2, E1 and SP1

<p>Upper part</p>	<p><math>h \leq 800 \text{ mm}</math> and <math>b \leq 650 \text{ mm}</math>  <math>L \leq 1000 \text{ mm}</math></p>		
<p>PAF1,          WL1,          DSL0,          PL0,          TDB3,          TDT2,          P2, E1          and SP1.</p>	<p>PAF1,          WL2,          DSL0,          PL0,          TDB3,          TDT2,          P2, E1          and SP1.</p>	<p>PAF1,          WL3,          DSL0,          PL0,          TDB4,          TDT3,          P2, E1          and SP1.</p>	

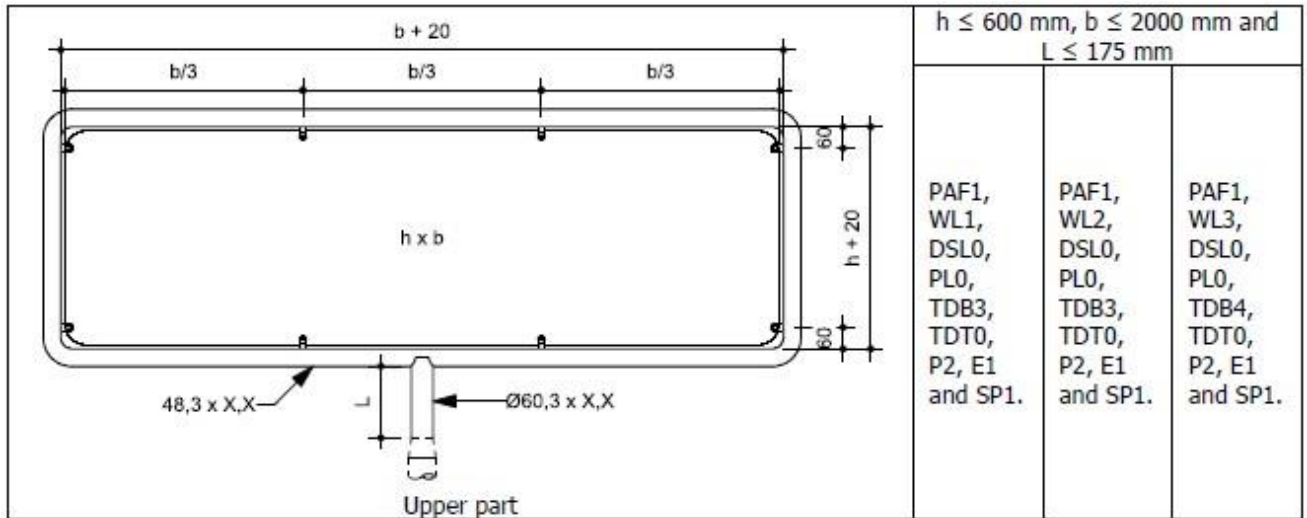
 <p>Upper part</p>	$h \leq 700 \text{ mm}$ and $b \leq 700 \text{ mm}$ $L \leq 1000 \text{ mm}$		
	<p>PAF1,            WL1,            DSL0,            PLO,            TDB3,            TDT1,            P2, E1            and SP1.</p>	<p>PAF1,            WL2,            DSL0,            PLO,            TDB3,            TDT2,            P2, E1            and SP1.</p>	<p>PAF1,            WL3,            DSL0,            PLO,            TDB4,            TDT3,            P2, E1            and SP1.</p>

<p style="text-align: center;">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 style="text-align: center;">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.	

<p>Upper part</p>	$h \leq 600 \text{ mm}, b \leq 1000 \text{ mm}$ and $L \leq 875 \text{ mm}$		
	PAF1, WL1, DSL0, PLO, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB2, TDT0, P2, E1 and SP1.

<p>Upper part</p>	$h \leq 600 \text{ mm}, b \leq 1750 \text{ mm}$ and $L \leq 375 \text{ mm}$		
	PAF1, WL1, DSL0, PLO, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL2, DSL0, PLO, TDB1, TDT0, P2, E1 and SP1.	PAF1, WL3, DSL0, PLO, TDB2, 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 gallows are intended for mounting at the top of another straight steel pipe. Together the gallows and the straight steel is the support for the sign.  M6 Screws, nuts and washers are minimum A2, class 70 ( $f_{y,b} = 450$ MPa).
Temporary deflection (supports) -bending -torsion		NPD To be declared on the support
Permanent deflection		NPD
Performance under vehicle impact		NPD To be declared on the support

<b>Visibility</b>		<b>Value/description/ class/reference</b>
Retroreflective signs: Daylight chromaticity & luminance factor	3M Advanced Engineering Grade Prismatic 7930	ETA 16/0006 ETA 17/0465
	3M High Intensity Prismatic 3930	ETA 18/0290 ETA 17/0491
	3M Engineering Grade Prismatic 3430	ETA 12/0550 ETA 10/0118
	3M Diamond Grade DG	ETA 18/0405 ETA 17/0490
	3M Flexible Engineer Grade Prismatic 7600	ETA 19/0839
Non retroreflective signs: Daylight chromaticity & luminance factor		NPD
Retroreflective signs: Coefficient of retroreflection R <sub>A</sub>	3M Advanced Engineering Grade Prismatic 7930	ETA 16/0006 ETA 17/0465
	3M High Intensity Prismatic 3930	ETA 18/0290 ETA 17/0491
	3M Engineering Grade Prismatic 3430	ETA 12/0550 ETA 10/0118
	3M Diamond Grade DG	ETA 18/0405 ETA 17/0490
	3M Flexible Engineer Grade Prismatic 7600	ETA 19/0839
<b>External illumination</b>		<b>Value/description /class</b>
mean illuminance,		NPD
uniformity of illuminance		NPD
<b>Durability</b>		<b>Value/description /class</b>
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 ETA 17/0491
	3M Engineering Grade Prismatic 3430	Pass ETA 12/0550 ETA 10/0118

	3M Diamond Grade DG  3M Flexible Engineer Grade Prismatic 7600	Pass ETA 18/0405 ETA 17/0490  Pass, ETA 19/0839
Resistance to weathering – sign face material: Retroreflective signs	3M Advanced Engineering Grade Prismatic 7930  3M High Intensity Prismatic 3930  3M Engineering Grade Prismatic 3430  3M Diamond Grade DG  3M Flexible Engineer Grade Prismatic 7600	ETA 16/0006 ETA 17/0465  ETA 18/0290 ETA 17/0491  ETA 12/0550 ETA 10/0118  ETA 18/0405 ETA 17/0490  ETA 19/0839
Resistance to weathering – sign face material: Non retroreflective signs		NPD
<b>Corrosion resistance</b>		<b>Value/description/class/reference</b>
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

File number	Title	Date
None	<p>Saferoad Danmark A/S 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.</p> <p>Saferoad Danmark A/S 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. Revision 01</p> <p>Saferoad Danmark A/S Calculation of minor traffic signs (ITC) Shapes and sizes for signs mounted in gallows type GS, Revision 01</p> <p>3M Advanced Engineering Grade Prismatic 7930 ETA 16/0006 ETA 17/0465</p> <p>3M High Intensity Prismatic 3930 ETA 18/0290 ETA 17/0491</p> <p>3M Engineering Grade Prismatic 3430 ETA 12/0550 ETA 10/0118</p> <p>3M Diamond Grade DG ETA 18/0405 ETA 17/0490</p> <p>3M Flexible Engineer Grade Prismatic 7600 ETA 19/0839</p>	<p>September 2016</p> <p>June 2017</p> <p>January 2018</p> <p>2016-03-03 2017-07-26</p> <p>2018-06-21 2017-07-26</p> <p>2016-02-10 2018-06-06</p> <p>2018-06-21 2017-07-26</p> <p>2020-04-17</p>

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. 10-01-2023



Jesper Arbirk Larsen

Quality and sustainability consultant