

# VIK-SVV 1 Parapet

H2 W4 Parapet

Installation manual



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### 1. Important

Proper installation and repair is essential to ensure the systems maximum performance.

### 2. Description

The VIK-SVV 1 is a steel bridge restraint system that is designed to enhance safety on the bridges. The system has successfully been tested according to classes H2 described in EN 1317-2. The system is based on tube formed profiles with post distance of 2 meters.

### 3. Level of performance

According to EN-1317

Post distance	Containment level	Working width [W]	Dynamic deflection	Impact severity level
2 m	H2	1,2m/W4	0,8 m	B

### 4. List of components

For list of components, see drw. no. SVV1-010

### 5. General dimensions, placement, heights and anchor bolts

For instruction about anchor bolts, dimensions and placement, please see Statens Vegvesen handbook 268.

Recommended anchor bolts: M24 8.8 / M24 A4 80

## 6. Installing the VIK-SVV 1 parapet

### 6.1 Installing the post

The posts should be installed with a nut and washer on both sides of the base plate on each anchor bolt, see drw. no. SVV1-010. The height and alignment of the installed parapet can then be adjusted by altering the heights of these nuts.

### 6.2 Installing the handrail

The handrails have predrilled holes for connection to the top plate on the posts. The M20x40 bolts are used to connect the handrail to the post. See drw. no. SVV1-020, detail 1.

### 6.3 Connecting the handrails

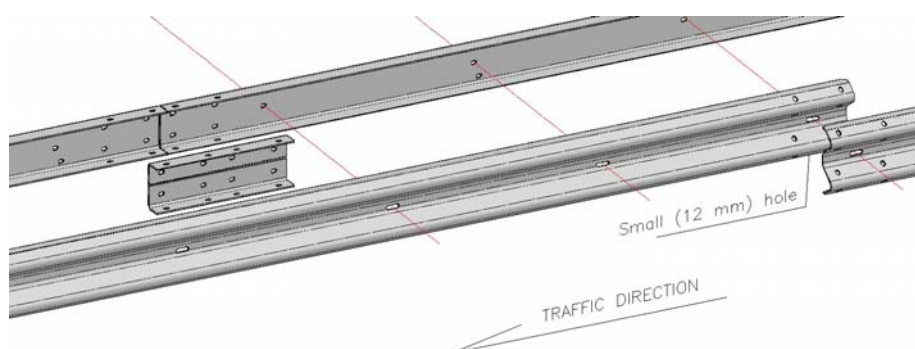
The handrails are connected to each other by using the handrail connecting bar, placed on the underside of the handrail. The connection bar is locked in place by the M20x60 bolts, see drw. no. SVV1-020, detail 2.

### 6.4 Installing the front elements (U-shaped backside beam and A-profile beam)

The front elements including the three following elements:

1. Energy absorption box: This box is connected to the posts with M16x40 bolts, see drw. no. SVV1-010, section B:B
2. U-shaped backside beam: The beam is connected to the energy absorption box with M16x40 bolts, see drw. no. SVV1-010, section B:B. The beams are connected to each other with an two angles of steel and M16 bolts, see drw. no. SVV1-010, section B:B
3. A-profile beam: The beams are connected to the U-shaped backside beam with M16x40 bolts, see drw. no. SVV1-010, sections B:B. Distance between bolts, 1 meters.

Note: When connecting the A- profiles, the wide end of the profile is placed outside the narrow end of the following barrier in the direction of traffic. See drawing below.



### 6.5 Horizontal panel

This panel is placed between the posts. The panel is fixed to the post with an angle of steel and M16 bolts, see drw. no. SVV1-020, detail 3.

### **6.6 Bolts/fasteners**

Please check that all bolts/fasteners are placed correct and all bolts-washer-nuts-connections are normally/proper fastened/tighten.

### **7. Maintenance**

There are no general inspections intervals for this parapet itself. Inspections intervals have to be determent based on local factors such as volume of traffic, risk of damage, climate etc.

The parapet should be inspected regularly and if displaced or damage, it should be adjusted and repaired.

All damage profiles should be replaced with new when repaired.

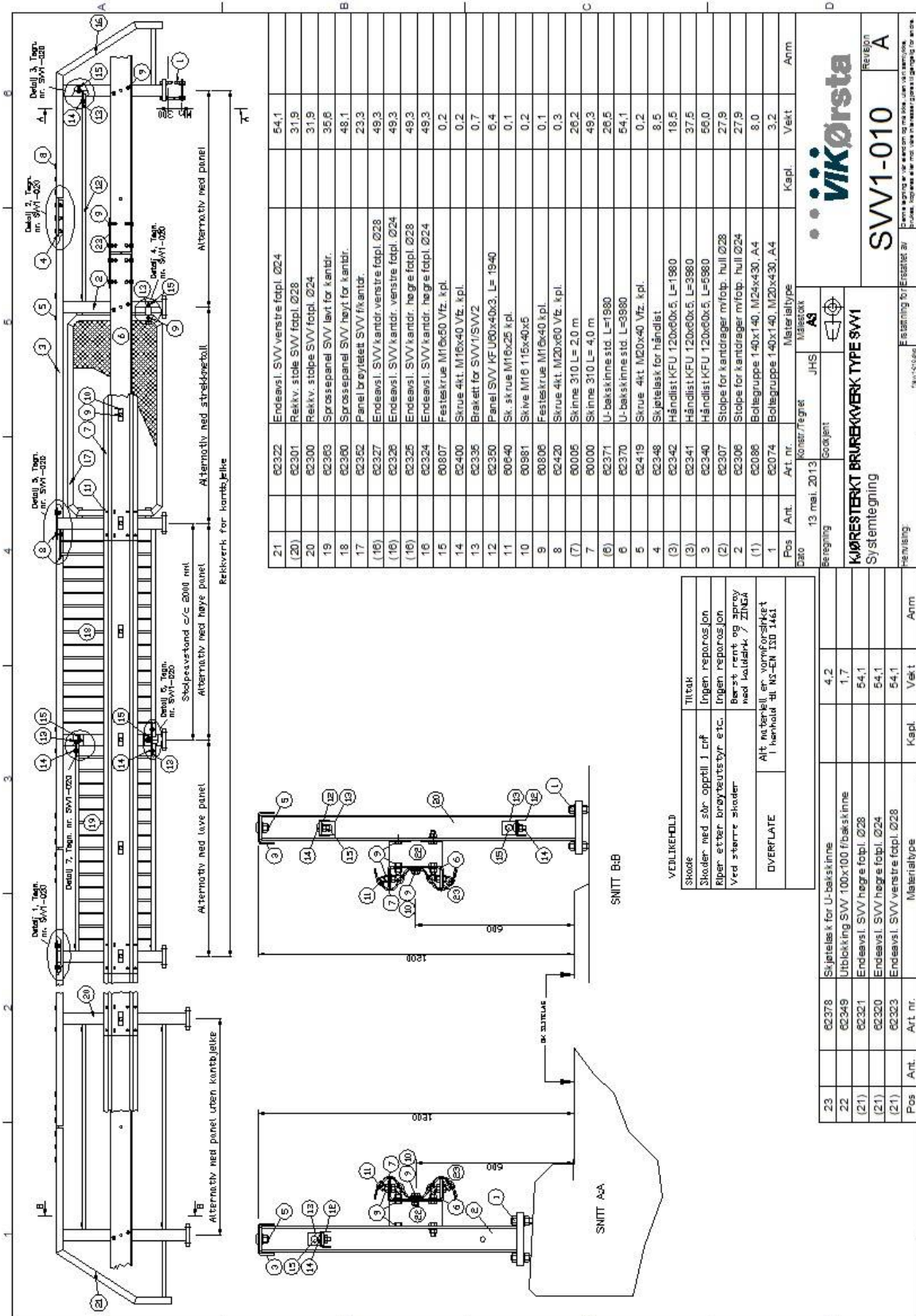
#### **7.1 Cleaning**

Cleaning can be done with water and any type of Ph neutral detergent.

### **8. Marking**

If everything is done and installed according to this installation manual, the guardrail can be marked with the CE-mark. This mark shall be placed at the end (the starting end) of the installed guardrail.

9. Drawing



Detailj 1 tegn. nr. SV1-010

Detailj 2 tegn. nr. SV1-010

Detailj 3 tegn. nr. SV1-010

Detailj 4 tegn. nr. SV1-010

Detailj 5 tegn. nr. SV1-010

Detailj 6 tegn. nr. SV1-010

Detailj 7 tegn. nr. SV1-010

(20)		Rekky. stole SV1 f/tpk. Ø28	31,9
20		Rekky. stole SV1 f/tpk. Ø24	31,9
19		Sprosspanel SV1/avt for kantro.	35,6
18		Sprosspanel SV1/avt for kantro.	46,1
17		Panel brøyrett SV1 f/kantro.	23,3
15		Festeskruer M16x50 Vz. kpl.	0,2
14		Skrue 4kt. M16x40 Vz. kpl.	0,2
13		Brakett for SV1/SV2	0,7
12		Panel SV1/KFU 60x40x3, L= 1940	6,4
11		Sk. skruer M16x25 kpl.	0,1
10		Skive M16 115x40x5	0,2
9		Festeskruer M16x40 kpl.	0,1
8		Skrue 4kt. M20x60 Vz. kpl.	0,3
5		Skrue 4kt. M20x40 Vz. kpl.	0,2
4		Skjeteleak for håndlist	8,5
3		Håndlist KFU 120x60x5, L=5980	56,0
2		Støpe for kantrodrager m/fstp. hull Ø24	27,9
Pos	Ant.	Art. nr.	Kapl.
		Målestokk	Vekt
		13 mai. 2013	
		Konstr./Tegnet	
		Boogant	
		JHS	
		Målestokk	
		A3	
<b>KJØRESTERKT BRUEREKKEVÆRK TYPE</b>			
<b>SV1</b>			
Detailer 1-7			
Referanse: <a href="#">http://www.vikorsta.no</a>			
Etableringsplan for SV1-020			
Revisjon			
<b>SV1-020</b>			
<b>A</b>			