

# VIK-SVV 2 Parapet

H2 W1 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 2 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	0,6m/W1	0,4 m	B

### 4. List of components

For list of components, see drw. no. SVV2-010

### 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 2 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. SVV2-010. 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. SVV2-020, 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. SVV-020, detail 2.

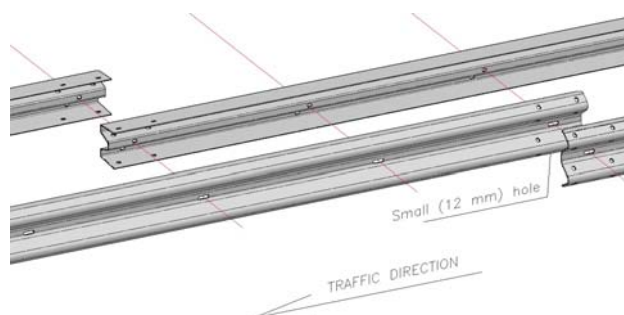
### 6.4 Installing the front elements (w-shaped backside beam and A-profile beam)

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. SVV2-010, section B:B
2. W-shaped backside beam: The beam is connected to the energy absorption box with M16x40 bolts, see drw. no. SVV2-010, section B:B. The beams are connected to each other with M16x25 bolts, see drw. no. SVV2-010, section B:B
3. A-profile beam: The beams are connected to the W-shaped backside beam with M16x40 bolts, see drw. no. SVV2-010, sections B:B. Distance between bolts, 1 meters.

Note: When connecting the profiles:

- A-profile: the wide end of the profile is placed outside the narrow end of the following barrier →
  - W-shaped backside beam: the narrow end of the profile is placed outside the wide end of the following beam →
- 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. SVV2-020, 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

**Table 1: Parts List**

Pos	Ant.	Art. nr.	Materialtype	Kapl.	Vekt	Anm
19		62363	Sprossepanel SVV lavt for kantdr.		35,6	
18		62360	Sprossepanel SVV høyt for kantdr.		48,1	
17		62352	Panel brytelett SVV-Flkantdr.		23,3	
(16)		62387	Endeavsl. SVV2 kantdr. venstre f.øpl. Ø28		51,3	
(16)		62386	Endeavsl. SVV2 kantdr. venstre f.øpl. Ø24		51,3	
(16)		62385	Endeavsl. SVV2 kantdr. høyre f.øpl. Ø28		51,3	
(16)		62384	Endeavsl. SVV2 kantdr. høyre f.øpl. Ø24		51,3	
15		60807	Festeskrue M16x50 Vz. kpl.		0,2	
14		62400	Skruer 4kt. M16x40. Vz. kpl.		0,2	
13		62335	Brakett for SVV1/SV2		0,7	
12		62350	Panel SVV KFU06x04x3, L= 1940		6,4	
11		60640	Sk. skruer M16x25 kpl.		0,1	
10		60981	Skive M16 115x40x5		0,2	
9		60806	Festeskrue M16x40 kpl.		0,1	
(7)		60005	Skimme 310 L= 2,0 m		26,2	
7		60000	Skimme L= 4,0 m		49,3	
6		62543	Bakskinne L= 2,0 m		33,8	
(6)		62542	Bakskinne L= 4,0 m		65,1	
5		62419	Skruer 4kt. M20x40 Vz. kpl.		0,2	
(3,1)		62221	Håndlist Ende KFU 140x60x6, L=4980		18,5	
(3,1)		62223	Håndlist Ende KFU 140x60x6, L=2980		18,5	
(3)		62219	Håndlist KFU 140x60x6, L=1980		18,5	
(3)		62222	Håndlist KFU 140x60x6, L=3980		37,5	
3		62220	Håndlist KFU 140x60x6 L=5980		56,0	
(2)		62307	Stolpe for kantdrager m/foip. hull Ø28		27,9	
2		62306	Stolpe for kantdrager m/foip. hull Ø24		27,9	
(1)		62086	Boltegruppe 140x140, M24x30, A4		8,0	
1		62074	Boltegruppe 140x140, M20x430, A4		3,2	

**Table 2: Assembly Details**

Pos	Ant.	Art. nr.	Materialtype	Kapl.	Vekt	Anm
22		62081	Utbløking HUP100x100 fribakskine		1,9	
(21)		62381	Endeavsl. SVV2 høyre f.øpl. Ø28		57	
(21)		62380	Endeavsl. SVV2 høyre f.øpl. Ø24		57	
(21)		62383	Endeavsl. SVV2 venstre f.øpl. Ø28		57	
(21)		62382	Endeavsl. SVV2 venstre f.øpl. Ø24		57	
(20)		62301	Rektv. stole SVV f.øpl. Ø28		31,9	
20		62300	Rektv. stole SVV f.øpl. Ø24		31,9	

1

Detailj 1 tegn. nr. SW2-010

2

Detailj 2 tegn. nr. SW2-010

3

Detailj 3 tegn. nr. SW2-010

4

Detailj 4 tegn. nr. SW2-010

5

Detailj 5 tegn. nr. SW2-010

6

Detailj 6 tegn. nr. SW2-010

7

Detailj 7 tegn. nr. SW2-010

Pos	Antl.	Art. nr.	Materialtype	Kapl.	Vekt	Anm.
(20)		62301	Rekkv. stole SVV foppl. Ø28		31,9	
20		62300	Rekkv. stole SVV foppl. Ø24		31,9	
19		62363	Sprossepanel SVV lavt for kandr.		35,6	
18		62360	Sprossepanel SVV høyt for kandr.		48,1	
17		62352	Panel brøynett SVV fkanidr.		23,3	
15		60807	Festeak M16x50 Vz. kpl.		0,2	
14		62400	Skrue 4kt. M16x40 Vz. kpl.		0,2	
13		62335	Brakett for SVV/SVW2		0,7	
12		62350	Panel SVV KFUS60x40x3, L=1940		6,4	
11		60640	Sk. skruer M16x25 kpl.		0,1	
10		60981	Skive M16 115x40x5		0,2	
9		60806	Festeak M16x40 kpl.		0,1	
8		62420	Skrue 4kt. M20x60 Vz. kpl.		0,3	
5		62419	Skrue 4kt. M20x40 Vz. kpl.		0,2	
4		62225	Skjirelask for håndlist SVW2		13,7	
3		62220	Håndlist KFU 140x60x6, L=5980		56,0	
2		62306	Stolpe for kandrager m/foppl. hull Ø24		27,9	

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konstr./tegn: JHS

Utsjekk: A3

Revisjon: A

SVW2

KJØRESTERKT BRUEREKKE TYPE

Detailer 1-7

Forberedelse av utgaver til bruk i prosjektet

Forberedelse av utgaver til bruk i prosjektet

Forberedelse av utgaver til bruk i prosjektet

Forberedelse av utgaver til bruk i prosjektet