NEO INSTALLATION GUIDE







CONTENTS	
F	Page
1. SAFETY 1.1 Explanation of the safety notes	3
2. MOUNTING 2. 1 Tools, resources and materials 2. 2 Preparing the installation 2. 3 Mounting situations: Wall, ceiling and rafter 2. 4 Mounting height, number and position of the brackets 2. 5 Fastening technique 2. 6 Fastening the awning	3 4 5 - 6 5 - 7
3. INITIAL OPERATION 3.1 with hand crank 3.2 with motor drive. 3.3 Setting the inclination of the awning 3.4. Awning inclination using the "inclination adjustment" option 3.5. Mounting rain pelmet. 3.6. Completing the installation / Transfer to the client	. 10 . 10 . 11
1. DISMOUNTING	. 11
5 TPOLIBLESHOOTING	12

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.

1.2 GENERAL SAFETY INFORMATION



The NEO 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

- Drill bits, suitable for the drilling substrate and the mounting pieces
- Ratchet 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 PREPARATON



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.

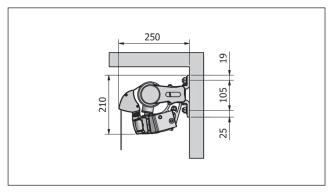
If significant differences make the safe installation of the awning seem doubtful, please contact the manufacturer of the system and a mounting/installation specialist.



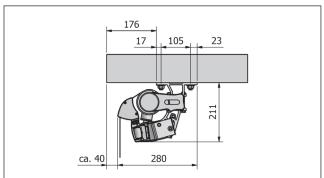
Failure to comply may result in collapsing of the awning and putting the health of persons at risk!

2.3 MOUNTING SITUATIONS

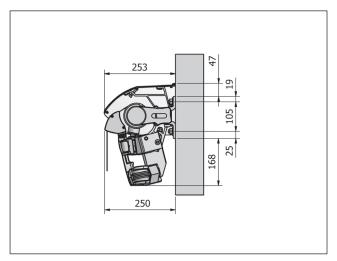
WALL MOUNTING



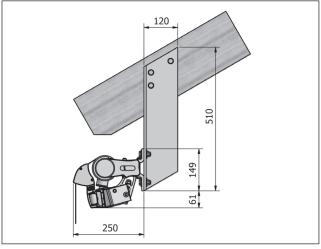
CEILING MOUNTING



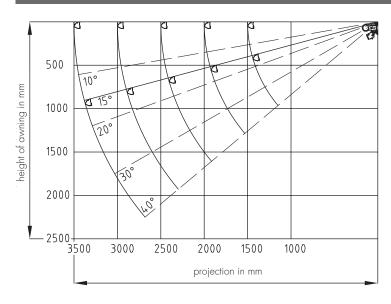
MOUNTING WITH CROSSED ARMS AND RAIN PELMET



RAFTER MOUNTING



2.4 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:

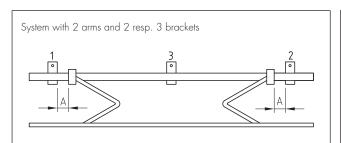
The following tables indicate the number of standard supplied brackets required for mounting the NEO awning to a con-crete base using the wall bracket and bracket plates.

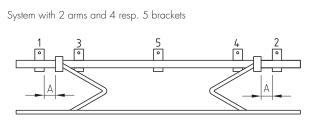
Standard number of supplied brackets for the wall/ceiling bracket for mounting on a concrete base						
Projection (mm)		Width (mm)				
	1100 - 4000	4001 - 6000	6001 - 8000	8001 - 12000	12001 - 14000	
1500	2	3	4	6	9	
2000	2	3	4	6	9	
2500	2	3	4	6	9	
3000	2	3	4	6	9	
3500	2	5	4	10	15	

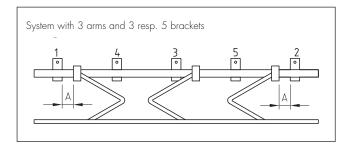
Standard number of brackets supplied for mounting using a bracket plate						
Projection (mm)	Width (mm)					
	1100 - 4000	4001 - 6000	6001 - 8000	8001 - 12000	12001 - 14000	
1500	2	3	4	6	9	
2000	2	3	4	6	9	
2500	2	3	4	6	9	
3000	2	3	4	6	9	
3500	2	3	4	6	9	

POSITION OF THE BRACKETS:

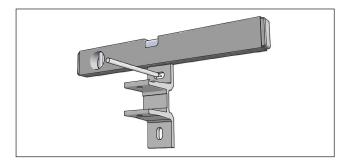
The brackets should be placed as close as possible to the connection points on the arms. The following sketches illustrate the best possible distribution of brackets. Dimension >A< should be a maximum of 300 mm.







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

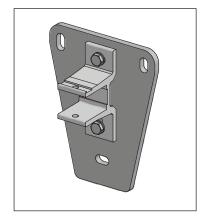


DRILLINGS FOR BRACKETS:

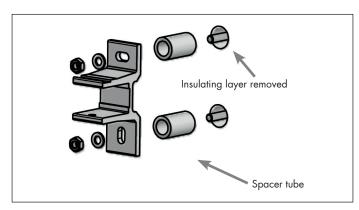
Transfer the drilling outlines of the brackets to the determined bracket positions.

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

2.5 MOUNTING TECHNIQUE



Reduction of forces can be achieved by increasing the number of brackets in the vicinity of the arms or by using bracket plates (see adjoining figure).

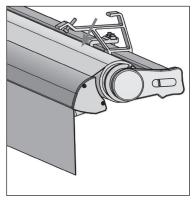


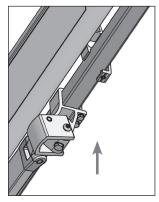
MOUNTING ON THERMALLY INSULATED FACADES:

Insulating plaster and full multi-layer thermal insulation are not pressure stable. Therefore, it is necessary to use distancers 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).

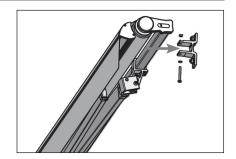
2.6 FASTENING THE AWNING



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.



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 damaaed.

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.



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.



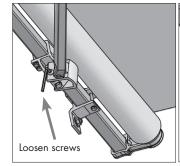
In the case of awnings operated with a switch, the switch must be positioned in sight of the drop profiles, but at least 0.4 m away from moving parts, and at a height corresponding to national regulations concerning handicapped persons (preferably less than 1.30 m).

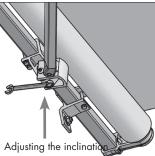
3.3 SETTING THE INCLINATION OF THE AWNING

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





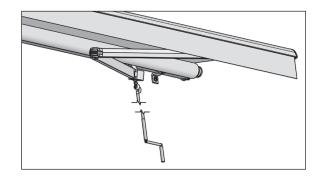
In the event of a significant change of the inclination setting (more than 10°), the arms must be adjusted alternately.

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

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°.

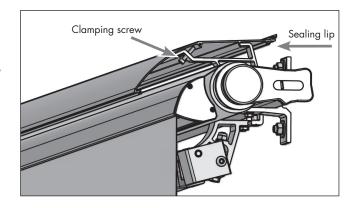
Care should also be taken that the drop profile is positioned horizontally using the attached spirit level, especially when retracting the awning.



3.5. MOUNTING RAIN PELMET

The supports for the rain pelmet have already been installed when the brackets were mounted (Section 2.5.).

- 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 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	
	No power	Check connection (specialized company)	
	Driving gear not correctly connected	Check connection (specialized company)	
Driving gear does not work	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	