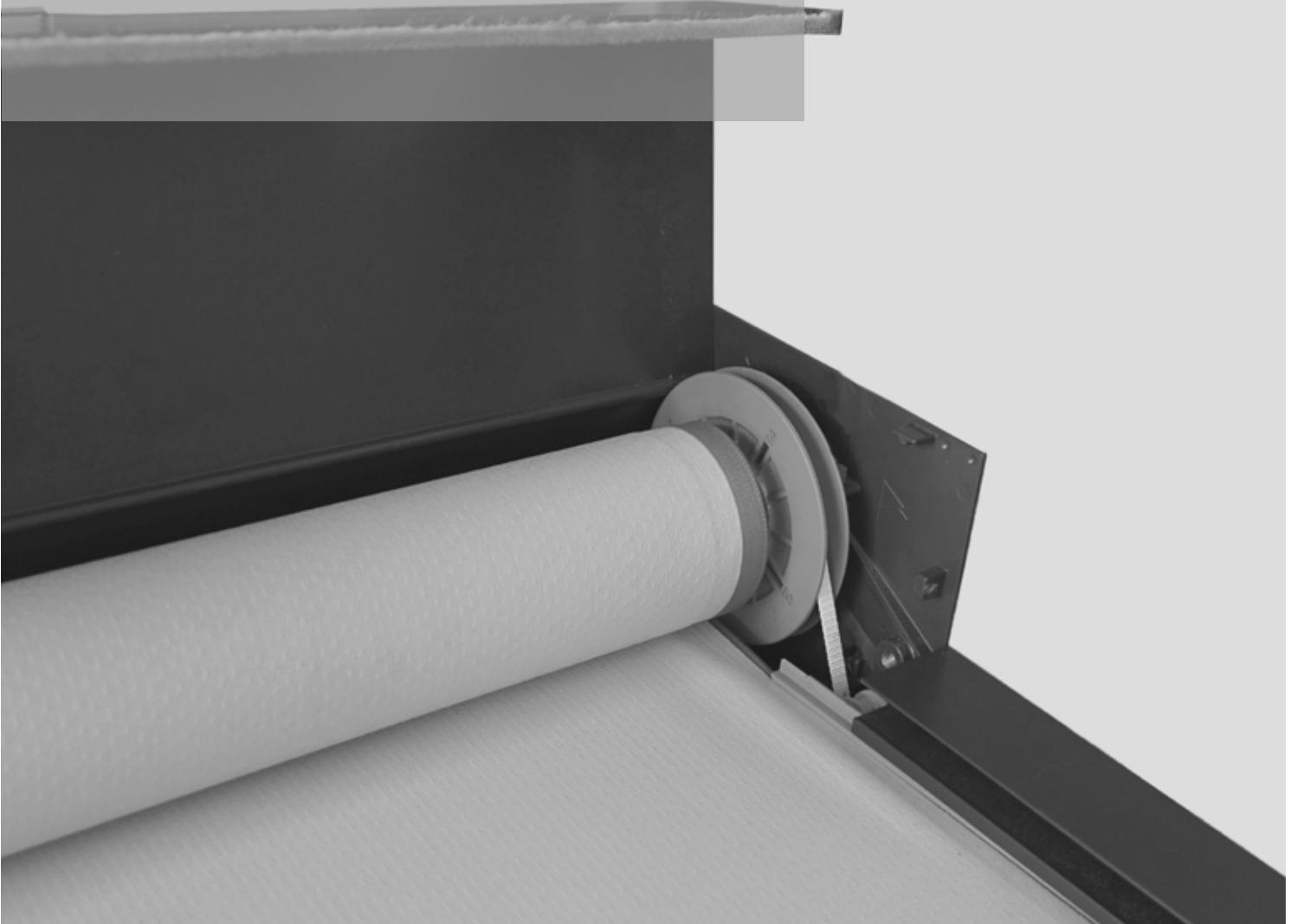


TROUBLESHOOTING GUIDE COUNTER-TENSIONED SYSTEMS



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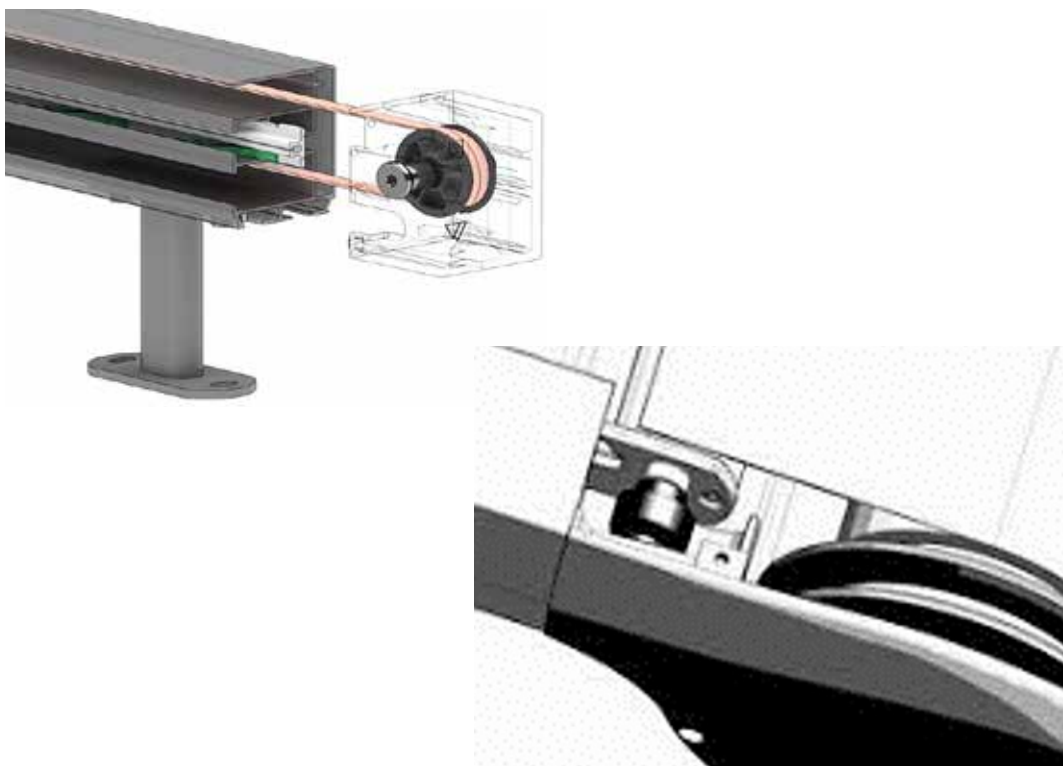
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ASSESSMENT

BASIS

Standards and guidelines are usually used as a basis for assessing sun protection systems, including their installation. Based on those sources, and broadened to include technical characteristics of the relevant products and the state of the art, this guide covers the key issues and performance features of **WOUNDWO** counter-tensioned systems that are most frequently mentioned and occur most often.



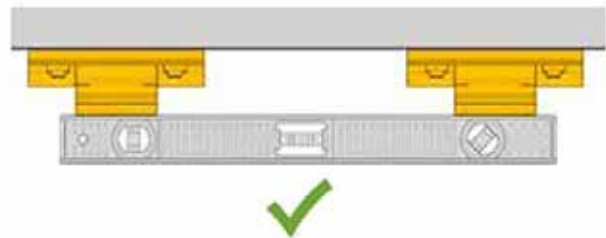
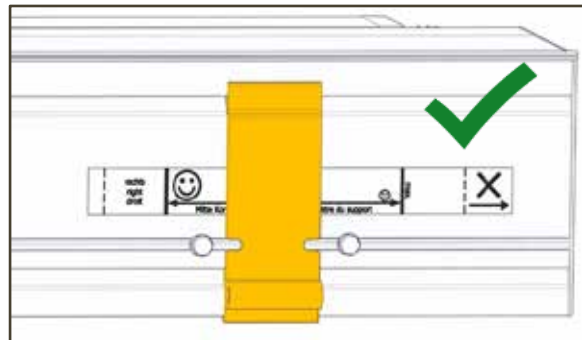
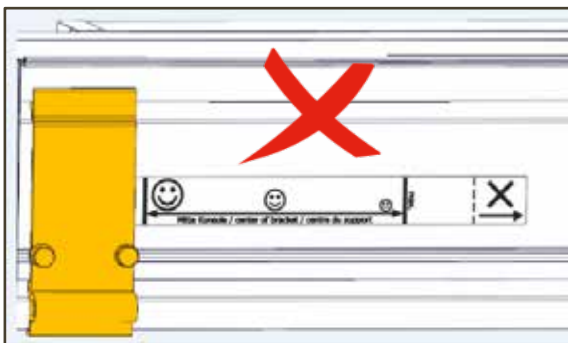
1. GENERAL INFORMATION

1.1 Position and alignment of the brackets

1. Awning / housing is skewed (Points 1.2 / 2.2 / 2.4)
2. Awning doesn't close properly (Point 2.1)
3. Awning makes noise when opening / closing (Point 1.4)
4. Revision profile of the awning is difficult to attach / remove

The correct positioning and alignment of the brackets is a prerequisite for trouble-free functioning. If brackets are incorrectly mounted, the malfunctions referred to above frequently occur.

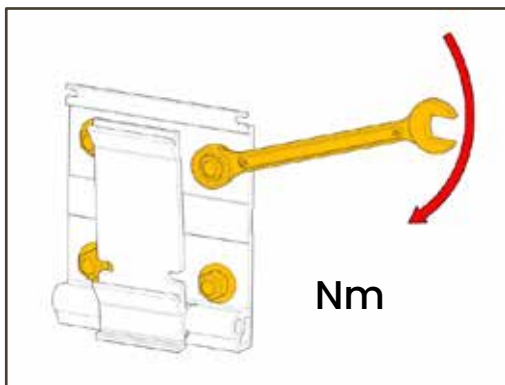
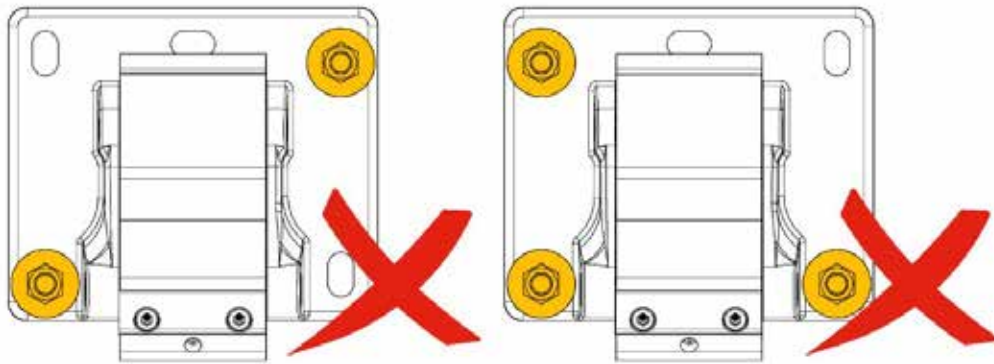
Guidance: Mounting instructions



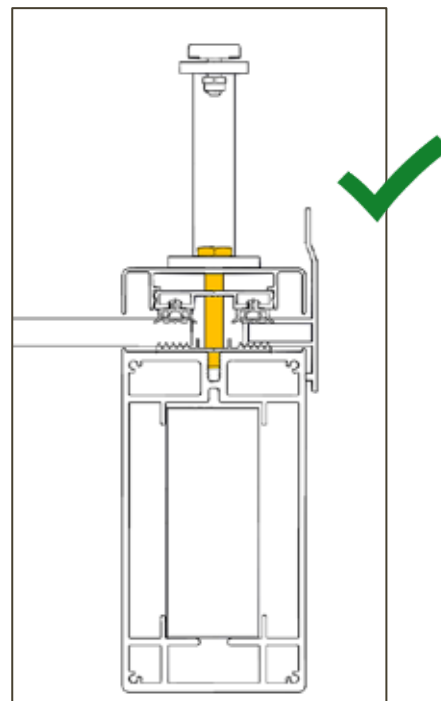
1 GENERAL INFORMATION

1.2 Installation and fastening

The number of screws / anchors must be adjusted for the specified brackets as per the mounting instructions. The fixing screws must be tightened properly. The relevant torques as per the manufacturer's instructions must be adhered to. An incorrect tightening torque (too tight or too loose) can result in damage such as fracturing of the anchors or loosening of the screw joints / nuts. Anchoring points that are loose or already detached are often a cause of damage and injuries. For example, if columns or distance brackets fail to hold and the guide rails are no longer parallel, or the entire system is no longer at right angles.



Torque of the fastening components as per manufacturer instructions.

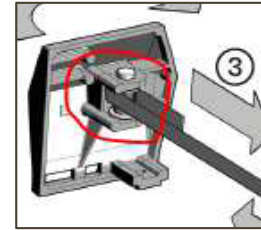
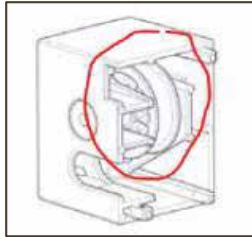


1 GENERAL INFORMATION

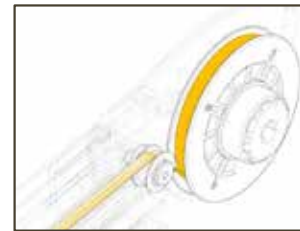
1.3 Tape / tape breakage

The tapes used are designed to be tough and durable. Nonetheless, they can still break. It must be determined whether the breakage is a result of ageing, or was caused by something else. Even with very heavy use, a tape will last many years. The following points are important in this context – they adversely affect the service life of the tapes or are a direct cause of damage or breakage:

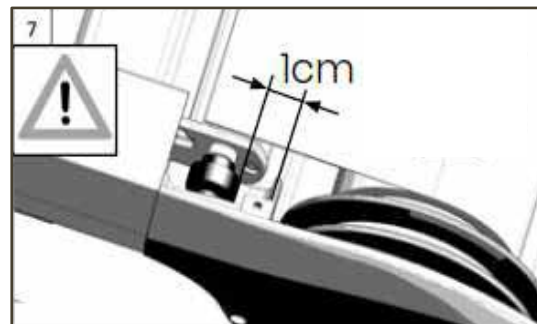
1. Deflectors at the end of the guide rails: clean, running freely, centred or flush – to ensure the tape doesn't slip off, rub or chafe.



2. Infeed rollers in the side part / casing: clean, running freely, flush with the tape disc, so that the tape is guided cleanly and with no friction from the guide rails onto the grey tape discs.



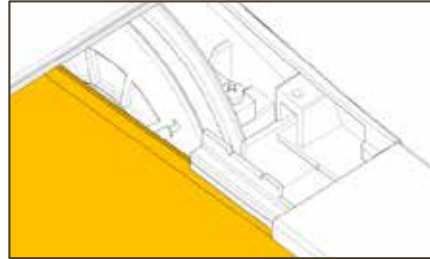
3. Rear (upper) stop point of the motor (end position): the projection profile must be at least 1cm (preferably a little more) away from the rear stop bar. The projection profile must NOT strike against the rear of the casing / system housing – otherwise the tapes are loose when retracted and will slide off the rollers (in windy conditions). Simple adjustment aid: move the system as far as the rear stop bar – make a mark (pencil, sticky tape) on the rail – move the projection profile at least 1 cm away from the mark – record and retain this position as the rear end point (upper end position).



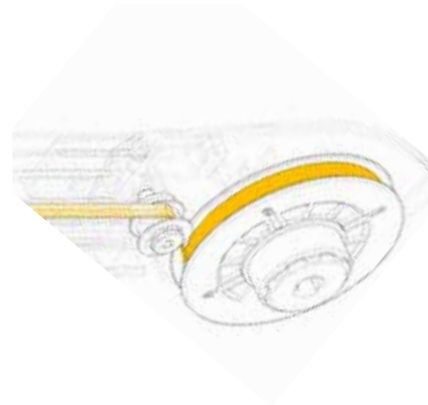
1 GENERAL INFORMATION

1.3 Tape / tape breakage

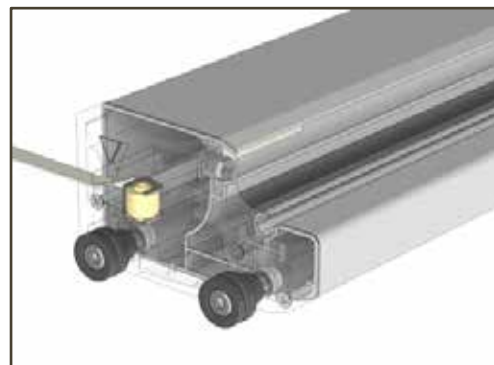
4. ZIP + guide inlay: ZIP must run smoothly in and into the ZIP guide inlay – higher friction when retracting the awning may cause the tapes to become slack, and they may fall off the rollers or deflection rollers (check each time before closing the cover).



5. Tape: must not be twisted – if it is, correct this to prevent overloading.
6. Guide rails: must be properly aligned – parallel, not buckled or loose
7. Entire system must be at right angles: diagonal deviation max. 5 mm.
8. Spacer profiles / fabric support profiles: correct installation (see mounting instructions for pergola awnings) is necessary.
9. Tape guide: especially in the area of the infeed rollers in the casing, tapes must be guided correctly – otherwise they will rub or chafe and break.



10. Wheels and rollers of the projection profile: clean and freely rotatable – otherwise, clean them and ensure they are running smoothly. Increased friction puts additional strain on the tapes.

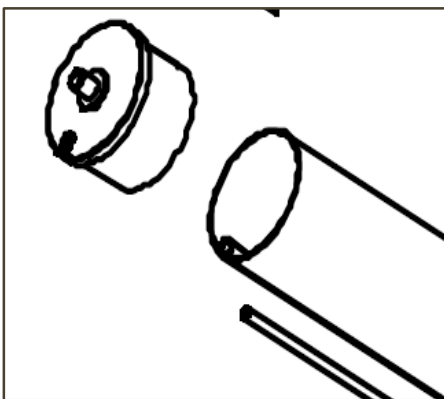


1 GENERAL INFORMATION**1.4 Noise when retracting / extending**

1. Deflectors at the end of the guide rails
2. ZIP in the ZIP guide inlay
3. Casters of the fallbar
4. Infeed rollers in the housing / casing, via which the tape is guided onto the tape discs.
5. Seating of the roller tube on the tape discs (insufficiently lubricated, dried out)
6. Tension springs in the roller tube
7. Roller capsule

Apart from operating noises that occur when the system is moving and when opening and closing the brake (a kind of 'click'), moving parts such as rollers, wheels, springs, ZIP, etc. can make noise. These noises are not usually regarded as problematic. Any noises beyond this, sometimes described as squeaking, whistling, creaking or cracking, indicate one of the problems referred to above.

Guidance: Mounting and maintenance instructions



**1 GENERAL INFORMATION****1.5 Coating defects / scratches / dents**

Despite the utmost care being taken in the handling of all parts during manufacture and regular inspections, faults such as coating defects, scratches or dents may sometimes occur. We recommend careful handling during transport, storage and especially during delivery and installation. This sort of damage often occurs when awnings are incorrectly raised, wound up or turned over. Various tools or objects (examples include ladders, awning lifts, drill chucks) may also cause scratches or abrasions. Coating defects that can be proven to have been present when the goods were delivered are, of course, grounds for complaint.

Basis:

Guideline for evaluating the product characteristics of awnings – Visual characteristics

1 GENERAL INFORMATION**1.6 System can no longer be tensioned**

Sometimes, systems cannot be tensioned or can no longer be tensioned correctly. The reasons for this are almost always servicing or repairs carried out previously, such as changing the fabric, replacing the motor or adjusting the settings. What has happened?

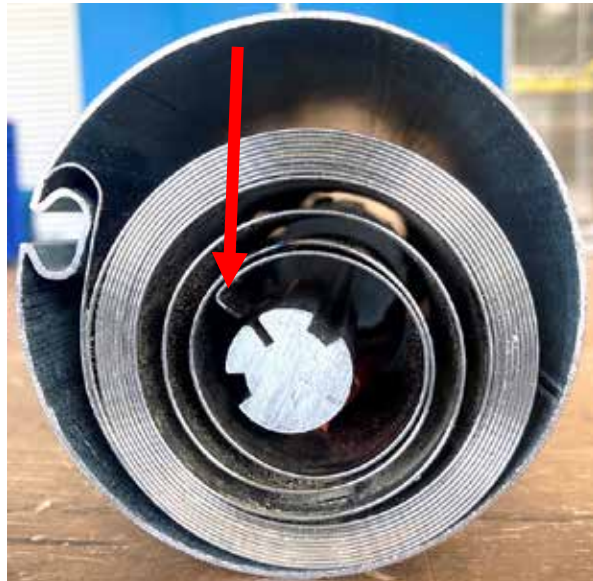
During servicing and repair work, it **MUST** be ensured that the motor is **NEVER** used to extend the awning while not allowing the roller tube to rotate. If the motor inside rotates in the direction of extension and the roller tube remains stationary, the motor pushes the tension springs in the wrong direction. This enlarges the internal diameter of the springs and they no longer sit in their mounting, or sit improperly. This means that they slip through and cannot be tensioned or can no longer be adequately tensioned.

See also videos in the B2B area / Academy / Training videos

Good spring in roller tube



Broken spring in roller tube



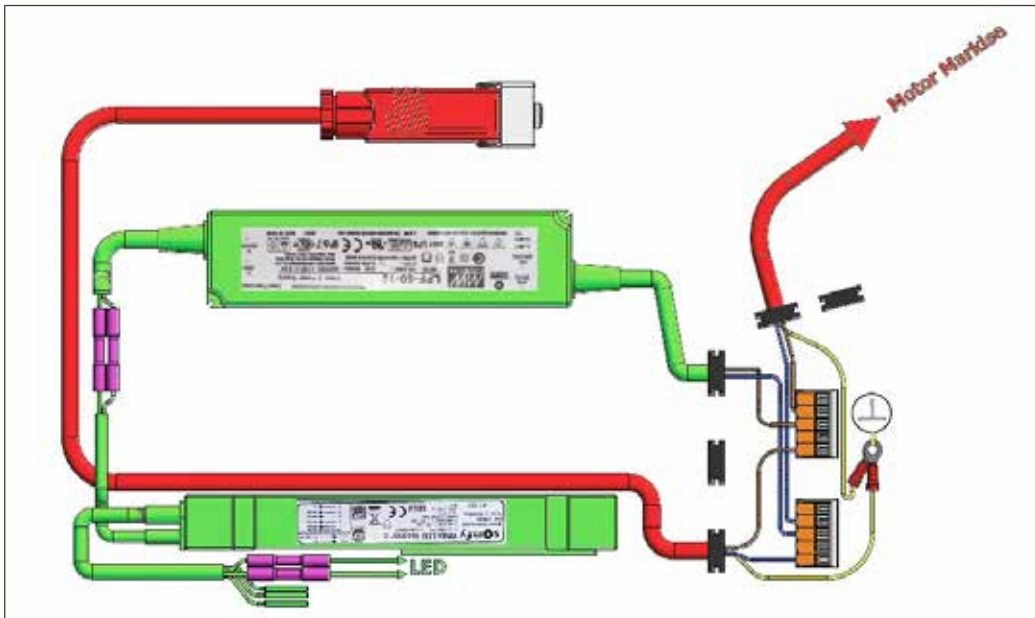
1 GENERAL INFORMATION

1.7 LED doesn't switch on

There are 5 possible reasons why an LED that previously functioned no longer works.

1. The power supply is interrupted (supply line to the transformer and battery in the transmitter)
2. The transformer is defective
3. The radio transmitter is defective
4. The radio receiver is defective
5. The LED strip itself is defective

The only way to identify the faulty component is to check the individual parts one by one. It is best to start with the transmitter (battery, other transmitter) and then check the supply line (measure input voltage) and the transformer (measure output voltage). If all of this produces no result, the final step is to check the radio receiver and LED strip.

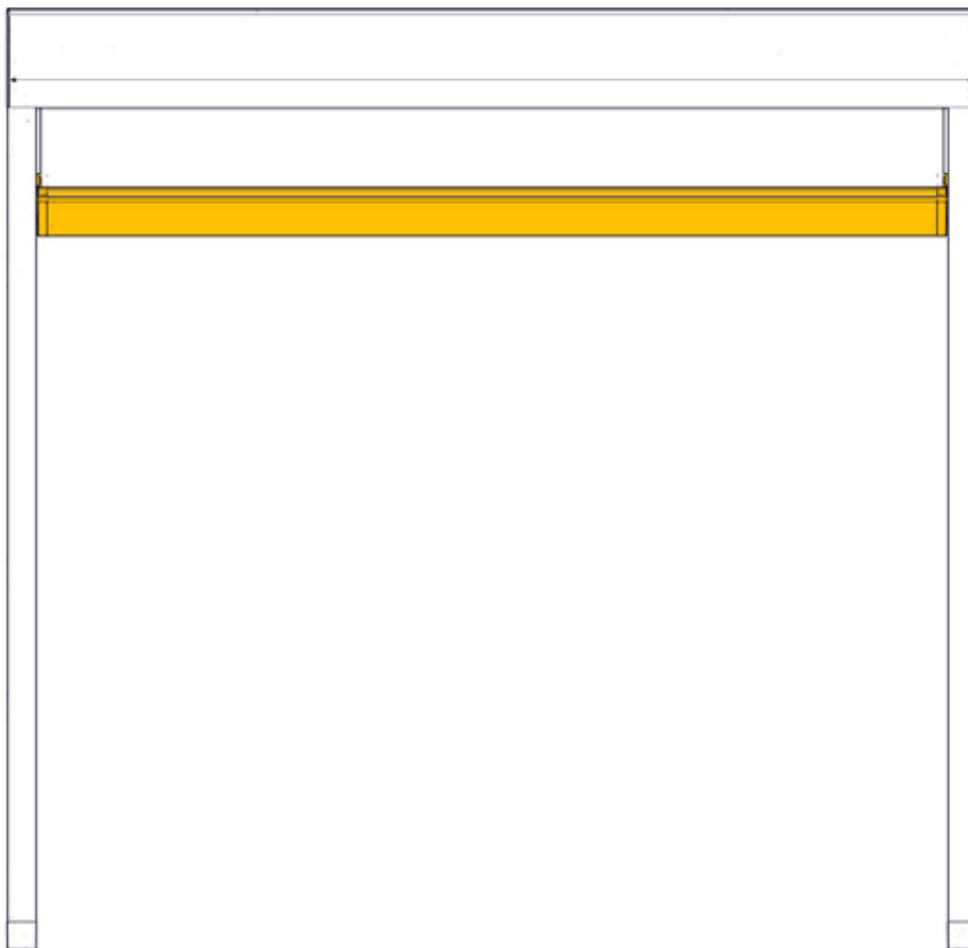


2 FRAME / MECHANISM**2.1 Awning doesn't stop correctly (inner end position)**

Possible causes:

1. Awning is skewed (fallbar strikes against the housing) – check bracket installation (Points 1.1, 1.2)
2. Awning sits too wide open – adjust end position
3. Awning retracts too far (tape is slack) – adjust end position

Basis + guidance: mounting instructions, adjustment instructions



2 FRAME / MECHANISM

2.2 Projection profile isn't straight on the outside (unequal distance to the end of the guide rails)

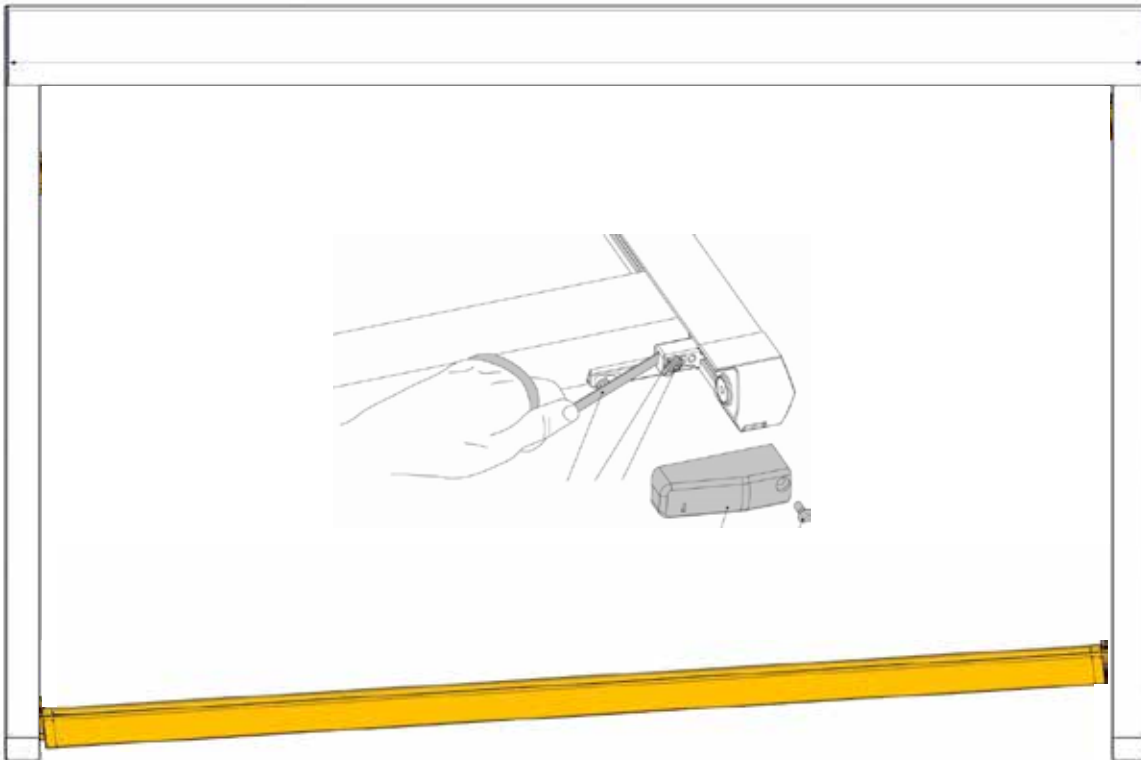
1. Different tape lengths (as a result of uneven tape fixation on the projection profile)
2. Differences in the tape thickness (tape tolerance)
3. Uneven safety windings on the tape discs (left 1 rotation – right 2 rotations)

Point 1+2: On the side that is further to the outside (in the image below, it's on the left), hold the tape, loosen the fixing screw and slacken the tape. The profile moves inwards; loosen until the profile is straight and then tighten the fastening again.

Point 3: Align the safety windings.

Important: After all points, the end positions must be reset!

Basis + guidance: mounting instructions



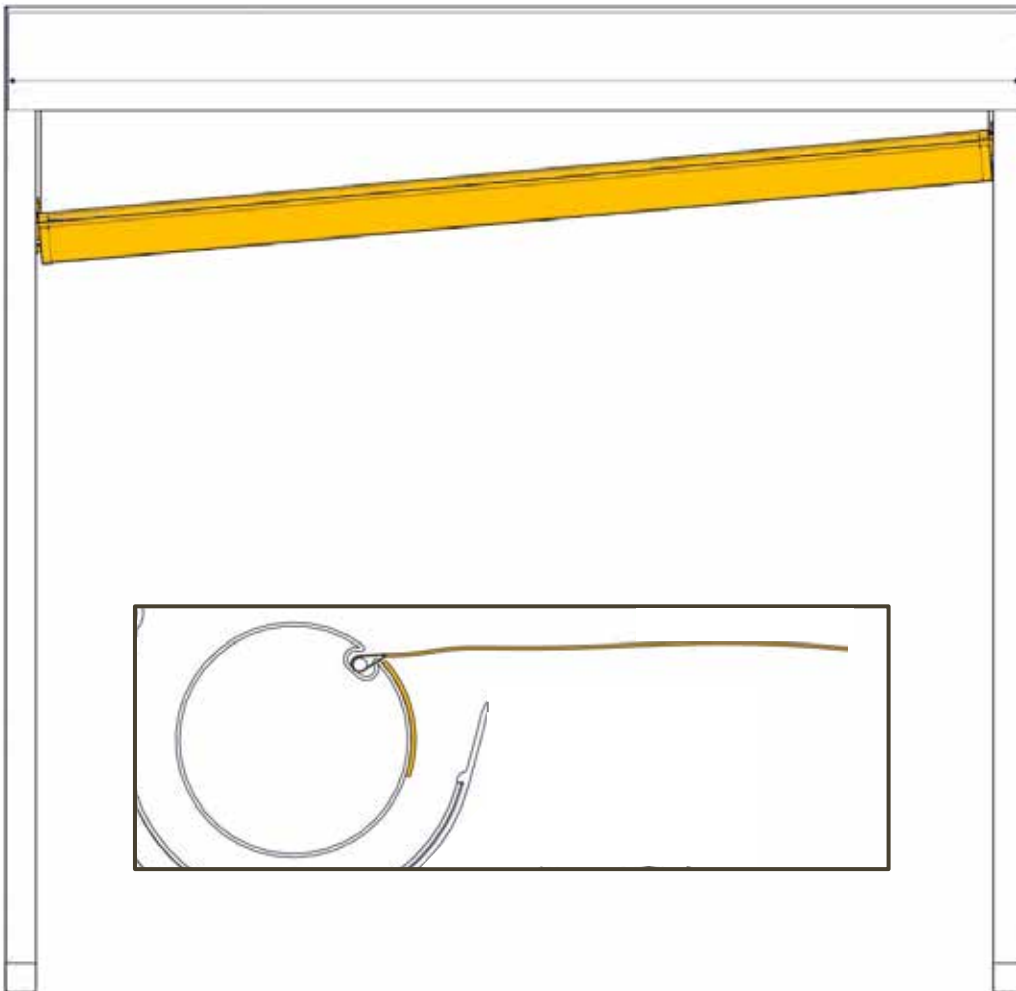
2 FRAME / MECHANISM

2.3 Projection profile is not straight inside (uneven distance to the casing)

First, the projection profile must fit in the outer end position (2.1).

Placing a small piece of cloth (or textile tape) under the fabric on the side that is further out increases the roller tube circumference and the profile becomes straight when retracted.
The underlay must be placed under the seam and at the back of the roller tube.

Basis + guidance: mounting instructions for counter-tensioned systems



**2 FRAME / MECHANISM****2.4 Awning cassette / housing is skewed**

A skewed housing (cassette) is often caused by incorrect positioning and alignment of the brackets. Considering that one degree at a distance of 1 m results in a deviation of 10 mm, it becomes clear why the brackets have to be aligned very precisely. The best way to do this is using a piece of string. Such faults can also be identified during installation or dismantling if the awning is difficult to hang or take down, or if the awning can only be pulled firmly into the brackets by tightening the locking piece. In addition, there are tolerances for components that allow distortion within a certain range.

Basis + guidance: Guideline for assessing the product characteristics of awnings – Distortion

See also Point 1.1 – Position and alignment of the brackets

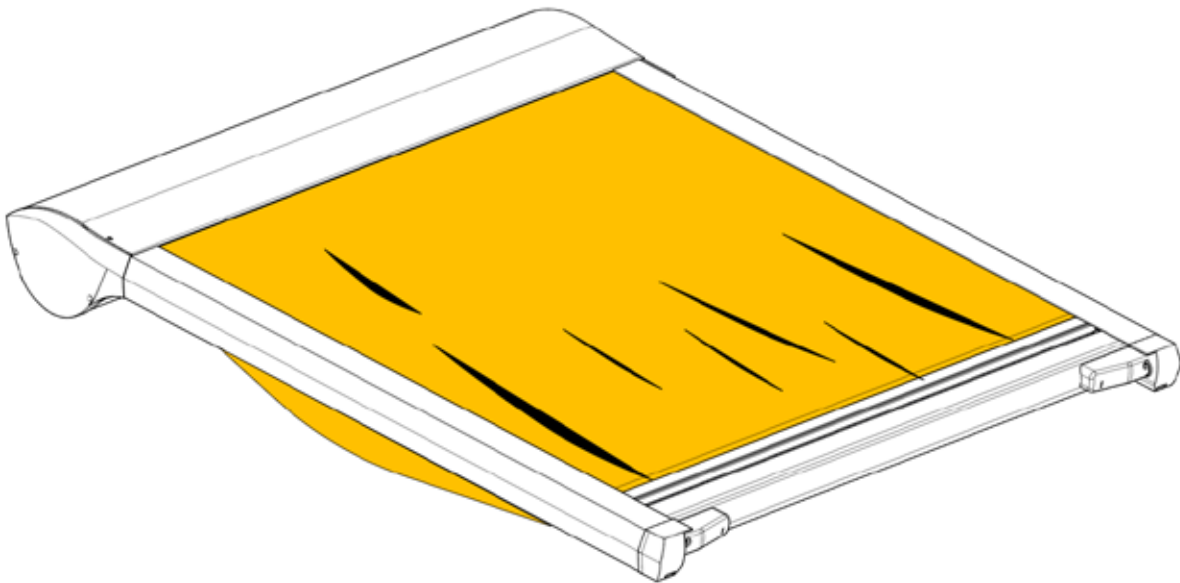
3 CURTAIN / FABRIC**3.1 Fabric is sagging**

1. On the side with sagging, the tape is not tensioned tightly enough.
2. The fabric is overextended on one side – this can happen, for example, after a tape has broken, if the entire tension force is acting on one side of the fabric and overstretches that side, or if the projection profile becomes jammed and the full pulling force of the motor is acting on one side of the fabric.

With tensioned fabrics, it must be accepted that a certain amount of sagging will occur. This sagging will be more or less noticeable depending on the size of the awning and what awning system is used. In addition, the sagging is affected by the fabric itself (weight, type of fabric) and other factors such as humidity or wind (stretching of the fabric). This type of sagging is inevitable even with the most careful manufacturing and processing of the fabrics.

Basis + guidance:

IVRSA guideline for the evaluation of ready-made awning fabrics – Fabric tensioning



3 CURTAIN / FABRIC

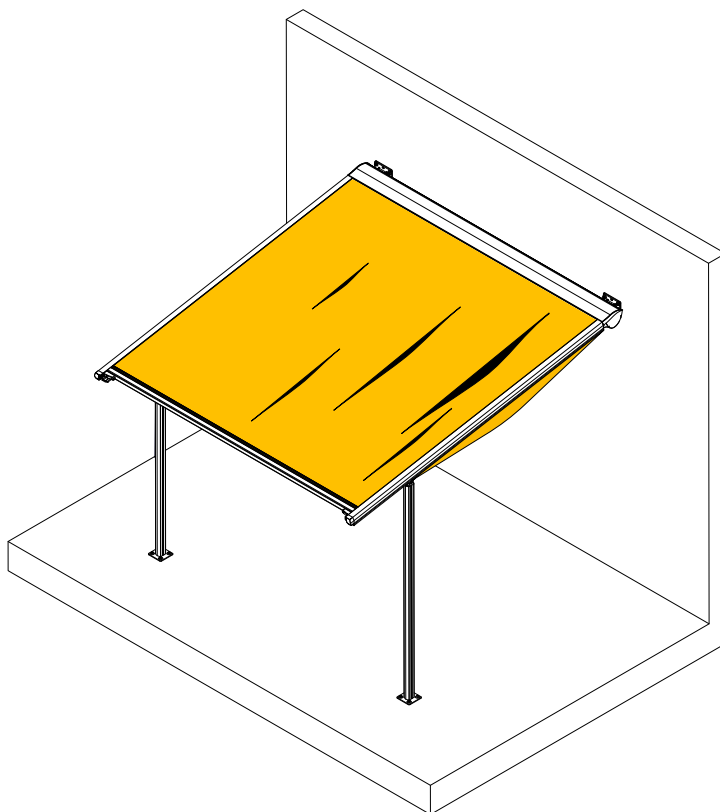
3.2 Fabric has folds or rippling

Small ripples, 'honeycomb' patterns or folds are often seen, especially in the area of seams and hems. These variations occur as a result of different roll-up diameters between the seams, where the fabric is twice as thick as in the flat area between the seams, where it is only a single layer. This means that, when they are wound onto the shaft, these areas are subjected to differing levels of stress resulting in these folds or rippling. This is usually intensified by moisture (humidity).

In models with ZIP (lateral zipper), crease formation in the transition area is almost inevitable due to differing materials, processing technology and roll-up characteristics. Some stripes that may seem lighter or darker are also perceived as creases. These are creases and wrinkles due to handling that arise due to the unavoidable laying down, folding or rolling of the fabrics during processing. These variations have no effect on the function and lifespan of the fabrics and do not represent any deterioration.

Basis + guidance:

IVRSA Guideline for the evaluation of ready-made awning fabrics – General explanatory notes on fabrics, manufacture and systems.



4 DRIVE / OPERATION

4.1 Awning motor no longer works

When motors stop working, this can often be traced back to one of the following causes:

1. Wind prevents extension (locked by wind sensor)
2. Radio transmitter doesn't work (empty battery, defective transmitter)
3. Motor has no power supply (no current)
4. Motor overheating (operated too often)

Basis + guidance: mounting instructions under the section 'Troubleshooting'

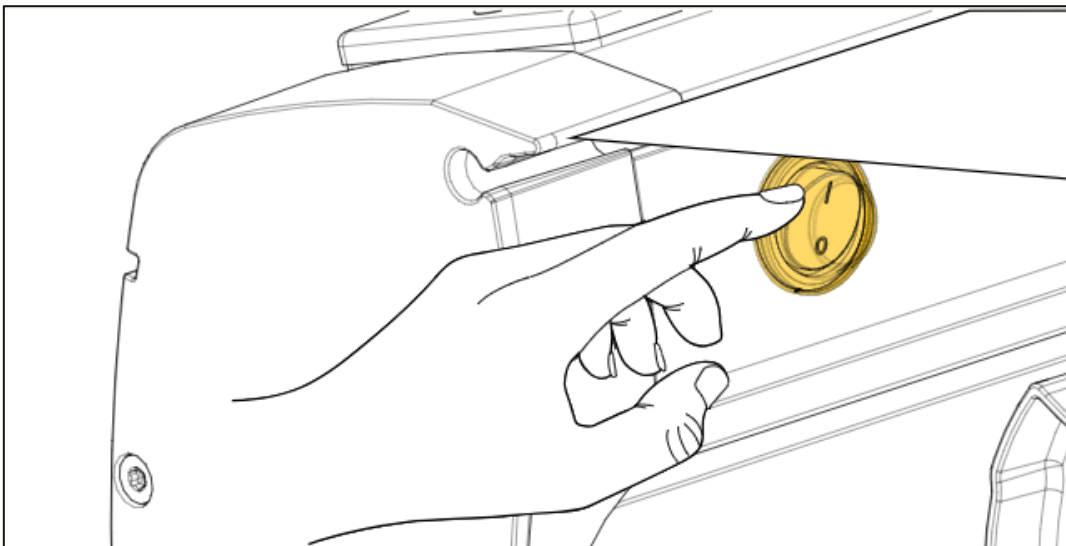


4 DRIVE / OPERATION**4.2 Solar motor of the vario valance no longer works**

1. Radio transmitter doesn't work (empty battery empty, defective transmitter)
2. Motor overheating (operated too often)
3. The power supply is switched off

For vario valances manufactured from 04/2024, you will find a toggle switch in the projection profile, on the inside under the fabric. This must be switched on so that the motor is connected to the battery (power supply).

Basis + guidance: mounting instructions

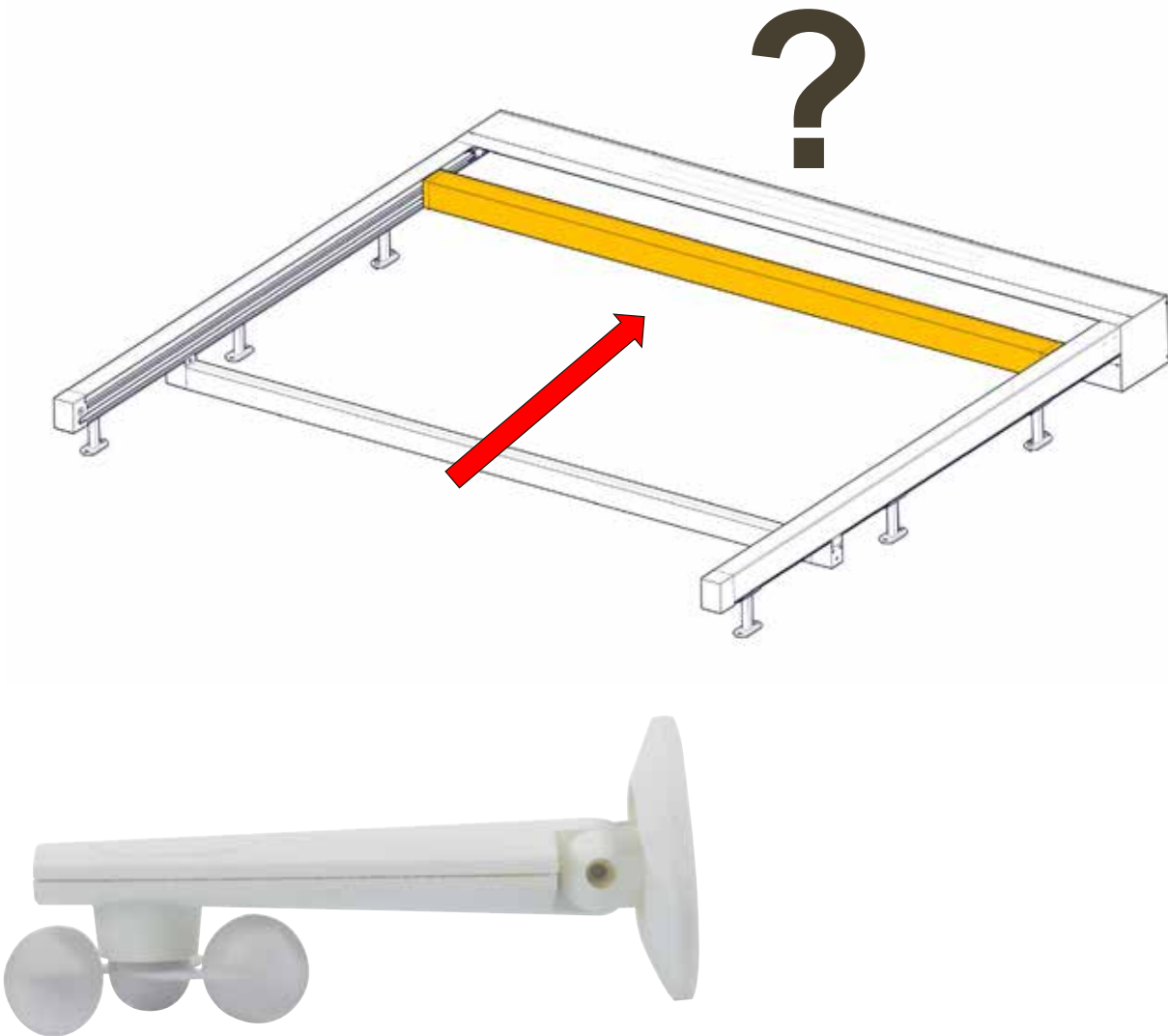


4 DRIVE / OPERATION

4.3 Awning retracts by itself

If awnings periodically retract on their own (approx. 30 minutes after being extended), even though there is no reason for them to do so (no wind, no darkness), this is a signal that the battery for the wireless wind sensor is empty. Replacing the battery will rectify this.

If the wireless wind sensor was previously replaced because it was defective, this is an indication that the old (defective) wind sensor that was removed has not been deleted from the motor memory. To make the automatic retraction stop, the old wind sensor must be deleted from the motor memory.

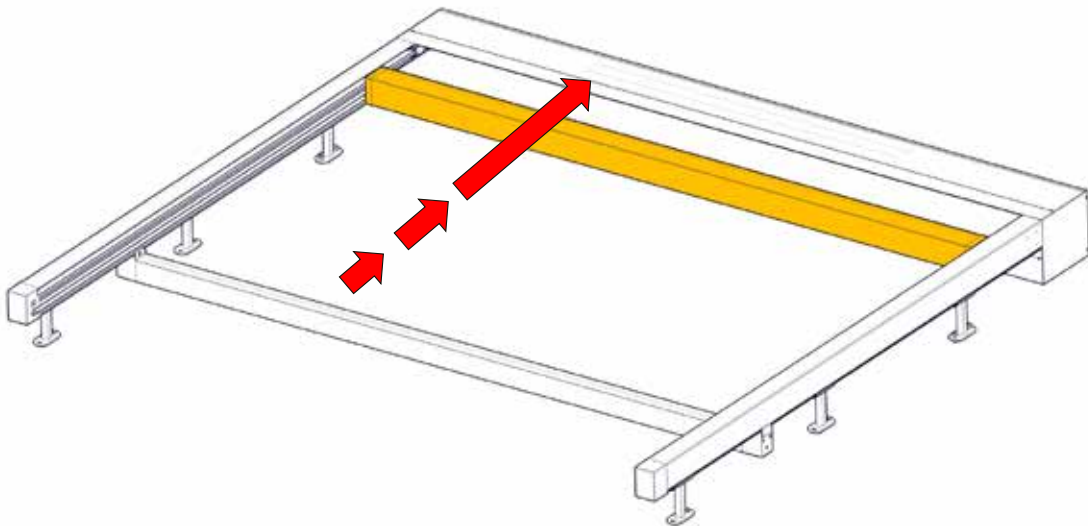


4 DRIVE / OPERATION**4.4 Awning randomly retracts**

If counter-tensioned systems retract randomly, the cause is inadequate tensioning of the springs. This tends to occur in systems with ZipRail systems. If during retraction the friction of the ZIP in the guides is greater than the preloading of the springs, the profile will stop until the springs are wound tightly enough. Then the projection profile will move up. The whole process may be repeated 1-2 times.

Increasing the tension helps here.

See also videos in the B2B area / Academy / Training videos / Tensioning



5 GUIDE / POSTS / SPACERS

5.1 Alignment of the rails

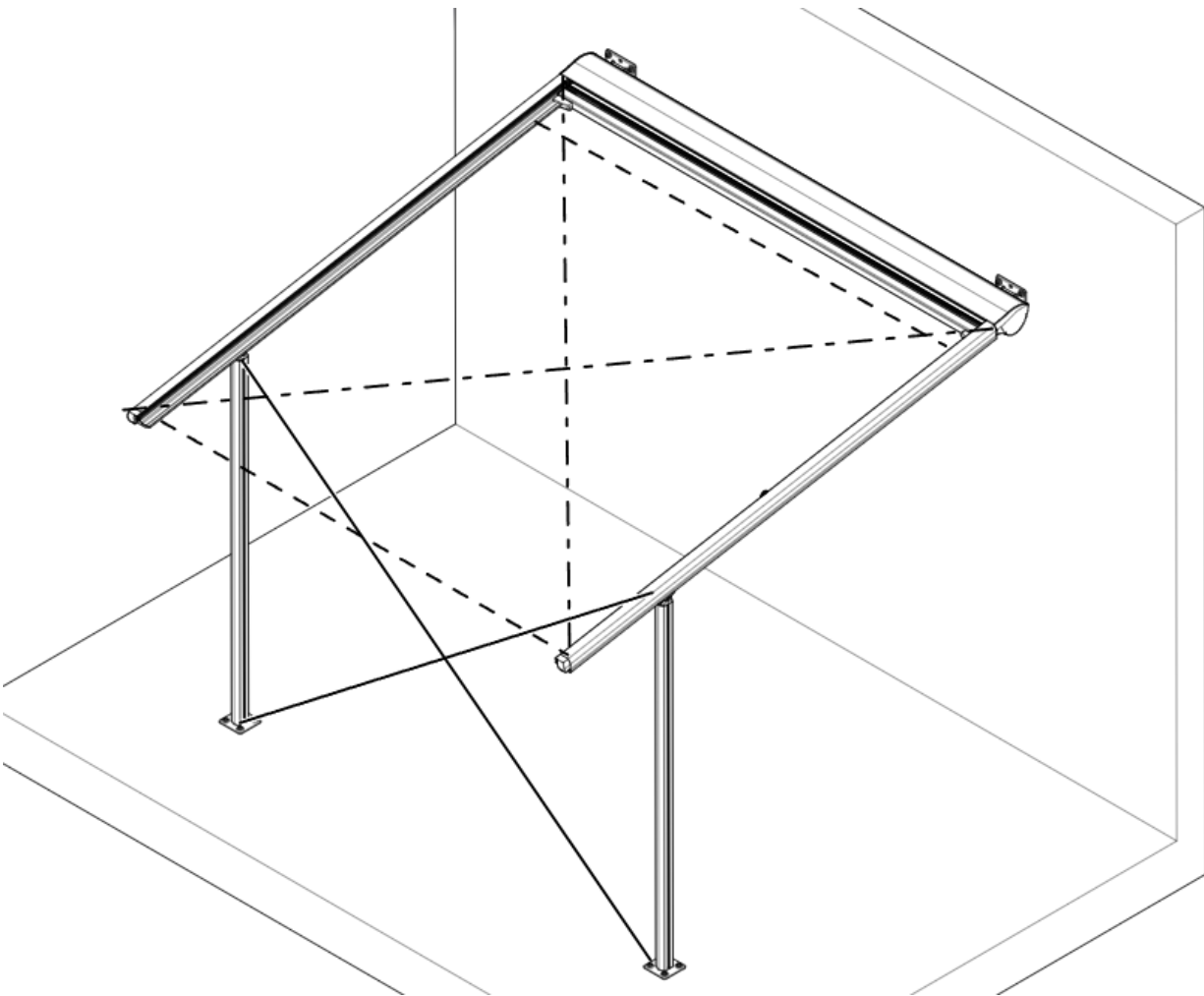
The guide rails must be parallel and the system must be at right angles. The tolerance for the diagonals is max. 5 mm difference!

Note:

Discrepancies in the width of the guide rail can be clearly seen in the varying clearance between the projection profile and the rails when extending and retracting.

Variations in the angle (diagonal dimension) cause creases to form in the fabric, starting from one of the rear corners.

Basis + guidance: mounting instructions

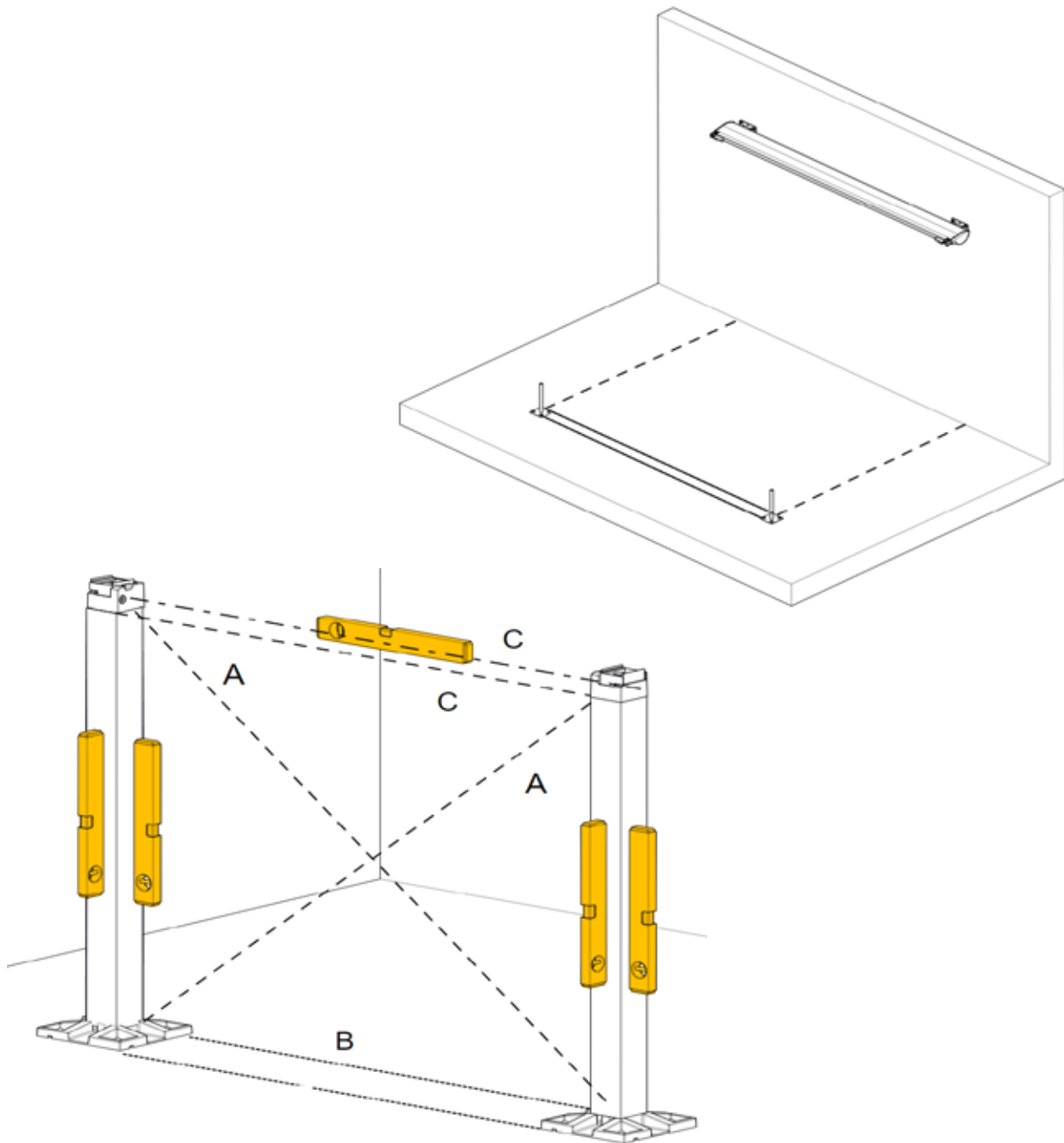


5 GUIDE / POSTS / SPACERS

5.2 Alignment of the posts

The posts must be set up straight and vertical. Any lateral deviations must be corrected by moving the casing on the wall (in the brackets) until the diagonal measurements (see Point 5.1) are lined up correctly.

Basis + guidance: mounting instructions

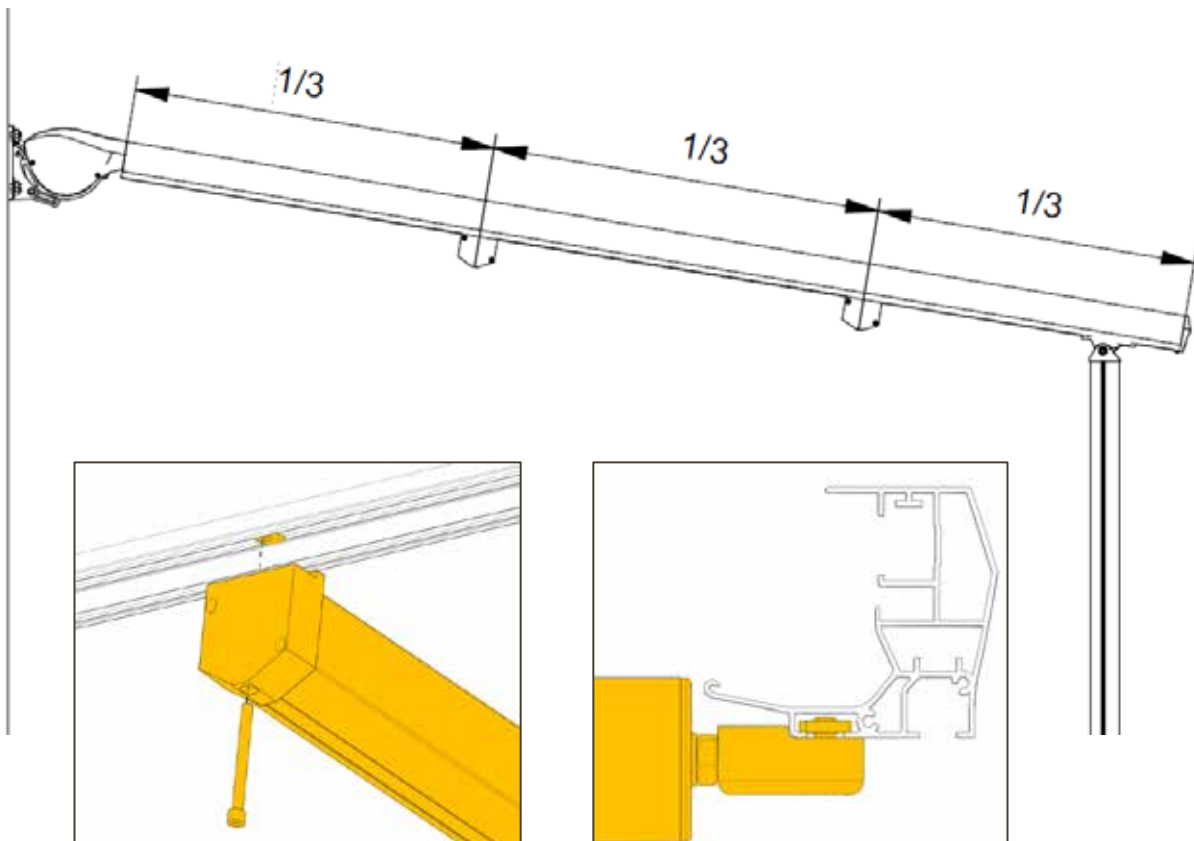


5 GUIDE / POSTS / SPACERS

5.3 Spacers / fabric support profiles

Spacer profiles and fabric support profiles must be correctly installed and are vital parts for stability and function because if they are incorrectly positioned or omitted, they can significantly reduce the service life of the systems and can even result in damage and hazard by altering the distances between the guide rails. In the worst case, the fallbar can fall out of the guide and injure someone.

Basis + guidance: mounting instructions



5 GUIDE / POSTS / SPACERS

5.4 ZIP and ZIP guide rail

1. Wear results in greater frictional resistance – keep the guiding groove clean, replace worn inserts
2. Replace damaged guide inlays – zip should not catch or chafe.
3. Friction of the zip in the guide inlays can cause noises (squeaking) – this can be prevented by regularly spraying with PTFE spray.

