

SURESPAN

SURECOVER INSTALL



Installation Manual



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1. General

These instructions are for the following models :
SBV, SB, SBVA, SBVA-SL, SBVE, SBV-F90, SBV-thermo, SBVS250, sBVS400, SBV-shallow SBVE-shallow, SBVH maxi, sBVHS 50, SBVHS 400, RVA, SRV, SRG, SBR, RVE, BVA multi, BVA-RA;

Surecover manhole covers are for installation horizontally with the tray facing upwards.

If the cover is to come into contact with aggressive gases, vapour or liquids, check their chemical compatibility with aluminium or galvanized steel.

Not for use in temperatures above 70°C. Load bearing, sealing (when specified) and safe working life can only be guaranteed if the following instructions are complied with.

2. Positioning and filling the SURECOVER manhole cover

Covers are delivered with the tray screwed in place in the frame or, in the case of non-sealed covers, the tray lies in the frame. After unpacking, the cover and frame must be installed with the tray in place. If this is not done, there is a possibility that the cover will not fit correctly after installation.

Sequence of work

2.1 Mark-out to ensure the cover is correctly positioned, centred over the opening - see fig 1 (please open the flap in the back cover).

2.2 For steel covers, bend the anchors outwards. The outer-frame sections on aluminium covers will provide a key for the concrete.

2.3 If frost-proofing, quick-setting additives or plasticisers are to be used, all parts coming into contact with the concrete or mortar must be coated with a protective layer of bitumastic paint, coal-tar-epoxy, zinc chromate (on aluminium) etc. When installing with hot asphalt, insulate the frame and cover to prevent possible distortion. With other screeds or specialised flooring materials, check shrinkage or expansion properties with their manufacturer to prevent possible damage.

If necessary, fit the cover and frame with spacers forming a gap around the periphery: the gap can be filled afterwards. Use spacers to maintain an even gap between the outer frame and tray.

2.4 Lay bedding concrete (incorporating a waterproofing additive, essential if the cover is to be fitted in a β wet' area) as a ridge which is the width of the frame. The height will depend on the final level of the cover - see fig. 2.

Place the cover and frame centred accurately on the concrete bed, using the marking out lines mentioned in 2.1. Check with a spirit level and tap the cover and frame gently into place, using a piece of wood to protect the metal sections - see fig 3.

Caution: The upper edge of the cover must be set to the finished floor level.

2.5 Fill all voids in the bedding to prevent seepage. Make sure the frame is completely supported, to prevent possible damage when the cover is loaded. Leave sufficient height for the floor finish – see fig 4.

2.6 When the bedding concrete has set, the tray can be filled with C 35/45 grade concrete (European Standard EN 206) – see fig 5. **Under no circumstance should you use screed instead of concrete! Fill the tray and haunch around the outer frame at the same time, maintaining a straight, even gap between cover and frame – see fig 5.**

Note: Take account of the depth of the floor finish (ceramic tiles, terrazzo, stone, carpet, vinyl etc) when filling the tray. We recommend a simple wooden screeding gauge is used.

When filling continuous duct-covers, care must be taken to prevent excessive gaps opening between the covers and the frame, and adjustments should be made, using spacers, before the concrete has hardened.

SURECOVER in-fill manholes achieve their loading-strength when properly filled with C 35/45 grade concrete (Euronorm EN 206) design. The concrete should be carefully vibrated to make sure no voids occur.

The BVH-Maxi, BVHS 250 and BVHS 400 achieves its design strength when 50mm of depth of infill is used.

Filling the tray with asphalt or screed will not allow the cover to reach its design strength.

2.7 When the concrete has reached about 90% of its final strength, take out the cover (see (3) and (4) and thoroughly clean away any concrete overspill from the edges and seat of the

cover and frame. Use mortar to point any gaps in the bedding under the frame.

2.8 Take care when tiling and grouting that any surplus is immediately cleaned out of the gap between tray and frame.

2.9 If the sequence of work on site means that the tray cannot be filled immediately, fit a wooden panel cut to fit the recess. Use a plywood collar to protect the protruding edges of the cover and frame from damage.

3. Opening

Every SURECOVER is delivered with the correct lifting tools

Sequence of work

3.1 Remove the protective cap using a screw driver.

3.2 Unscrew the hexagon socket-head screws (only fitted on sealed versions) using the key provided.

3.3 Insert the Golden Key (with the extension below the threaded section) into the threaded lifting point.

When resistance is felt, make one more turn to loosen the corner. Repeat for the other three corners. Screw SURECOVER lifting keys into the lifting points and lift the cover vertically before sliding out. Get assistance if the cover is too heavy or use an approved lifting device (by others). Take care to protect the surrounding flooring.

Golden Keys are not supplied with Types SB, SRV, SRVE, SBR. For Type SBV-F90 and SBV-thermo, the main cover is removed and the panel is lifted out using the in-built handle. We recommend the supports for the panel are removed at the same time. Protect the panel from physical damage and dampness.

- protective caps
- locking screws
- seals
- lifting tools:
 - Allen key
 - Lifting key, long – the Golden Key
 - Lifting key, standard
 - Lifting key for sRG

4. Closing

Sequence of work

4.1 Make sure the seat and edge of the tray are clean and free from debris. Check that the rubber seal (on sealed versions) is fitted correctly and not damaged. If necessary, fit new seals.

4.2 Place tray centrally in the frame

4.3 On sealed models, replace screws and tighten them gently until the tray lies flush with the frame. Replace the plastic caps.

5. Care and Maintenance

We recommend lifting out covers at least annually. Clean the seat and edges of the cover, check seals (where fitted) are in position and undamaged and coat the seat with a small amount of a silicone-based compound (or Waxoyl) to prevent sticking. On sealed covers, lubricate the screws before re-fitting.

6. Spare parts

A full range of spare are available. Please specify the type of surecover when ordering.

7. Special instructions

The basic instructions for the installation of SURECOVER manhole covers are in our brochure and also in these instructions. Occasionally, exceptional conditions arise and we suggest you contact your supplier or ourselves for further advice.

SURECOVER access covers may not be used as emergency exit lids!

When installed correctly and maintained according to our instructions in (5) SURECOVER manhole covers will give many years of trouble-free service.

Special instructions – all aluminium in-fill covers

The base plate is spot-welded in place and care must be taken to prevent distortion during filling. Prop larger sizes to prevent this.

To obtain the complete integrity of the waterproofing of these types the cover has to be filled with C 35/45 (EV 206) and it should not be installed on a metal construction or similar. Special attention must be given on item 2.4 of these instructions.

When exposed directly to the sun's rays or other heat sources the tightness of the manhole cover may be impaired. In these situations we recom

mend that you seal the outer frame into the surrounding floor by using additional tightening material.

Special instructions – SBVA-RA

SBVA-RA Duct covers are delivered in sections a maximum 3,0 m long, to be assembled on site. Connectors for the outer-frame are supplied with fasteners.

All parts are identified, allowing a logical sequence of installation to be followed.

Special instructions – hot dip galvanized steel covers

Post-manufacturing stress-relief can occasionally lead to minor dimensional changes. The effect of this can usually be overcome during installation. Careful weighting on the frame will usually be successful.

However, we cannot accept responsibility when unsuitable methods for rectification are used.

These instructions, to the best of our knowledge, cover the conditions found in most installations. If you encounter unusual circumstances, please consult your supplier.

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SURELIFTER

The convenient lifter.



With this convenient lifter the lifting of manhole covers becomes child's play. Even heavy covers can be lifted and moved to the side by just one person and without any particular efforts.





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