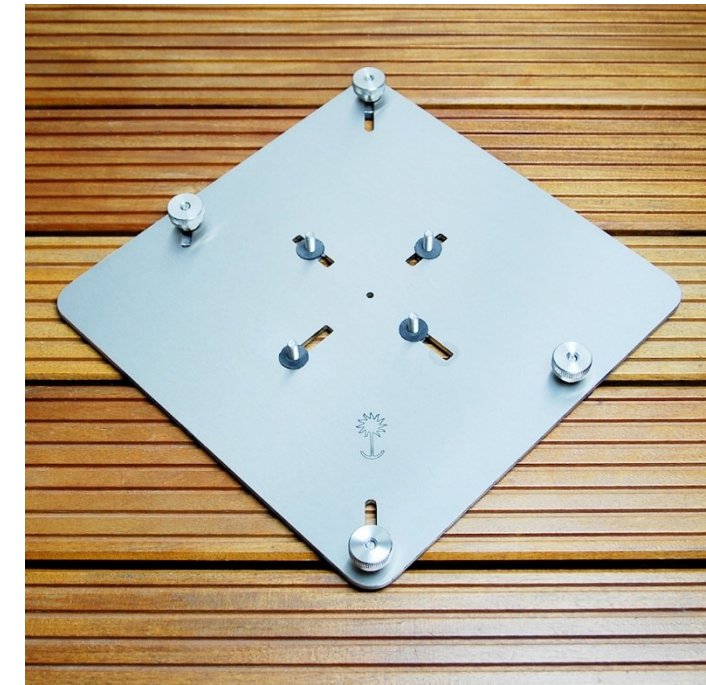
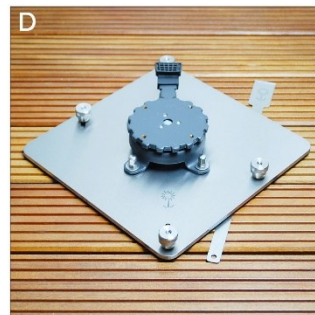
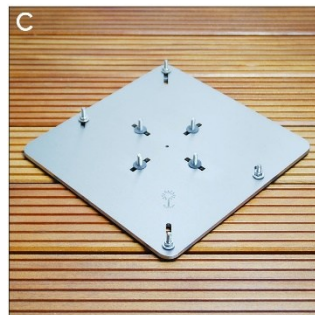
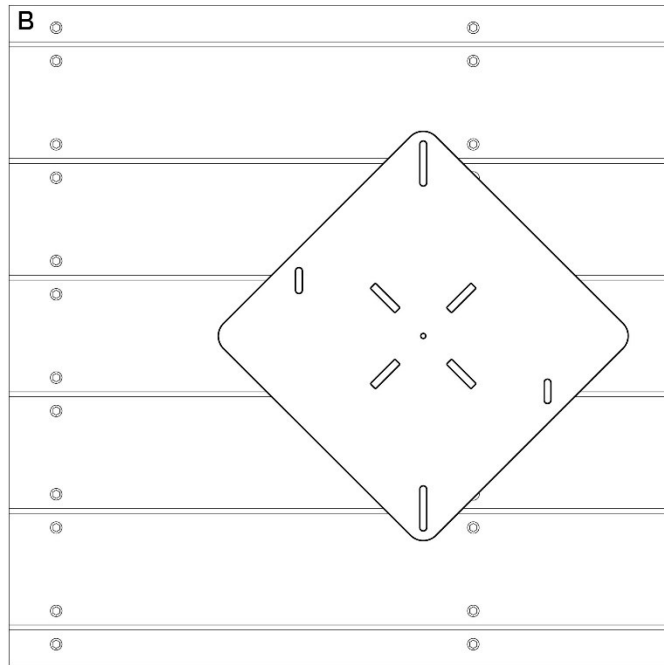
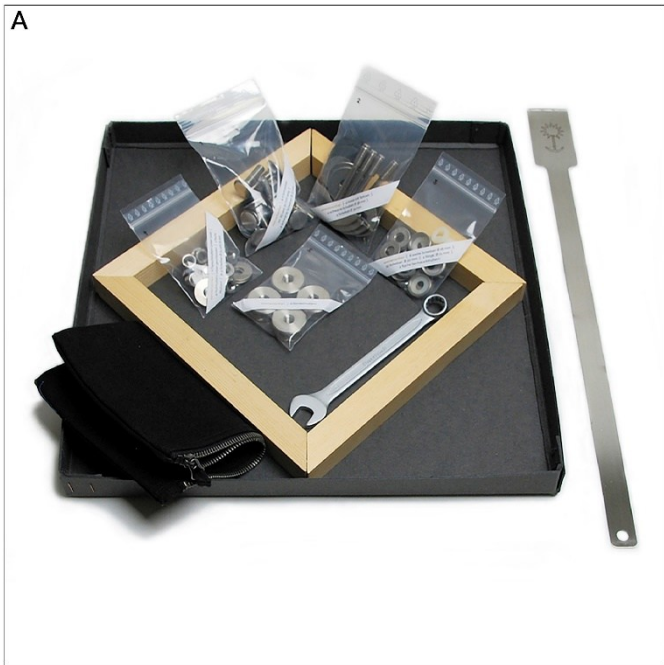


INSTRUCTION MANUAL  
Base for Cantilever Parasols





## ● Content

Unless otherwise stated, all parts are made of stainless steel; standard parts are usually of V4A grade.

The following parts are included in the delivery:

- 1 1 square base plate**, 36 cm x 36 cm with 8 slotted holes
- 2 4 anchors** with points (2a) including nuts and washers
- 2b 4 black washers Ø 38 mm (EPDM)
- 2c 4 washers Ø 34 mm
- 2d 4 white washers Ø 16 mm (polyamide)
- 2e 12 washers Ø 20 mm
- 2f 4 flat hexagon nuts M 8
- 2g 4 rings Ø 16/19 mm
- 2h 4 knurled nuts Ø 30 mm
- 3 4 bolts**, M 8 including nuts and washers
- 3a modified carriage bolts 20, 25 and 30 mm long, 4 of each
- 3b 4 black washers Ø 22 mm (EPDM)
- 3c 4 white washers Ø 16 mm (polyamide)
- 3d 4 each of flat hex nuts, cap nuts and flange nuts
- 4 Accessories**
- 4a Slider
- 4b 13 mm spanner
- 4c Instruction manual

The fasteners are clearly packed in five transparent bags, numbered in the order of assembly.

Caution! Small parts may fall through the gaps between the decking boards. We therefore include an extra spare of important small parts.

**The slider is not a child's toy!** Children may bend it or injure others with it.

Your parasol base can be assembled very quickly. All you need is the spanner supplied! Follow the video on our website [sonnenanker.de](http://sonnenanker.de) or these step-by-step instructions.

## ● Please follow these instructions!

Even if you assemble the parasol base using our video ([www.sonnenanker.de/videos](http://www.sonnenanker.de/videos)), please read these instructions. They contain important additional information.

This parasol base works differently from most others. To ensure you get the most out of it, **please read the user manual thoroughly and carefully from start to finish**. This manual is detailed to ensure safe and correct use.

**Pay particular attention to the safety instructions.** Failure to do so may result in damage to property or personal injury. We accept no liability for damage caused by improper use.

You can also find these instructions at [www.sonnenanker.de/service/bedienungsanleitungen/](http://www.sonnenanker.de/service/bedienungsanleitungen/).

## ● Suitability

This parasol base must only be fixed to decking boards that are screwed down. Several small anchors are placed in the gaps between your decking boards and secured to the boards. Your decking boards and the parasol base thus form a stable system.

The load-bearing capacity of this system depends crucially on the pull-out strength of the decking boards. This depends far more on the type of screw connection than on the material of the boards.

This parasol base is designed for cantilever parasols, also known as free-arm parasols, with four screw holes for fastening.

You can only secure this parasol base safely and correctly to decking boards that are between 120 and 146 mm wide.

## ● Load-bearing capacity

This parasol base is designed to secure cantilever parasols up to Ø 3.5 m to well-screwed decking boards. To achieve this, the parasol base is attached to the decking boards at several points rather than just one. This distributes the load across additional screw connections between the decking boards and the substructure.

The connection with the highest load-bearing capacity is one where the screw heads are visible from above, meaning the

decking boards are held in place by screws through the substructure across their full thickness.

The pull-out strength of concealed screw-fastened systems varies considerably. **The following figures can therefore only serve as a guide.** In addition to the screw-in depth, the material of the decking boards and the substructure, as well as the clips or fittings used for fastening are relevant. Also, the elasticity and stability of the parasols play a role.

Our recommendations apply to all fixing methods where the decking boards are not simply laid loosely or clipped into place. In most cases, the fixings can withstand higher loads. **However, only test higher loads under continuous supervision.** With natural wood decking, failure is usually preceded by noticeable noises. In contrast, WPC decking usually tears out without warning. Screw fixings in aluminium profiles often have very low pull-out strength.

Our recommendations are based on limiting the tensile force to 500 kg. **Higher tensile forces can bend the anchors and render the parasol base unusable.**

Centre-pole parasols up to Ø 3.5 m can be installed on decking boards using our system with almost any type of fixing and, if securely fixed, remain open in wind forces up to 9 without exceeding the permitted tensile force of 500 kg.

**We cannot provide such clear recommendations for cantilever parasols as we can for centre-pole parasols.** Canopy umbrellas can suddenly be subjected to very high loads in strong winds and the resulting unfavourable orientation of the canopy. Please contact us for further advice.

You can use the following guidelines to estimate how much load your decking boards can bear. You can assess for yourself during the 14-day trial period whether these assumptions actually hold true.

This parasol base with four anchors is secured to five decking boards. Loads are transferred to the screw connections adjacent to the anchors. They are distributed across the majority of the at least eight screw connections between the decking boards and the substructure in the case of concealed fixings, and across up to 18 screw connections in the case of boards fixed through and through (**FIGURE B**).

· A single standard decking screw in softwood (e.g. spruce, fir, larch) can withstand a tensile force of 200 kg. Hardwoods and tropical woods can withstand loads many times greater. The load-bearing capacity of this parasol base, with a tensile force of 500 kg, is guaranteed in all cases where the decking boards are screwed from above.

· With concealed fixings, we have frequently observed pull-out strengths of around 100 kg. Under higher loads, the fixings did not usually break immediately, but first became permanently deformed.

## ● Assembly

**Important note:** The screws and nuts for this parasol base have been tested to ensure they can be tightened by hand. **Always ensure that the screws and nuts do not jam! If they do not grip or become stuck, try again!** Clean the threads if necessary. Do not use force!

1. Remove the base plate from the box **FIGURE 1**. Underneath the base plate, you will find four square wooden strips and a bag containing the fixing materials. These are divided into small transparent bags with labels **FIGURE A**. Some of the fixing materials are so small that they can easily fall through the gaps in your decking. It is best to open only the bag containing the parts you currently need, over the lid of the box.
2. Choose a spot for your parasol. This parasol base must be positioned diagonally to the decking boards. Place it as close as possible to a substructure. Refer to **FIGURE B**. Lay the four wooden strips out in a cross shape and place the base on top.
3. Insert one locking bolt into each of the inner slotted holes in the base plate from below and secure them with an EPDM washer from above (see **FIGURE 3ab**). The hole in the EPDM washer is narrow enough to prevent the screw from falling out of the slotted hole. Choose the appropriate length from the range of carriage bolts: the short ones are suitable for parasol bases up to 5 mm thick and the long ones for those approx. 15 mm thick.
4. First, place a black EPDM washer onto each anchor, followed by the large stainless steel washer (**FIG. 2abc**). Insert the prepared anchors through the four outer slotted holes. Slide a polyamide washer onto each anchor from above (**FIG. 2d**). The plastic washer prevents the square base plate from being scratched.
5. Now screw the flat nut (**FIG. 2f**) onto the anchor's thread so that at least 5 mm of thread remains exposed to be gripped with your fingertips.
6. Align the base plate and the wooden strips so that the anchors can slide vertically into the corresponding joints.

The mark on the top of the anchor, on the pin, must point towards the joint. This parasol base is designed so that its anchors are fitted into four adjacent joints (**FIGURE B**). Once all four anchors are in the correct joints, remove the wooden strips.

7. Rotate the anchors into the correct position to secure the parasol base to the decking boards. The markings on the anchors must be perpendicular or at an angle to the joint. The anchors do not need to be exactly perpendicular to the joint. For decking boards that are profiled from below, the tips on the anchors may find a grip if the anchor is at an angle to the joint. Press the anchors fully down. The anchors should now rotate freely in place. Move the base plate if an anchor is too close to the sub-frame and cannot be rotated. If necessary, unscrew the flat nut slightly further. If the anchors still cannot be rotated, please contact us. In this case, longer anchors are required.
8. Now lift one of the anchors with the fingertips of one hand and screw the flat nut down as far as possible with the fingertips of the other hand. Release the anchor and carefully continue to tighten the nut by hand. You will notice that the anchor becomes fixed, as the small prongs on the underside of the anchor have found a firm grip on the underside of the decking boards.
9. Tighten the nut using the spanner. As soon as you feel significant resistance, tighten the nut by no more than half a turn. **FIGURE C** shows the state now achieved. **Caution!** Do not apply too much force. The polyamide washer could deform and the ring may no longer fit over it. There is no worry that the anchors will shift unnoticed and become detached from the decking boards. **Ensure that the anchors are not positioned at an angle. Otherwise, the flat nuts would jam and become blocked when tightened.**
10. Finally, slide the ring (**FIG. 2g**) over the washer and the flat nut, and screw the knurled nut (**FIG. 2h**) onto it. If you cannot slide the ring all the way on, you can easily do so with the help of the knurled nut. This covers the anchor and the screw connection, preventing them from getting dirty or causing injury.
11. Although the knurled nut does not rest directly on the flat nut, it prevents the flat nut from loosening by more than half a turn. This is sufficient to ensure that the anchor cannot move out of position. **You can check at any time whether the anchor is still secured to the decking by checking the position of the mark on the anchor.** For this reason, the top end of the anchor should protrude slightly beyond the knurled nut. If it protrudes too far, place one or more washers

(**FIGURE 2e**) under the knurled nut. With this method of fixing, the anchors are unlikely to come loose on their own, unless you are installing your parasol base whilst the decking boards are still very wet. **Thicker decking boards may shrink so much during prolonged dry spells that you will need to retighten the flat nuts.**

12. Align the locking bolt. To do this, measure the distance between the screw holes on your parasol base or refer to the documentation supplied with your parasol. Measure from the centre of one screw hole to the centre of the opposite screw hole, or from one edge to the corresponding other edge (centre-to-centre distance).
13. Place the base of your parasol or its screw-on parts onto the protruding locking bolts. If the bolts do not fit immediately, you can easily move them into the correct position. The EPDM washers remain under the parasol base to protect the base plate from scratches. **Take care not to damage the paintwork on the swivel base of your parasol.** Before finally installing the swivel base, check it for any defects in the paintwork. Such areas will rust. Over time, the rust will certainly spread to parts of the parasol base. **This can also cause stainless steel to rust.** This is excluded from the warranty.
14. First, place the plastic washer onto the protruding screw. It separates the parasol base from the parasol and prevents contact corrosion. Then screw the flat nut onto the thread of the locking bolt and tighten it moderately. Finally, screw the cap nut onto it (**FIGURE 3d**). It serves as a lock nut and secures the screw connection against accidental loosening. It also protects against injury. On some swivel plates, the space is so tight that the combination of flat nut and cap nut does not fit. In this case, use the flange nut or the flat nut on its own.

## ● Dismantling

15. Unscrew the knurled nut. Remove the ring and – if used – the washers for height adjustment. The ring may be so tight that you need to carefully lever it loose with a pointed object. **Caution!** The parts can easily fall through the gaps between the decking boards.

16. Loosen the flat nut, but do not unscrew it completely. With wide joints, the anchor could fall through the joints. The thread should protrude about half a centimetre beyond the nut. If the



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anchor does not sink down by itself, press the anchor down or tap the upper pin of the anchor lightly.

17. Rotate the anchors so that they are disengaged from the decking boards. To do this, the markings on the anchor pins must be aligned with the joints.

18. You can now lift the parasol base.

### ● Safety instructions

Take particular care when setting up the parasol base on a roof terrace. Parasols and stands that come loose can fall and injure people or damage property.

The sonnenanker parasol base does not simply stand on the decking boards; it relies on the boards to achieve its stability. Therefore, ensure that the decking boards are not rotten and are securely fastened with screws to the substructure. Information on the load-bearing capacity of your decking can be found at the beginning of this user manual. Only test loads higher than those specified there if you are constantly monitoring the parasol and base.

The load-bearing capacity specifications for concealed-fixing decking are only guidelines and do not constitute binding guarantees. Gauge the actual pull-out strength carefully. Limit the loads if components of the decking fastening system become permanently deformed. In such cases, close your parasol early or use a smaller parasol.

The anchors of our parasol bases are individually tested. They can withstand a tensile load of 500 kg. Beyond this, deformation or breakage may occur. Check the anchors at least once a year and after any exceptionally high load for cracks below the thread and at the weld seam, as well as for deformation. Do not use anchors with cracks. Please send them back to us. You will receive a replacement immediately.

We strongly recommend that you do not leave the parasol open in strong winds. At the very latest when your parasol becomes deformed and the wind catches in the canopy, you should close it and under no circumstances leave it unattended. It cannot be ruled out that your parasol may be damaged or torn away. Furthermore, your decking or the anchor of the parasol base may be damaged. Check the anchors after such an incident.

We endeavour to avoid plastic packaging. Keep plastic film, bags and small parts well out of the reach of children. There is a risk of suffocation!

Please observe any additional national regulations that may apply in your country.

### ● Care

This parasol base does not rest on the entire surface of your decking, but only at specific points. The gap beneath the base serves for ventilation. This allows the parasol base and your decking boards to dry easily. This works less effectively in cold and wet weather. We recommend dismantling the parasol base in winter.

Drying can also be impeded if the air gap beneath the base is blocked. Clean the gap from time to time using the scraper provided (FIGURE A).

Keep all parts of the parasol base clean, particularly the threads. Dirty threads are stiff to turn. In some cases, they may become so badly damaged that they become unusable. Accumulations of dirt can disrupt the passive layer and cause even stainless steel to rust.

Ensure that no parts of your parasol rust and that such rust cannot get onto the parasol base.

Follow the enclosed care instructions for stainless steel surfaces.

### ● Packaging

It is advisable to keep the box in case of a return. Pack the components as they were delivered. You can then ship the parasol base without additional packing material.

The box is not just transport packaging. It can be used to store your parasol base during the winter, saving space. The sturdiness of the box matches the durability of the parasol base.

### ● Troubleshooting

**Problem:** The parasol base wobbles.

**Causes:** The anchors are not securely fixed to the decking.

**Solution:** Unscrew the knurled nuts and remove the washers. Use the spanner to tighten the flat hex nuts.

**Problem:** The parasol wobbles.

**Causes:** The nuts on the locking bolts have come loose.

**Remedy:** If you have used cap nuts, unscrew them. Tighten the flat hex nuts and screw the cap nuts back on.

Do not allow anyone to operate the parasol base whom you have not instructed.

Please follow these operating instructions. Do not make any modifications to the parasol base without our consent.

Keep these operating instructions in a safe place. Pass on the operating instructions when you pass on this parasol base. You can also read and download any operating instructions from our website.