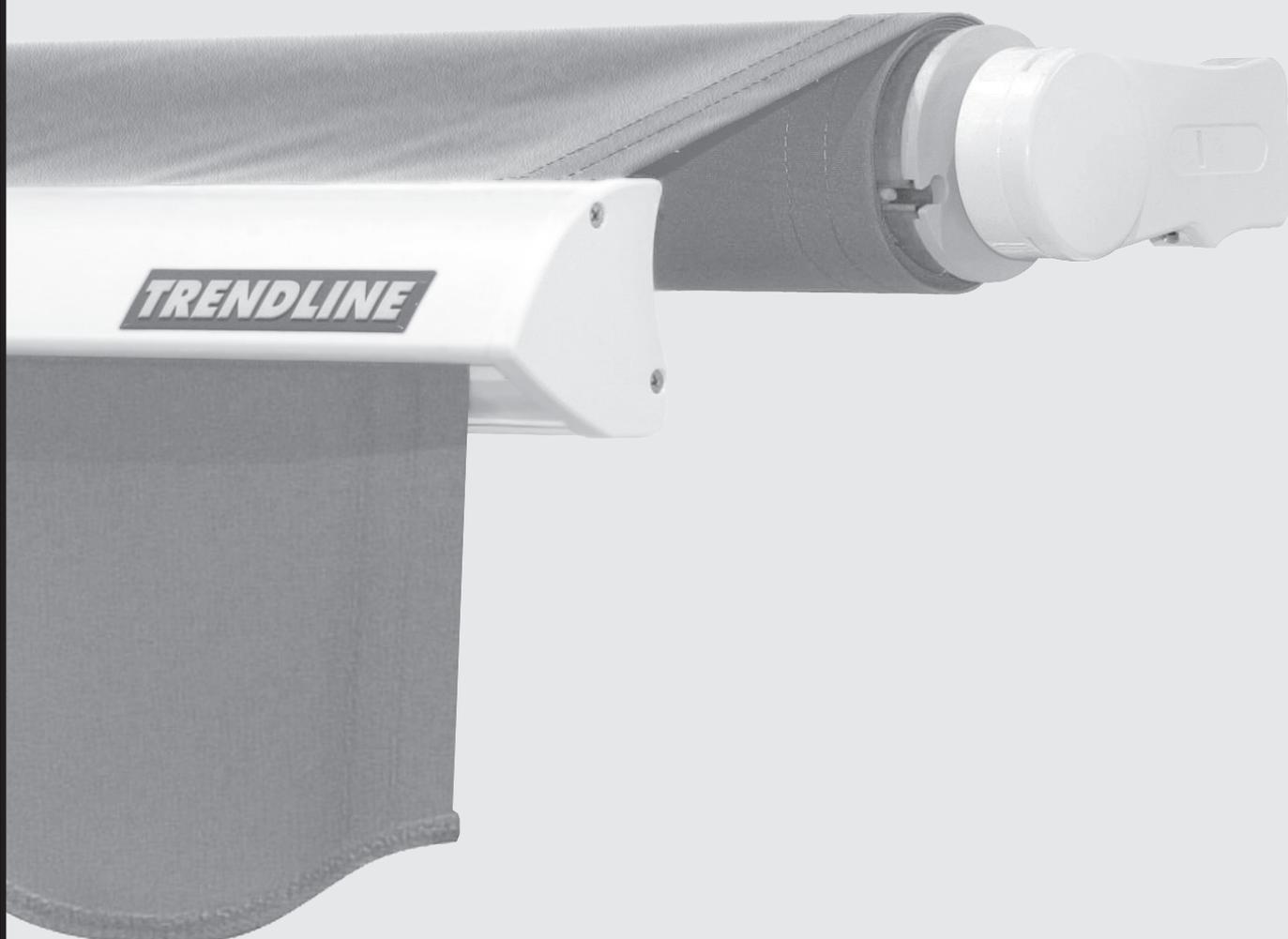
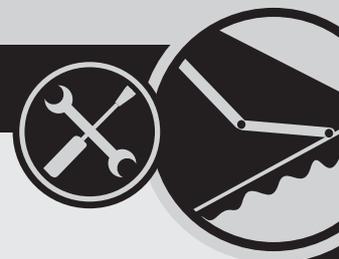


TRENDLINE

Monteringsanvisning





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1. SAFETY NOTES, WARNINGS AND MOUNTING INFORMATION

1.1 EXPLANATION OF THE SAFETY NOTES

SAFETY NOTES AND IMPORTANT INFORMATION ARE INTEGRATED IN THE TEXT AS APPROPRIATE. THEY ARE INDICATED WITH A SYMBOL.



This symbol means that the relevant note is important for the safety of persons or for the function of the awning.



This symbol highlights important product information for the installation engineer or user.

JOINTED ARM AWNING TRENDLINE

MOUNTING INSTRUCTIONS

1.2 GENERAL SAFETY INFORMATION

-  The WOUNDWO TRENDLINE (TRL) awning has been designed and manufactured in conformity with DIN EN 13561. However, when the awning is mounted or operated, the persons involved in the respective activity may be put at a risk if the relevant instructions are not observed.
-  Only qualified and duly specialized companies or trained specialist personnel may be permitted to mount the awning.
-  Always observe the information and notes in the Mounting and Operation Instructions. A failure to observe the relevant information will render the manufacturer's liability null and void.
-  Modification of the design or configuration of the awning is permitted only after consultation with the manufacturer or an authorized representative.
-  The occupational safety and accident prevention regulations specific to each country must be complied with. In particular, a person performing special work at height must be suitably secured. The notes on the product and its packaging must be observed.

2. MOUNTING

2.1 TOOLS, RESOURCES AND MATERIALS

- (Percussion) drilling machine
- Drill bits, suitable for the drilling substrate and the mounting pieces
- Ratchet (catrake) with extension and SW 17 and SW 19 sockets
- SW 19 ring spanner
- SW 5 and SW 6 Allen keys
- Slot screwdriver
- Spirit level and string for alignment
- String to align the brackets
- Test cable, resp. adjustment set (for initial operation)

2.2 INSTALLATION PREPARATIONS

-  Transport the awning to the site of installation, ensuring that the orientation is correct. The location of the drive side is indicated on the packaging.
-  Secure the installation zone (the secured zone must be at least equivalent to the size of the fully deployed awning). If the awning is hoisted to higher awning positions with ropes, the awning must be removed from the packaging. When attaching the hoisting ropes, ensure that the awning is properly fastened, but not damaged. Hoist the awning exclusively in horizontal position and evenly.

Before commencing the installation, please verify whether the type and number of brackets is in conformity with the order and whether the mounting substrate is the same as that stated on your order. If significant differences make the safe installation of the awning seem doubtful, please contact the manufacturer of the system and a mounting/installation specialist.

-  Failure to comply may result in collapsing of the awning and putting the health of persons at risk!

JOINTED ARM AWNING TRENDLINE

MOUNTING INSTRUCTIONS

2.3 WIND RESISTANCE CLASSES

DEFINITION:

DIN EN 13561 Item 4.3. defines different wind resistance classes for awnings. The classification depends on the quality of the product. The higher the class, the better the quality of the product.

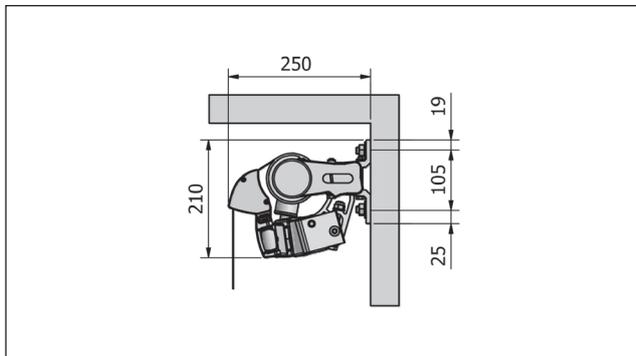
WIND CLASS	WIND FORCE	WIND SPEED
Class 0	undefined; product not tested or unsuitable	
Class 1	4 (according to Beaufort wind scale)	20 - 27 km/h
Class 2	5 (according to Beaufort wind scale)	28 - 37 km/h
Class 3	6 (according to Beaufort wind scale)	38 - 48 km/h

CLASSIFICATION OF THE TRENDLINE AWNING:

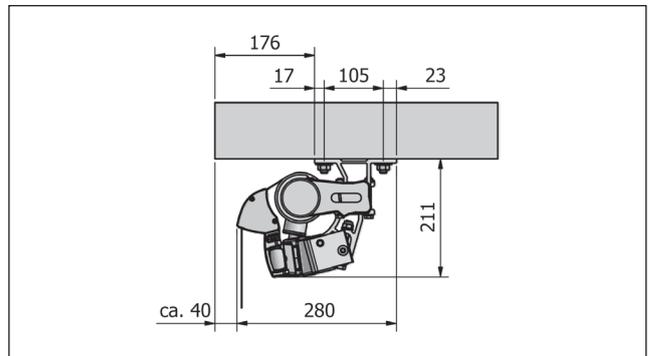
Version/projection	1500 mm	2000 mm	2500 mm	3000 mm	3500 mm
Wind class	3	3	3	2	2

2.4 MOUNTING SITUATIONS

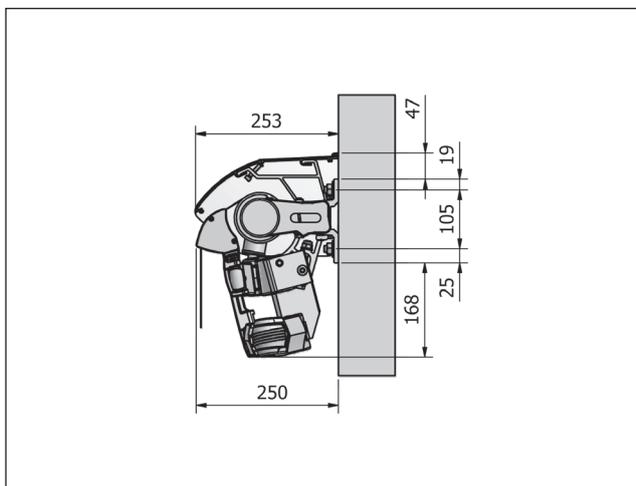
WALL MOUNTING



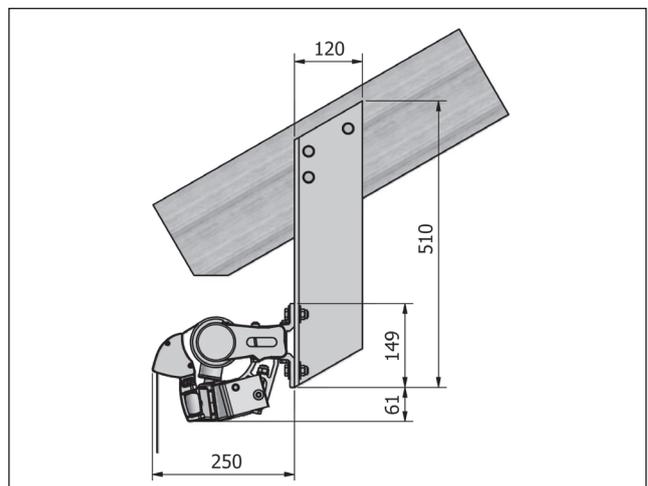
CEILING MOUNTING



MOUNTING WITH CROSSED ARMS AND RAIN PELMET

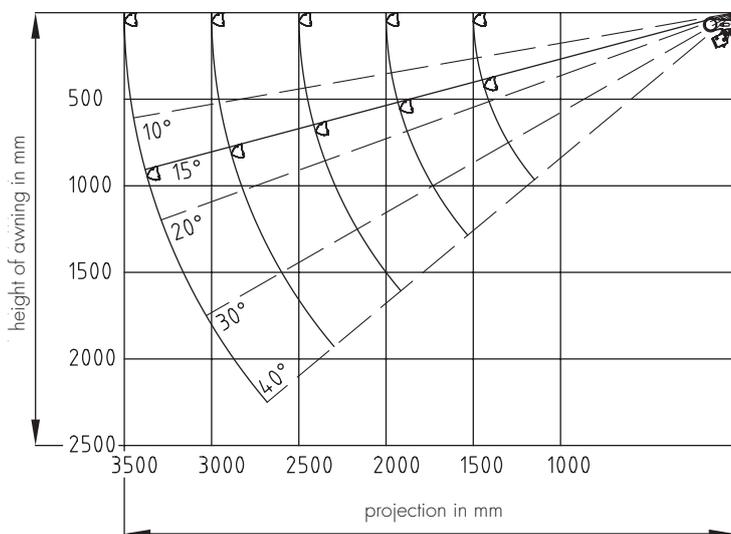


RAFTER MOUNTING



JOINTED ARM AWNING TRENDLINE MOUNTING INSTRUCTIONS

2.5 MOUNTING HEIGHT AND POSITION OF THE BRACKETS



MOUNTING HEIGHT: The awning can produce crushing forces and shear stresses, for instance between the drop profile and the casing, on the jointed arms and at the point where different profiles meet.



In the interest of human safety, the mounting height must be at least 2.50m. If the situation requires a mounting height less than the stated minimum height, it is necessary to operate the awning manually or with a switch mounted at a location from where the moving parts can be observed.



The drop profile must reflect a minimum distance of 40 cm from fixed objects.

DETERMINATION OF THE MOUNTING HEIGHT FOR WALL-MOUNTED AWNINGS:

The mounting height depends on the extended length and inclination of the awning. Please refer to the drawing on the right for basic orientation. Always ensure that there is sufficient headroom.

REQUIRED MINIMUM NUMBER OF TRL BRACKETS:

The following tables indicate the number of standard supplied brackets required for mounting the TRENDLINE awning to a concrete base using the wall bracket and bracket plates.

Standard number of supplied brackets for the wall/ceiling bracket for mounting on a concrete base					
Projection (mm)	Width (mm)				
	1100 - 4000	4001 - 6000	6001 - 8000	8001 - 12000	12001 - 14000
1500	2	3	4	6	9
2000	2	3	4	6	9
2500	2	3	4	6	9
3000	2	3	4	6	9
3500	2	5	4	10	15

Standard number of brackets supplied for mounting using a bracket plate					
Projection (mm)	Width (mm)				
	1100 - 4000	4001 - 6000	6001 - 8000	8001 - 12000	12001 - 14000
1500	2	3	4	6	9
2000	2	3	4	6	9
2500	2	3	4	6	9
3000	2	3	4	6	9
3500	2	3	4	6	9

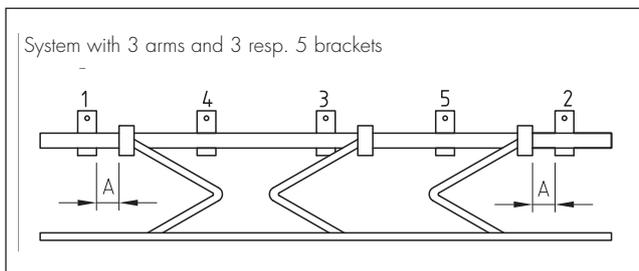
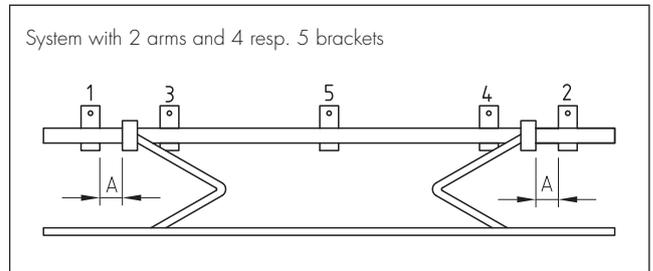
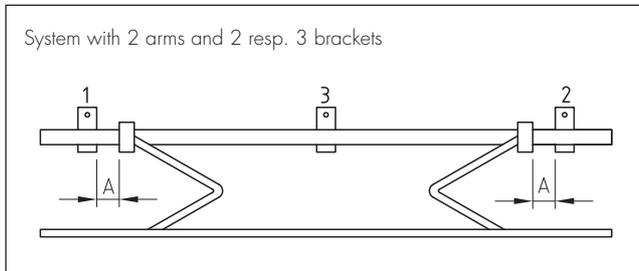
... grey cells: can be delivered only in wind class 2

JOINTED ARM AWNING TRENDLINE MOUNTING INSTRUCTIONS

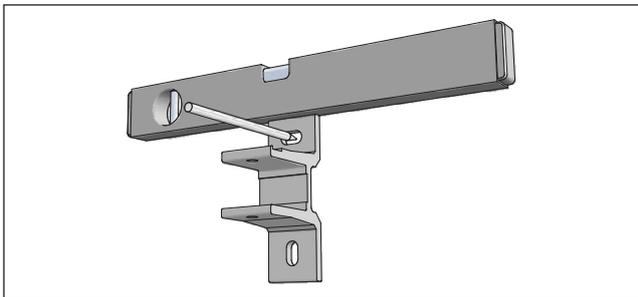
POSITION OF THE BRACKETS:



The brackets should be placed as close as possible to the connection points on the arms. The following sketches illustrate the best possible distribution of brackets. Dimension >A< should be a maximum of 300 mm.



In coupled systems, note that after insertion into the brackets, the systems have to be pushed about 7 cm towards one another.



DRILLINGS FOR BRACKETS:

Transfer the drilling outlines of the brackets to the determined bracket positions.

Select the appropriate drill bit for the respective base material and mounting method.

2.6 MOUNTING TECHNIQUE

- Due to the own weight of the awning and the maximum wind load, the dowels can be subjected to pulling forces up to 6,400N (approximately 640kg).

The following table defines the maximum dowel forces depending on the size of the awning, the type of bracket, the number of brackets (according to Table 2.5.) and the wind class (according to Table 2.3.):

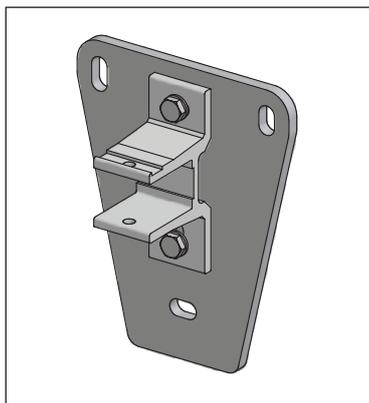
TRL maximum pulling forces depending on the system width [N]						
Mounting	Width	Projection (mm)				
		1500	2000	2500	3000	3500
WALL / CEILING	4000 mm	1810	2935	4465	3545	4590
	5000 mm	2200	3580	5430	4245	3165
	6000 mm	2585	4225	6400	5665	3705



... grey cells: can be delivered only in wind class 2

JOINTED ARM AWNING TRENDLINE

MOUNTING INSTRUCTIONS



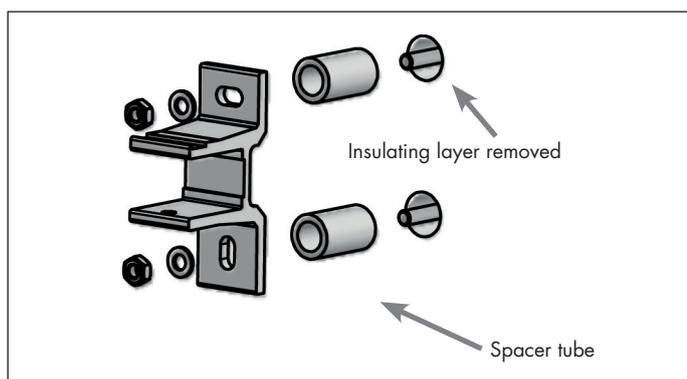
These values have to be taken into account when determining the standard number of supplied brackets used for mounting. If the supporting capacity of the base material is less than that of concrete and if injection anchors are used, please consult a qualified mounting engineer.

i Reduction of dowel forces can be achieved by increasing the number of brackets in the vicinity of the arms or by using bracket plates (see adjoining figure). The following table defines the maximum dowel forces depending on the size of the awning, the use of bracket plates, the number of brackets (according to Table 2.5.) and the wind class (according to Table 2.3.):

Pulling forces for wall mounting with bracket plates (N)						
Mounting	Width	Projection (mm)				
		1500	2000	2500	3000	3500
WALL	4000 mm	465	750	1140	905	1170
	5000 mm	560	915	1385	1085	1615
	6000 mm	660	1080	1630	1445	1890

... grey cells: can be delivered only in wind class 2

Downgrading of the wind class on the grounds of bad mounting conditions is permissible only in limit cases and subject to the agreement of the final user.

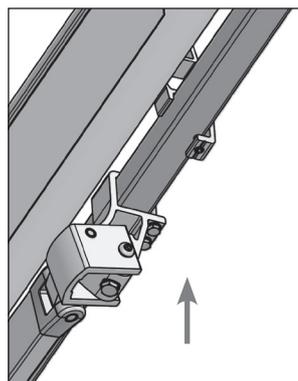
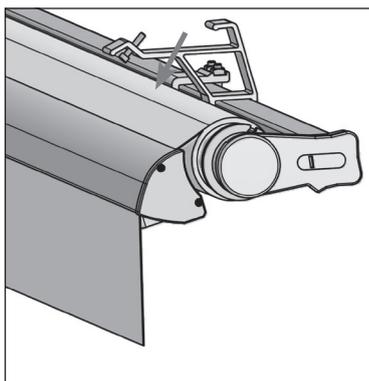


MOUNTING ON THERMALLY INSULATED FAÇADES:

Insulating plaster and full multi-layer thermal insulation are not pressure stable. Therefore, it is necessary to use spacers for the entire surface of the awning brackets or at least for the area around the screws. The picture on the right illustrates one possible variant:

BRACKET MOUNTING:

First attach and align both outer brackets. Using a string, accurately align all other brackets precisely to the outer brackets. Even out irregularities of the base by using suitable spacers. Then tighten all screws and check that brackets are firmly attached.



FOR A RAIN PELMET:

Prior to mounting the system, push the support onto the installation tube and secure it with the threaded pin on the underside.

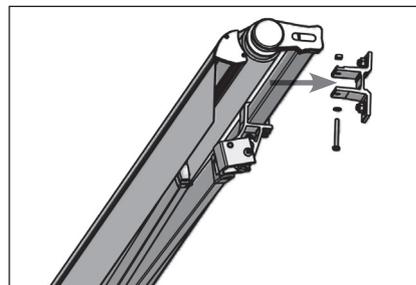
(For the final installation of the rain pelmet, see Section 3.4. of the Installation Instructions).

2.7 FASTENING THE AWNING

- i** Ensure that sufficient personnel is available to lift the awning. The awning weighs up to 80kg; the weights are defined on the packaging.

Slide the awning and support tube into the brackets from the front. Lightly grease the threads of the fixing screws and insert them into the drillholes from below, then secure them with square nuts.

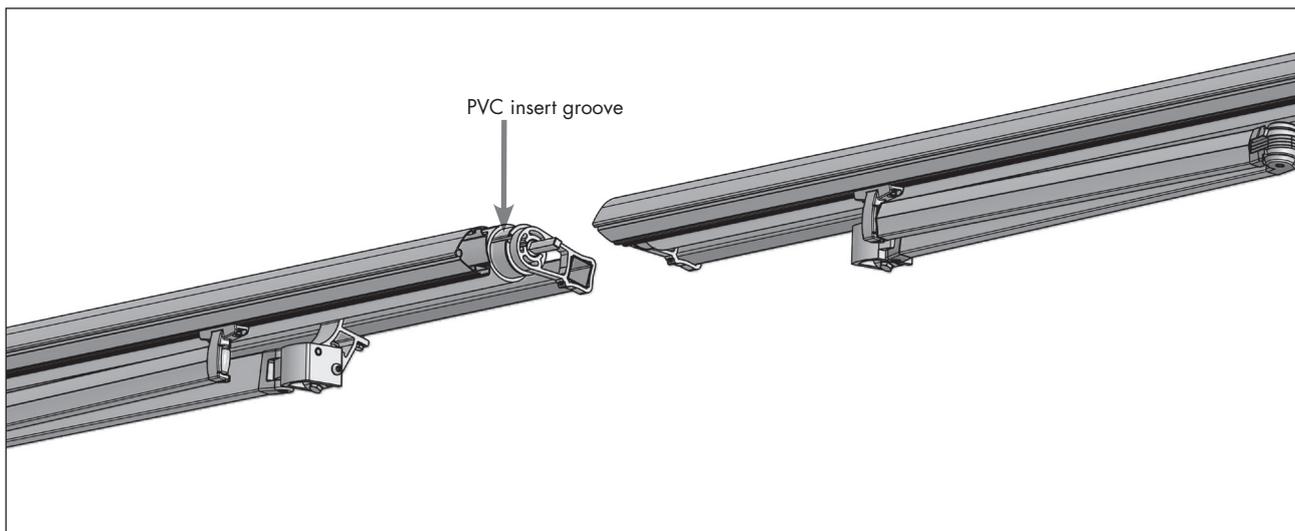
Straighten the awning laterally. Tighten all fixing screws.



2.8 COUPLED SYSTEMS

- !** Factory-part-mounted awnings (coupled systems without drive): the spring-loaded parts must be secured against unintentional opening. Do not remove this securing element until both systems have been coupled successfully (risk of injuries).

- First fasten the system and drive (as described in Section 2.7.)
- Using the test cable, extend system approx. 50 mm.
- Insert the coupled system without the drive in the bracket and secure with screws.
- Turn the square trunnion of the coupled system with a SW 13 open-end spanner in the extending direction until it is possible to engage it in the square hole of the drive unit.
- Ensure that the position of the insert grooves coincide with both roller tubes. Push systems together fully and fasten bracket covers.
- Push systems together fully.
- Level out both elements in the brackets and tighten all bracket lockers.



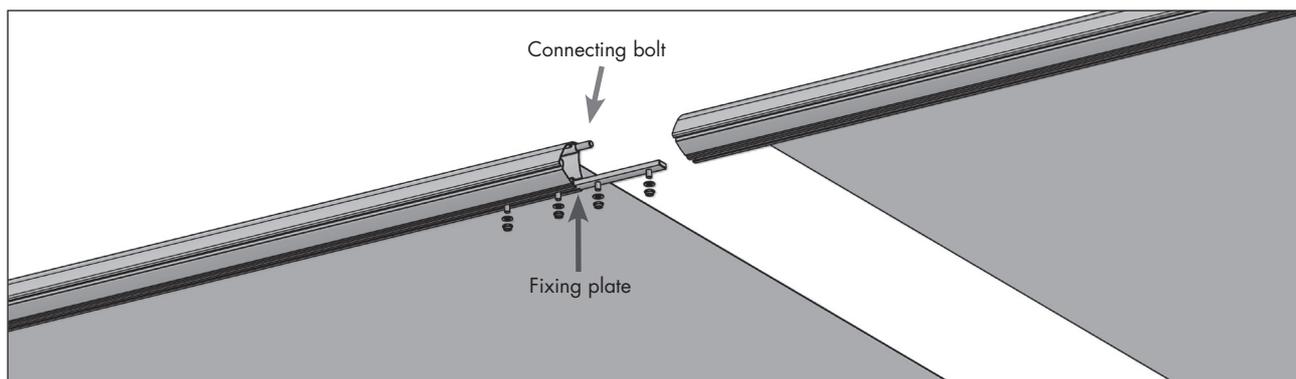
JOINTED ARM AWNING TRENDLINE

MOUNTING INSTRUCTIONS

DROP PROFILE COUPLING:

- If the test cable has not yet been connected, connect it and extend coupled systems at least 100cm.
- First install the connecting bolt into the groove of the drop profile.
- Align the drop profiles, set the clamping strip (pre-mounted in one of the drop profiles) in the centre of the system joint, press the drop profiles together and tighten the nuts using a SW 13 open-end spanner.

 Ensure that no gap remains between the two drop profiles.

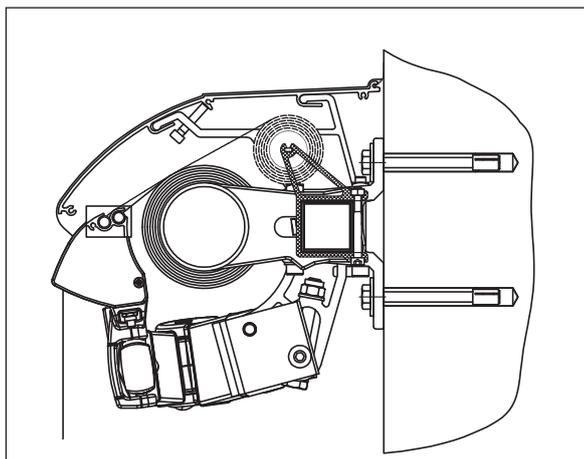


2.9 CLOTH GAP COVERING

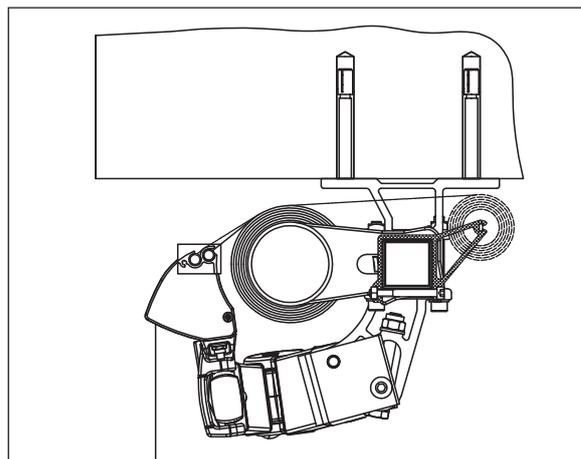
There are various wall and ceiling mounting positions for the spring-loaded tube of the cloth gap covering (see the following sketches).

- Extend the awning about 100 cm, place the support of the left cloth gap covering (part with bearing bush) onto the installation tube as shown in the sketch, and secure it with the screw and square nut about 200 mm from the system joint.
- Attach the spring-loaded tube and secure the right support.
- Pre-tension the spring roller up to 10 rotations in the unwinding direction.
- Cut the fabric insert approx. 6 cm shorter than the width of the fabric and push it into the fabric loop.
- Press the drop profiles apart, push a clamping mandrel into each of the profile grooves (tip in the direction to the system joint and hexagon of the threaded pin pointing to the opening of the profile groove).
- Press the fabric loop and insert into the same profile groove and center it to the system joint.
- Join both drop profiles with the fixing plate (pre-mounted in both drop profiles), and secure with the threaded pins.
- Bring channel fabric into parallel alignment with covering.
- Push the clamping mandrels into both sides of the fabric loop and secure with threaded pins.

Position of spring-loaded tube for wall mounting



Position of spring-loaded tube for ceiling mounting



3. INITIAL OPERATION

- ⚠ Before the initial operation of the awning, remove all objects (e.g. ladders, tools etc.) from the full travel range (in/out) of the awning and from underneath the awning.
- ⚠ During the trial operation, ensure that nobody is in this area – there is a risk of injury in case of a malfunction.

3.1 WITH HAND CRANK

Insert hook of the hand crank in the eye of the driving gear and fully extend awning. The end position of the awning (fully out) is factory set, but adjustments may be possible (please contact the system manufacturer). In fully extended condition, the awning is optimally stretched. When winding up the awning for the first time, check that the covering is wound up properly and that the articulated arms fold correctly (parallel).

- ⚠ When the end positions (in and out) are reached, do not force hand crank further. Otherwise the gearing may be damaged.

3.2 WITH DRIVING GEAR

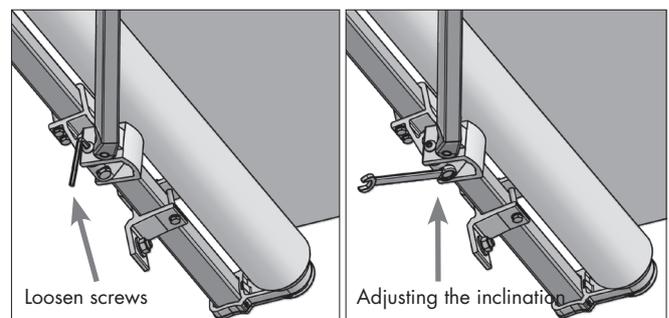
- ⚠ For trial operation, always use the test cable (no automatic control units etc.). In addition, the operator must be able to see the awning.
 - i If the test cable has not yet been connected, connect to the drive cable. The end position switches of the motors are factory set. If corrections are necessary on location, these can be carried out in accordance with the "Driving Gear Instruction Manual".
- Fully extend awning and check switch-off point. In fully extended condition, the awning is optimally stretched. When winding up the awning for the first time, check that the covering is wound up properly and that the articulated arms fold correctly (parallel).
- ⚠ Electrical installation work and connections to the mains must be carried out exclusively by a licensed electrical company.
 - i In the case of awnings operated with a switch, the switch must be positioned in sight of the drop profiles, but at least 0.4 m away from moving parts, and at a height corresponding to national regulations concerning handicapped persons (preferably less than 1.30 m).

3.3 SETTING THE INCLINATION OF THE AWNING

ADJUSTMENT OF THE ARM INCLINATION:

- Extend awning approximately half way.
- Loosen both lateral bolts of the brackets with a SW 6 Allen key.
- Relieve the tilting part by lifting the arm and set the inclination by turning the bolt on the underside with a SW 17 ring spanner.

TURNING COUNTER-CLOCKWISE → AWNING IS LOWERED
TURNING CLOCKWISE → AWNING IS RAISED



In the event of a significant change of the inclination setting (more than 10°), the arms must be adjusted alternately.

- After having performed the arm adjustment, firmly retighten lateral screws.

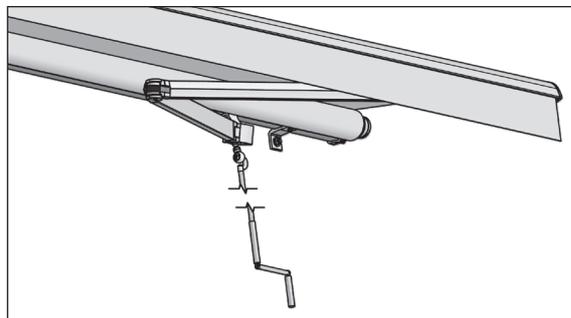
JOINTED ARM AWNING TRENDLINE

MOUNTING INSTRUCTIONS

3.4. AWNING INCLINATION FOR THE "INCLINATION ADJUSTMENT" OPTION

With the "inclination adjustment" option, it should be noted that with a greater change of inclination, the arms are alternately shifted by a maximum of approx. 10°.

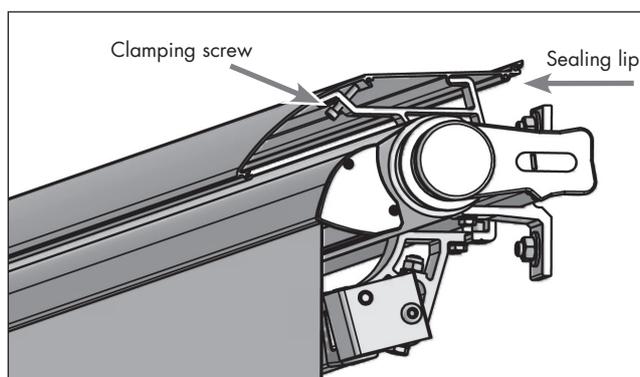
Care should also be taken that the drop profile is positioned horizontally using the attached spirit level, especially when retracting the awning.



3.5. MOUNTING RAIN PELMET

The supports for the rain pelmet have already been installed when the brackets were mounted (Section 2.6.).

- After the system has been mounted, push the rain pelmet from the front into the retaining bracket with both grooves and straighten it. The flexible sealing lip pointing toward the wall must face upward to prevent water from running behind the awning.
- Tighten the clamping screws using a SW 5 Allen key.
- Fasten the side parts of the rain pelmet with cross-head screws into the screw sockets of the profile.



Install the coupling in the same manner for coupled rain pelmets. The coupling engages half of each profile.

3.6. COMPLETING THE INSTALLATION / TRANSFER TO THE CLIENT:

- Clear site. Remove packaging materials from site and dispose according to local regulations.
- In the event of queries at a later date, the WOUNDWO order number and the product name must be recorded by the installer on the operating instructions under "Product labelling".
- Hand over to client all instructions concerning the installation and operation of the awning as well as the instructions for the electrical connections of control units and switches.



Give client comprehensive instructions about the operation of the awning. Failure to observe the instructions and incorrect operation can result in damages to the awning and accidents. Notify client of the wind resistance class of the awning.

4. DISMOUNTING OF THE AWNING



Ensure that the area around the awning is free of unauthorized personnel. De-energize awnings with driving gear and secure against accidental switch-on.

- Dismount the awning exclusively in retracted condition.
- Dismounting of the awning is the reverse of the mounting procedure.



Caution: In coupled systems, the passively driven system (without driving gear) must be secured to prevent accidental extension before the systems are uncoupled.

5. TROUBLESHOOTING

TYPE OF DEFECT	CAUSE	REMEDY
Driving gear does not work	No power	Check connection (specialized company)
	Driving gear not correctly connected	Check connection (specialized company)
	Thermal protection of the driving gear activated	Wait for 15-20 min., then operate again
	Remote control batteries empty	Check light signal on sending unit, replace batteries
	Higher-level control unit prevents manual operation	Wait until higher-level signal is not activated any more.
System does not extend or retract fully	End positions of the driving gear changed, or incorrect end position setting	Reset or re-program end positions (see Driving Gear Instruction Manual)
Awning makes grating noises	Insufficient lubrication	Spray arm articulation bearing with a suitable lubricant (e.g. Teflon spray)
System does not close on one side	Fabric not sewn straight	Line covering on this side by applying fabric tape to roller tube

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