

SKYSHADE 5500FC

Installation manual

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1 Introduction	5
1.1 Symbols used in this manual.....	5
1.2 Equipment required	5
2 Safety	5
2.1 General safety information	5
2.2 Requirements for working in safety	6
2.3 Working environment	6
2.4 General information regarding the motorised product safety	7
3 Technical data	8
3.1 Minimum obstacles table.....	8
3.2 Load on fixing components, according to the type of attachment	8
3.2.1 Wall installation.....	9
3.2.2 Ceiling installation	10
3.3 Exploded views	11
3.4 Coverage and installation diagrams	12
3.5 Supports	13
4 Wall bracket fastening	14
5 Structure installation	14
5.1 Installing the product on the brackets.....	14
6 Product inclination adjustment	15
6.1 Arm adjustment	17
6.2 Arm alignment	19
7 Completing the product.....	19

Installation manual

1 Introduction

This manual, and the others supplied with it (e.g. manual for the motor, remote control etc.) have been written by the manufacturer to provide the necessary information to those authorised to perform the assembly/installation of the components making up the product.

The operations described herein must be performed by persons with the training/skills required by applicable national standards and legislations (see (ERRORE Destinazione riferimento incrociato non trovato)).

The pages and content contained within this manual must not be removed, rewritten or modified in any way.

This manual must be kept intact in an easily accessible location until the product is disposed off.

The Manufacturer reserves the right to update its products and their corresponding manuals without any obligation to update previous products and manuals.

The Manufacturer reserves all rights concerning this manual: no reproduction shall be permitted, in whole or in part, without its express written authorisation.

1.1 Symbols used in this manual

WARNINGS:



INFORMATION AND WARNINGS

Instructions and advice to help ensuring correct use and storage of the product. Failure to follow these instructions may compromise the product's integrity and/or strength.



CAUTION

Operator hazard! Instructions and warnings to be read and followed carefully. Failure to observe these instructions may put people's safety at risk.



CAUTION

Read the instructions carefully before using the product.

ICONS INCLUDED IN THIS MANUAL:



Width



Projection



Height

1.2 Equipment required

To ensure correct assembly of the mechanical and fabric parts, and thereby to ensure that the finished product works optimally, the following equipment is required:

- Drill driver;
- Spirit level;
- Complete set of tools;
- Equipment for working at height (trestles, ladders, scaffolding, aerial platforms etc.) which meets applicable health and safety legislation;

The product is supplied already equipped with folding arms, fabric and remote control (manual or motorised) and any other requested optional components.



Never move the arm supports from their position when they are in the provision.

2 Safety

2.1 General safety information

- Operations of assembly/installation and first use, adjustment and extraordinary maintenance must only be performed by technicians trained and specialised for those tasks, contact Technical Support.
- Do not place objects on the awning fabric.
- It is forbidden for people to hang or hold themselves on the product, this would create a serious risk of injury as well as potentially damaging the product itself.

- The Manufacturer shall not be held responsible for any damage resulting from either tampering or unauthorised modification of the product.
- All lifting and handling operations must be performed with the utmost care, making absolutely sure that unauthorised persons stay at a safe distance and that no one goes below any suspended loads, whether still or moving.
- Wear the personal protective equipment and any other safety clothing required by health and safety legislation.
- Take note of the following information, required to find the correct fastening position of the brackets, before starting the installation process:
 - product dimensions (box height and width, product projection when it's closed and when it's opened);
 - support bracket dimensions (see Cap.3.5 "Supports", pag.13);
 - number of supporting arms (only for awnings with arms);
 - side of the product with the remote control mechanism;
 - dimensions of the wall/ceiling the product is to be installed on.

*· Use the most suitable wall plugs for the type of wall the product is to be installed on.
· If the product is to be installed on a ceiling, DO NOT fasten the brackets to any hollow-pot flooring section; this would risk the product falling with serious consequences for people and damage to the product.*



· All screws used on the aluminium components must be closed to a maximum tightening torque equal to that specified in the technical description of the screw itself. If a tightening torque is greater than the one who should be used, the castings and stainless-steel screws will be damaged. We therefore recommend using torque wrenches and electric screwdrivers.

· Use low-torque electric screwdrivers: applying high torque to stainless-steel hardware can cause the threads to seize, particularly for stainless-stainless or stainless-aluminium screws and threads.



The fabric must not be loosened beyond the arm's tension because there's the risk for the fabric to re-enter the tube from below and to get damaged.

2.2 Requirements for working in safety

- The installation must be performed in full compliance with workers' health and safety legislation.
- Keep a safe distance between moving parts and any fixed obstacles (walls, terraces etc.).
- No ladders or other fixed objects must be installed or positioned near the structure such that the spaces it needed are reduced.
- Check, prior to use, that any temporary structures (trestles, scaffolding, ladders etc.) and all personal protective equipment (safety slings and harnesses etc.) meet the code and that are in good condition.
- Always use adequate personal protective equipment.
- If there is more than one installer, the work must be coordinated.
- The operators must follow the safety instructions they have received.
- If the product is to be installed above the ground-floor level of a building, the area must be cordoned off while the product is being lifted to this level to ensure nobody is beneath the suspended load.
- To prevent the blind falling during installation, firmly secure the blind by tying the rope or belt around the arm supports so that it doesn't slip.

2.3 Working environment

- Assembly and installation operations must be performed in an environment sufficiently lit by natural or artificial light (per applicable standards/legislation). The worker must have good visibility of the work to perform and must also prevent any unauthorised persons from approaching the work zone.
- Before installing any product, ensure that static, climate and planning checks have been performed to ensure the product is suitable for the installation in the chosen location.
- Also check that any necessary authorisation or planning permission has been obtained from the relevant authorities.

2.4 General information regarding the motorised product safety



- A motorised version of the product must not be installed in potentially explosive (ATEX) atmospheres.
- Use a lockable (key) switch if the product is to be installed in sensitive locations such as schools, colleges, hospitals, rest homes etc.
- If fitted, the opening/closing switch or dead man-type switch must be installed within the sight of the movement of the front profile but away from any moving parts, at a height which complies with national legislation in respect of disabled persons and children.
- If a manual release is supplied, it must be positioned at an accessible height.
- The minimum installation height of the product must comply with applicable laws; if it is not possible to comply with this requirement, products controlled by automatic devices must have a warning buzzer installed.



- Danger of finger/upper limbs crushing between the extensibles arms in the processes of opening/closure of the product.



ALL MEASUREMENTS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE INDICATED.



Some figures could be of a general nature and not be referred to the product at issue.

3 Technical data

3.1 Minimum obstacles table





(cm)		Ingombri minimi della tenda finita Minimum awning encumbrances, Encombrents minimum du store fini Mindestabmessungen der Markise Tamaño mínimo del toldo						
		160	185	210	235	260	285	310
		191	216	241	266	291	316	341
		194	219	244	269	294	319	344

Fig. 1

3.2 Load on fixing components, according to the type of attachment



- Plugs calculations have been carried out considering their wind resistance class, in accordance to the legislation EN 13561.
- It is advisable to use all the available button holes on the stirrup. In the event that it is not possible, use the ones indicated in the figure.
- The information stated below are updated to the best of our knowledges. Still, it is a user's responsibility to apply them properly.
- The decision of the most appropriate fixing component depends on both the type of our basic material and on the physical state thereof. The verification of the material's basic status it's assigned to the installer before fixing the product.
- The decision regarding the fixing component must be carried out verifying the recommended loading values, which are listed in the supplier of reference's General Catalogue.
- In case of a corrosive environment, it is advisable the use of stainless-steel fixing components.

The value in the table is in KN and expresses the extraction load of the plug that is under the greatest stress. These values are required for the selection of the most suitable anchoring, based on the type of material upon which the product will be installed.

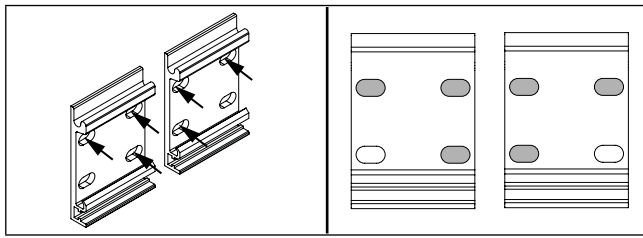
Example: awning with wall mount with 102mm bracket

- Awning dimensions: 400x210 - load on wall plug: 4.30 KN - Basic material: C25 non-cracked concrete.

Recommended plug according to Hilti's General Catalogue: HST M10.

Installation manual

3.2.1 Wall installation



102mm Bracket

Fig. 2

kN	XXX cm	XXX cm (cm)								
		150	200	250	300	350	400	450	500	550
XXX cm (cm)	160	-	1,39	1,70	2,02	2,33	2,65	2,96	3,28	3,59
	185	-	-	2,19	2,60	3,01	3,41	3,82	4,23	4,63
	210	-	-	2,77	3,28	3,79	4,30	4,81	5,32	4,14
	235	-	-	-	4,02	4,64	5,27	4,17	4,60	5,04
	260	-	-	-	4,83	3,94	4,46	4,98	5,50	4,09
	285	-	-	-	-	4,64	5,25	3,97	4,37	4,78
	310	-	-	-	-	5,42	4,14	4,61	5,07	5,53

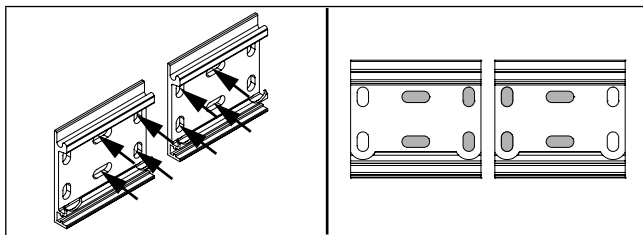
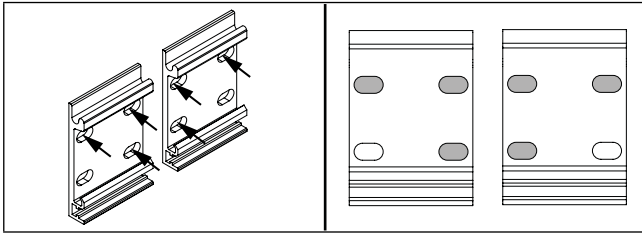



Fig. 3

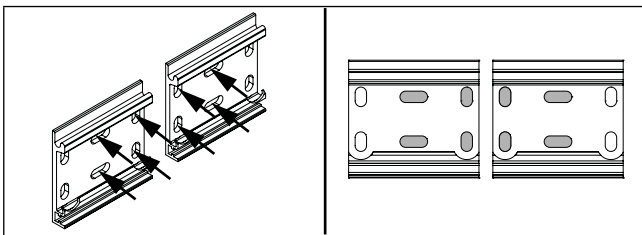
kN	XXX cm	XXX cm (cm)								
		150	200	250	300	350	400	450	500	550
XXX cm (cm)	160	-	0,92	1,13	1,35	1,56	1,77	1,98	2,19	2,40
	185	-	-	1,46	1,73	2,01	2,28	2,55	2,82	3,09
	210	-	-	1,85	2,19	2,53	2,87	3,21	3,55	2,76
	235	-	-	-	2,68	3,10	3,51	2,78	3,07	3,36
	260	-	-	-	3,22	2,63	2,97	3,32	3,66	2,72
	285	-	-	-	-	3,10	3,50	2,65	2,92	3,18
	310	-	-	-	-	3,61	2,76	3,07	3,38	3,69

3.2.2 Ceiling installation



102mm Bracket

kN		 (cm)								
		150	200	250	300	350	400	450	500	550
 (cm)	160	-	1,37	1,68	1,99	2,31	2,62	2,93	3,24	3,55
	185	-	-	2,17	2,58	2,98	3,38	3,78	4,19	4,59
	210	-	-	2,75	3,25	3,76	4,27	4,77	5,28	4,10
	235	-	-	-	3,99	4,61	5,23	4,13	4,56	4,99
	260	-	-	-	4,80	3,91	4,43	4,94	5,46	4,05
	285	-	-	-	-	4,61	5,22	3,94	4,34	4,74
	310	-	-	-	-	5,39	4,12	4,58	5,04	5,50



160mm Bracket

kN		 (cm)								
		150	200	250	300	350	400	450	500	550
 (cm)	160	-	0,91	1,12	1,33	1,54	1,75	1,95	2,16	2,37
	185	-	-	1,45	1,72	1,99	2,25	2,52	2,79	3,06
	210	-	-	1,83	2,17	2,51	2,84	3,18	3,52	2,73
	235	-	-	-	2,66	3,07	3,49	2,76	3,04	3,33
	260	-	-	-	3,20	2,61	2,95	3,30	3,64	2,70
	285	-	-	-	-	3,08	3,48	2,63	2,89	3,16
	310	-	-	-	-	3,59	2,74	3,05	3,36	3,66

Installation manual

3.3 Exploded views

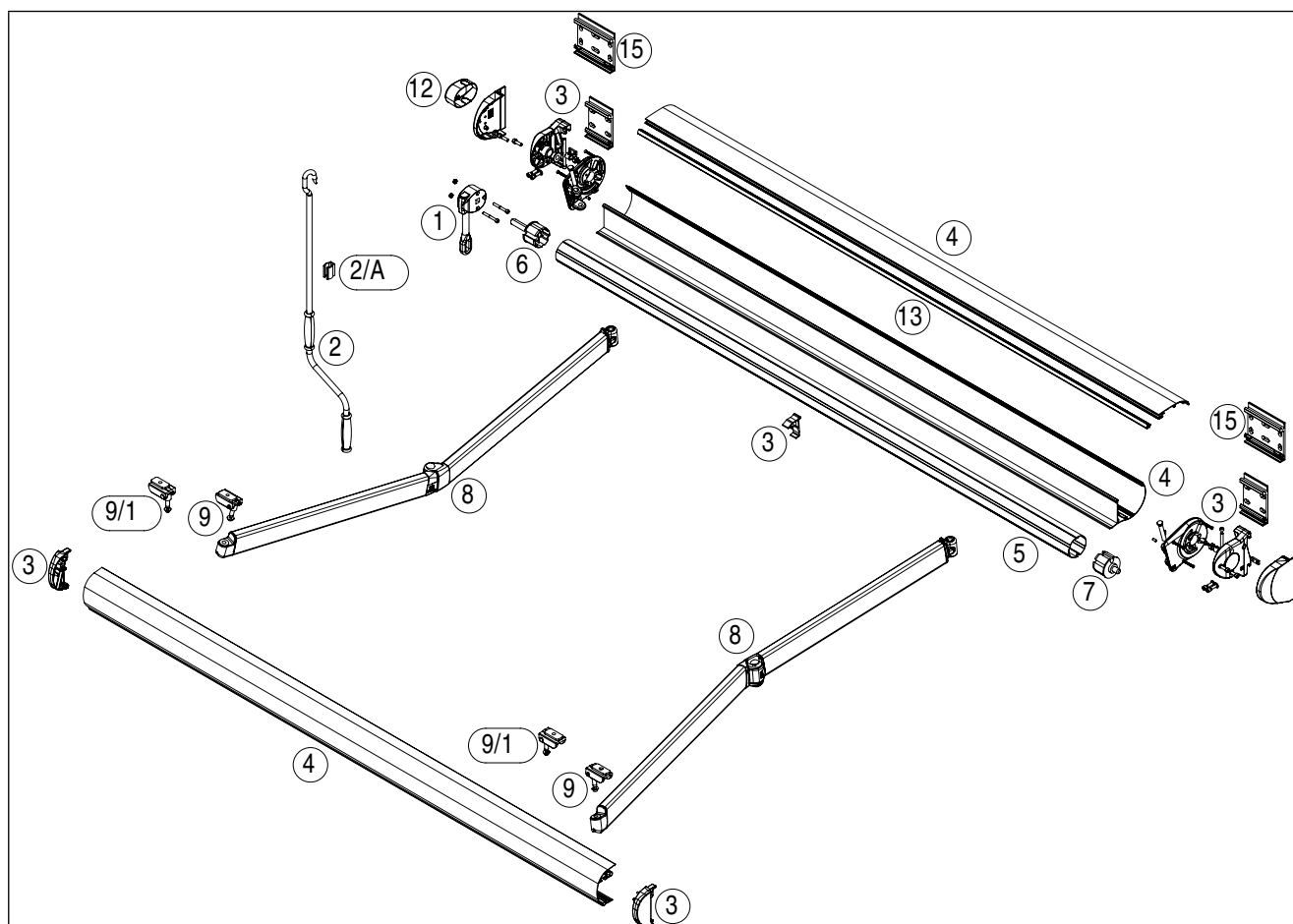


Fig. 4

1	Gear	9ARG--699102
1/A	Gear screws set M6x50mm	9CVA--520001
2	Crank rod	9AMX--699001
2/A	Crank rod clip	9FAM--699001
3	Complete supports set	9KBU--521124
4	"5500FC" set profiles	9KFX--521104
5	Ø70mm "Rollerbat"	9TAX--870704
5/1	Ø80mm "Rollerbat"	9TAX--350004
6	Ø70mm cap with 13x70mm square pin	9LPQ--821C70
6/1	Alluminium Ø80mm cap with 13x70mm square pin	9LPQ--821780
7	Ø70mm cap with Ø14x18mm round pin	9LPT--821170
7/1	Ø80mm cap with Ø14x20mm round pin	9LPT--821180
8	Arms with cable "Spin"	9BVG--320016
8/1	Arms with belt "Balteus"	9BHG--318016
9	Runners for "Spin" arms	9CCC--318001
9/1	Sloping runners for "Spin" arms	9CCC--521102
10	Bolt covers set	9OPR--699001
11	Brush	9ZZX--699001
12	9:1 reduction winch box	9CCA--822001
13	Gasket	9GBX--530001
14	Thickness for external covering	4PSC--870001
15	Bracket	7SUE--363041
16	Bracket	7SUE--521021

3.4 Coverage and installation diagrams
WALL INSTALLATION

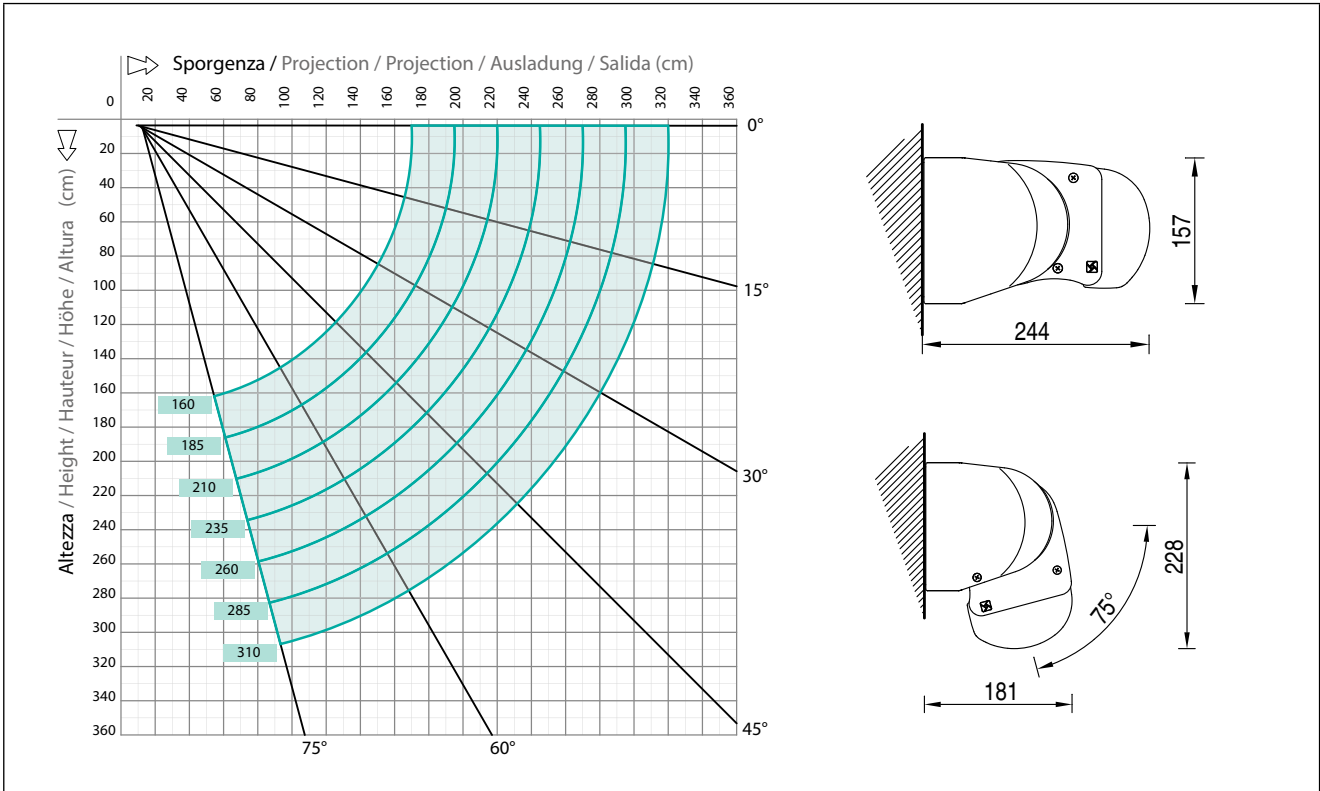


Fig. 5

CEILING INSTALLATION

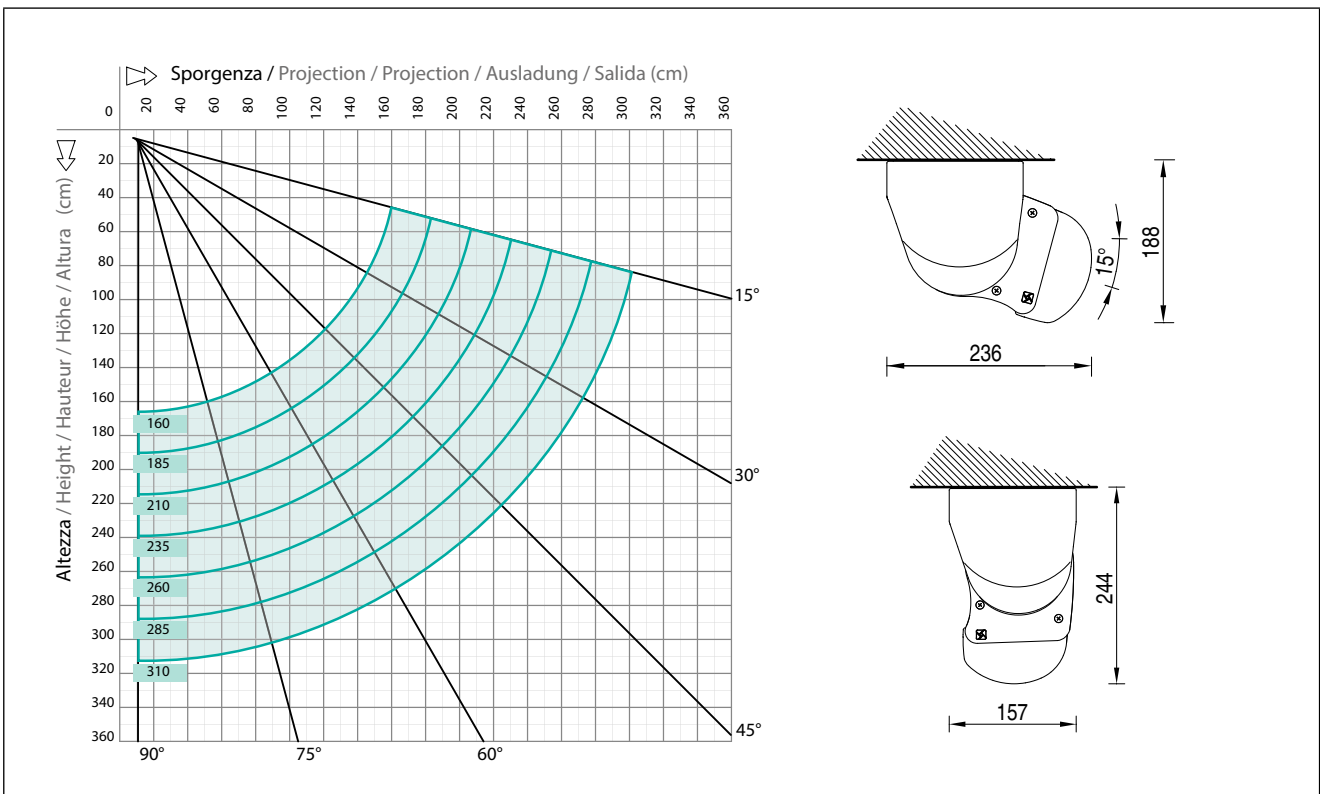


Fig. 6

Installation manual

3.5 Supports

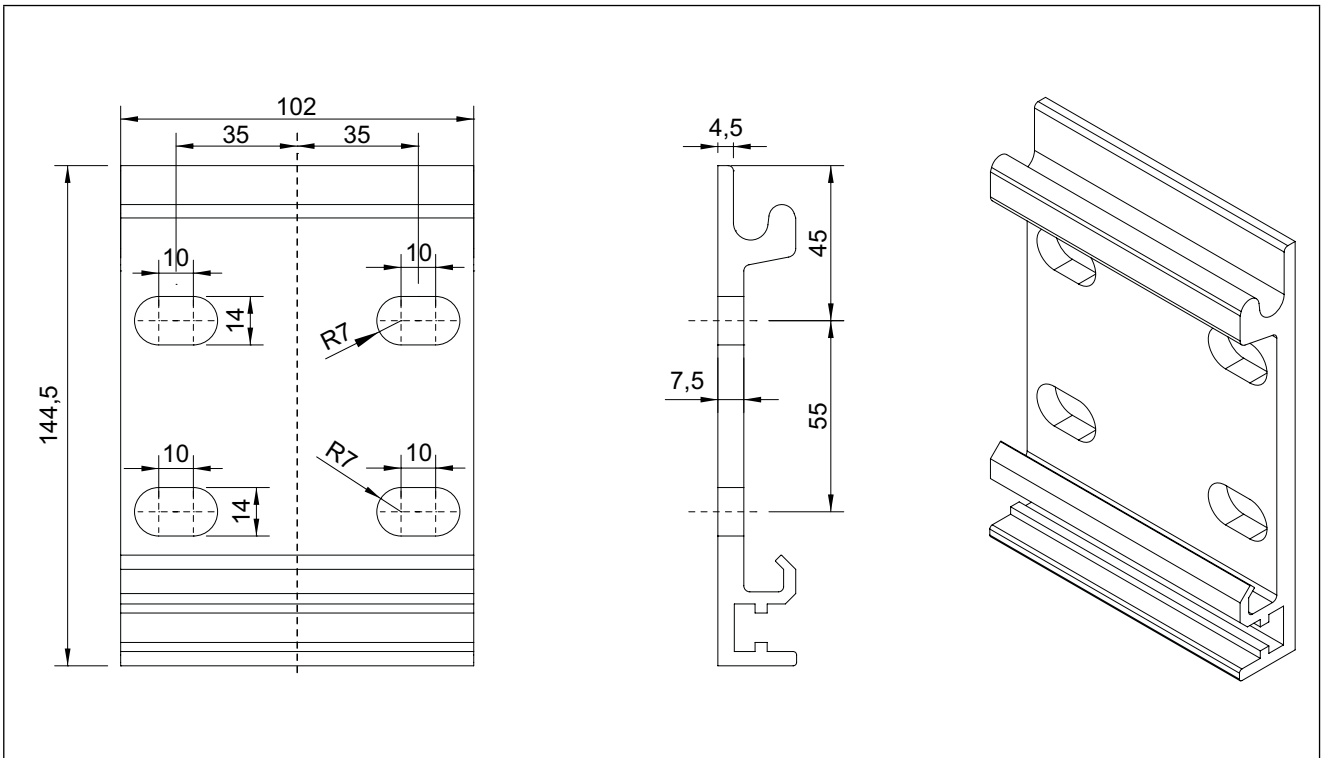


Fig. 7

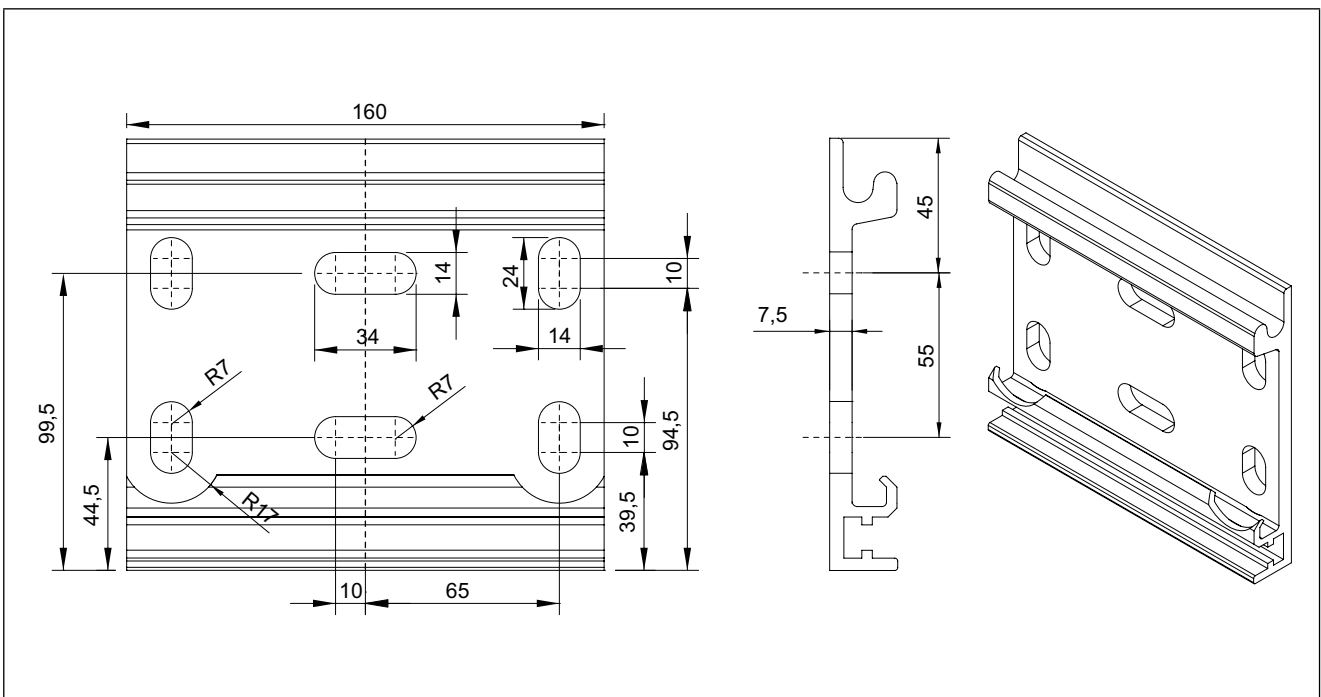


Fig. 8 160mm bracket

4 Wall bracket fastening

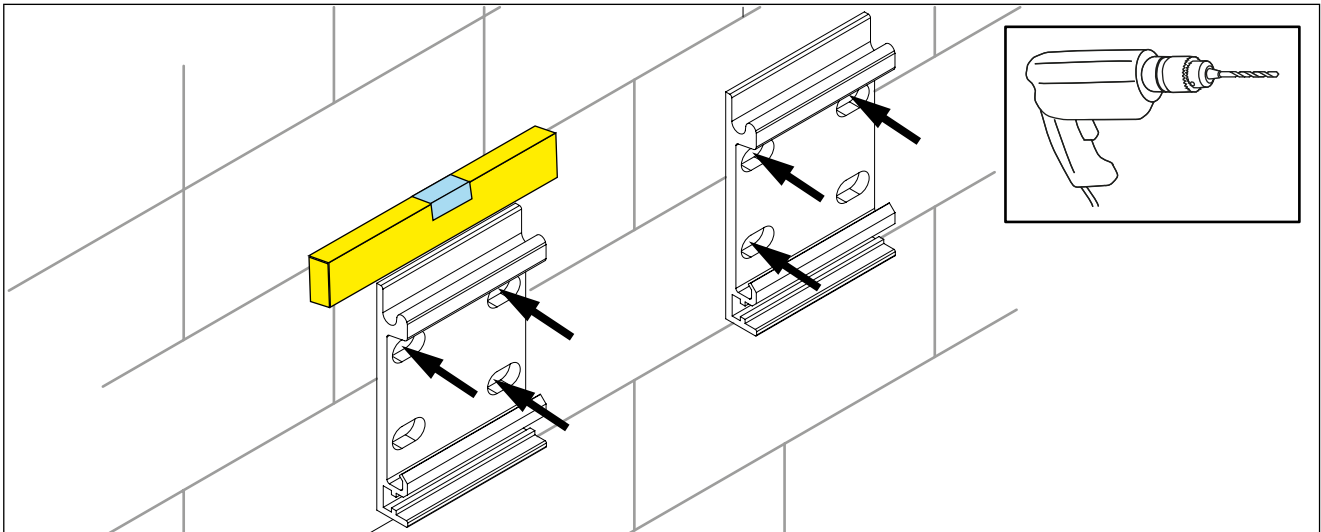


Fig. 9

5 Structure installation

5.1 Installing the product on the brackets

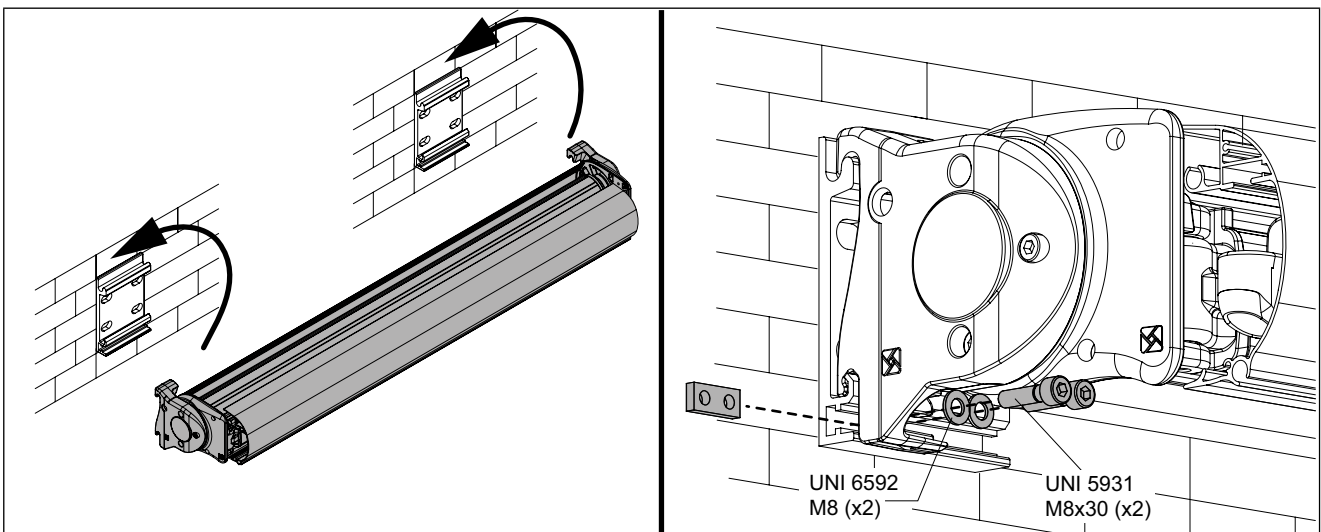


Fig. 10

Installation manual

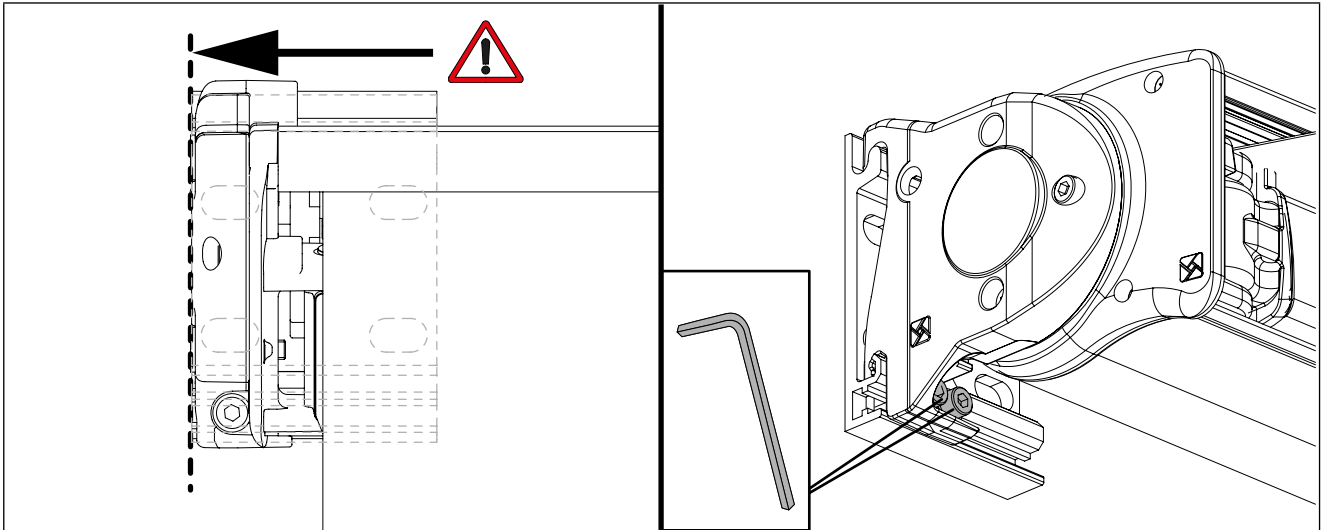


Fig. 11

6 Product inclination adjustment

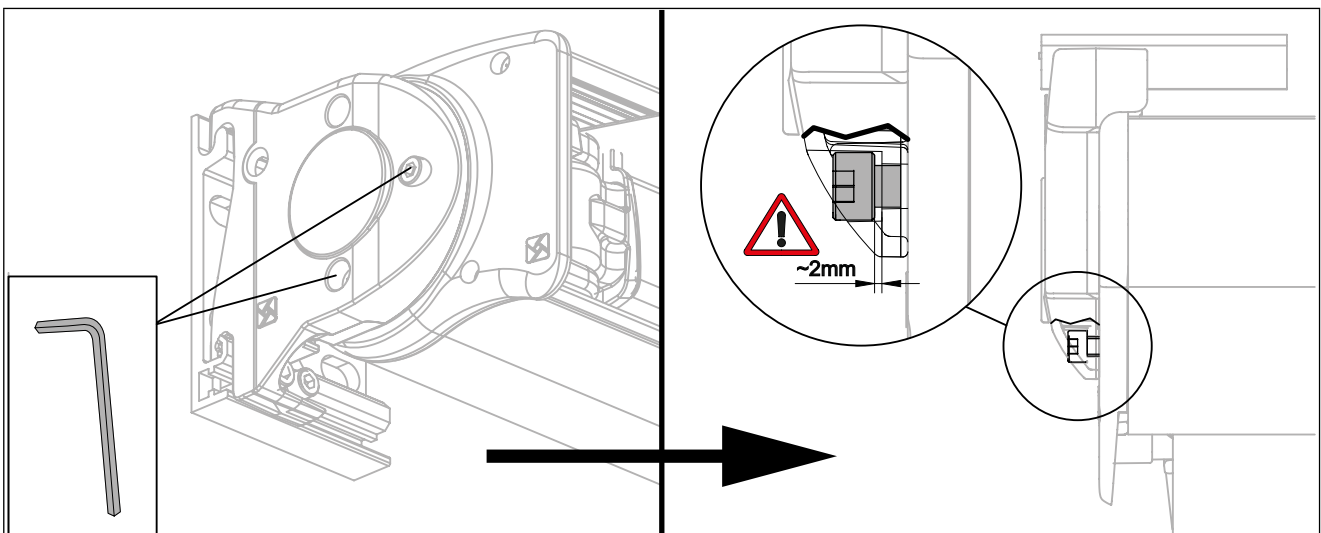


Fig. 12

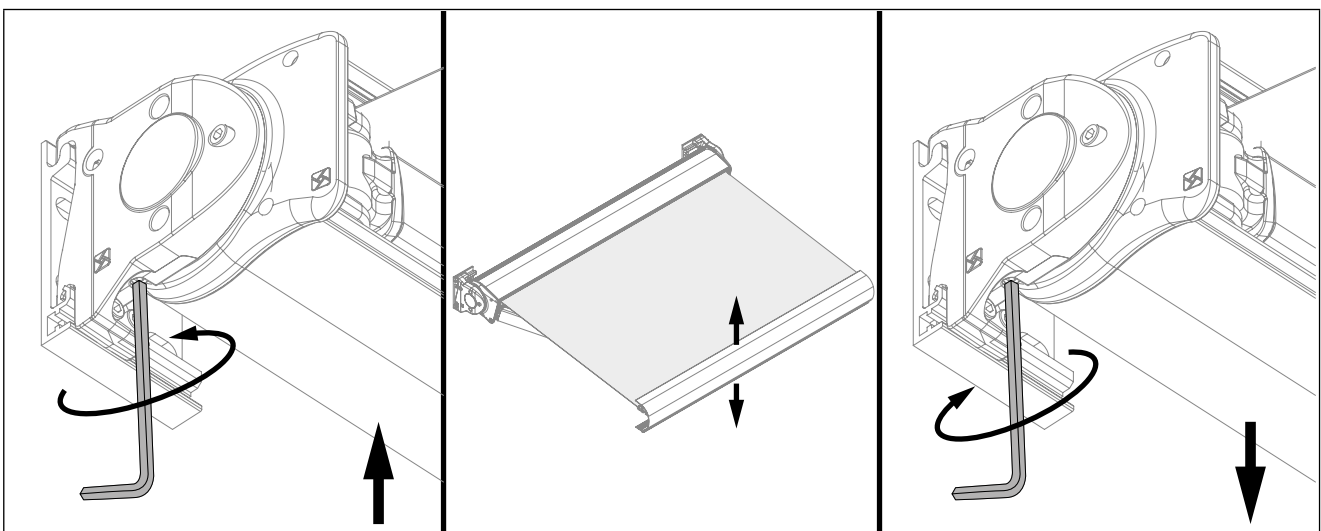


Fig. 13

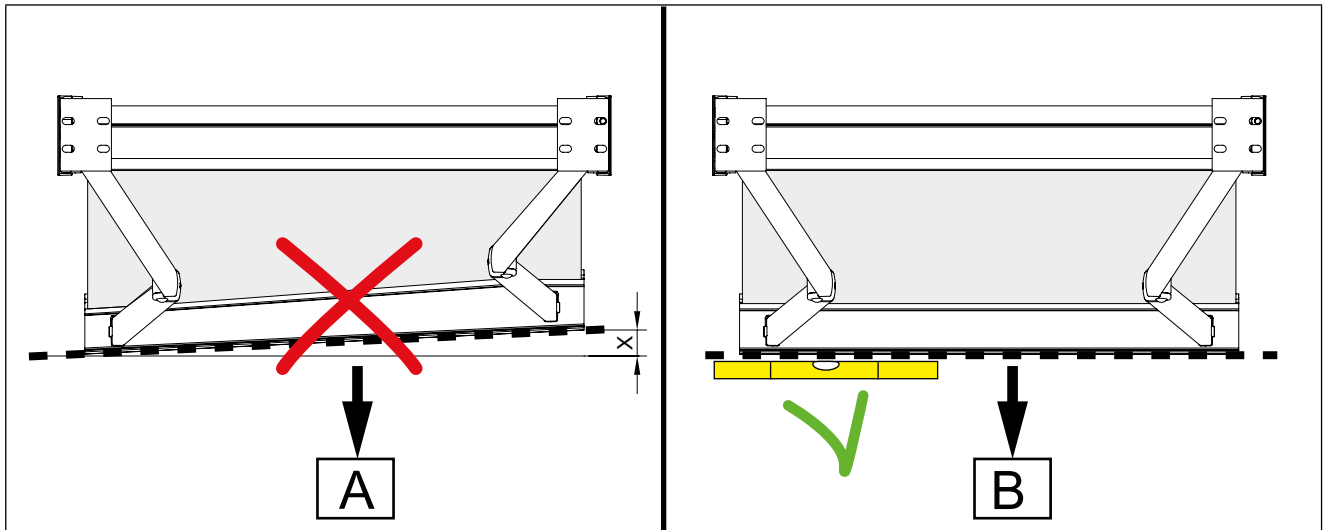


Fig. 14



A) See "Fig. 13" Pag. 15; B) "Fig. 15" Pag. 16.

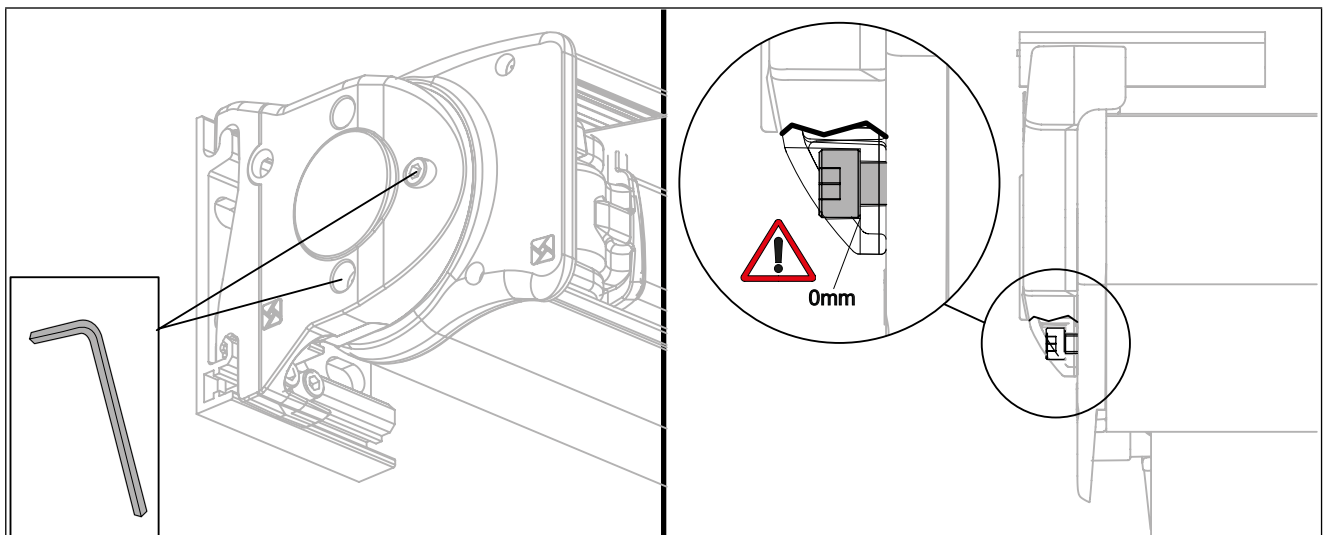


Fig. 15

Installation manual

6.1 Arm adjustment

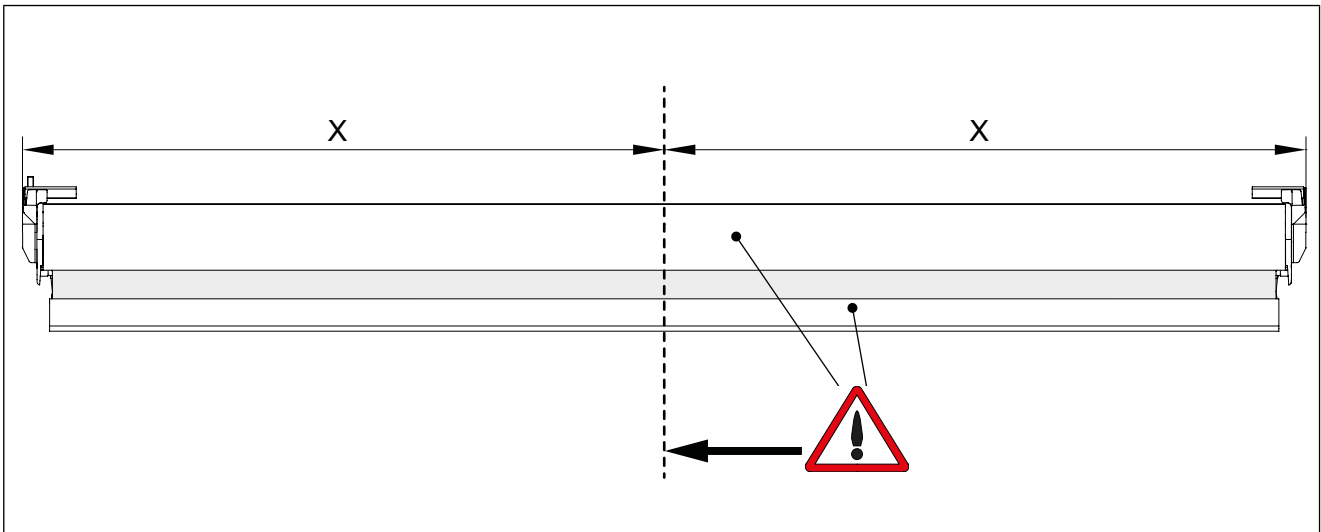


Fig. 16

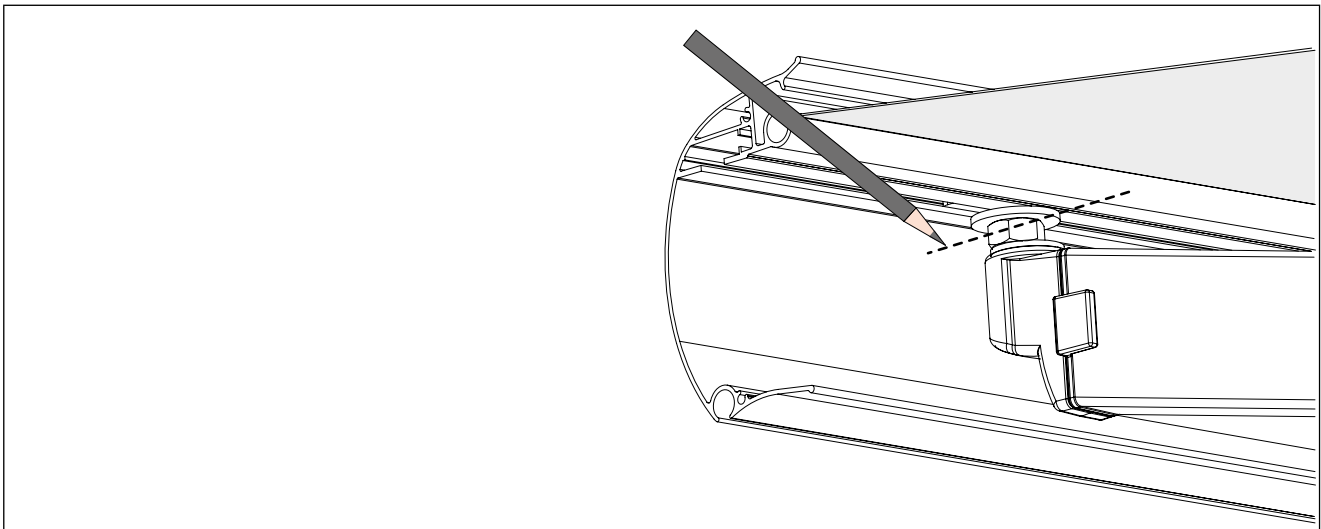


Fig. 17

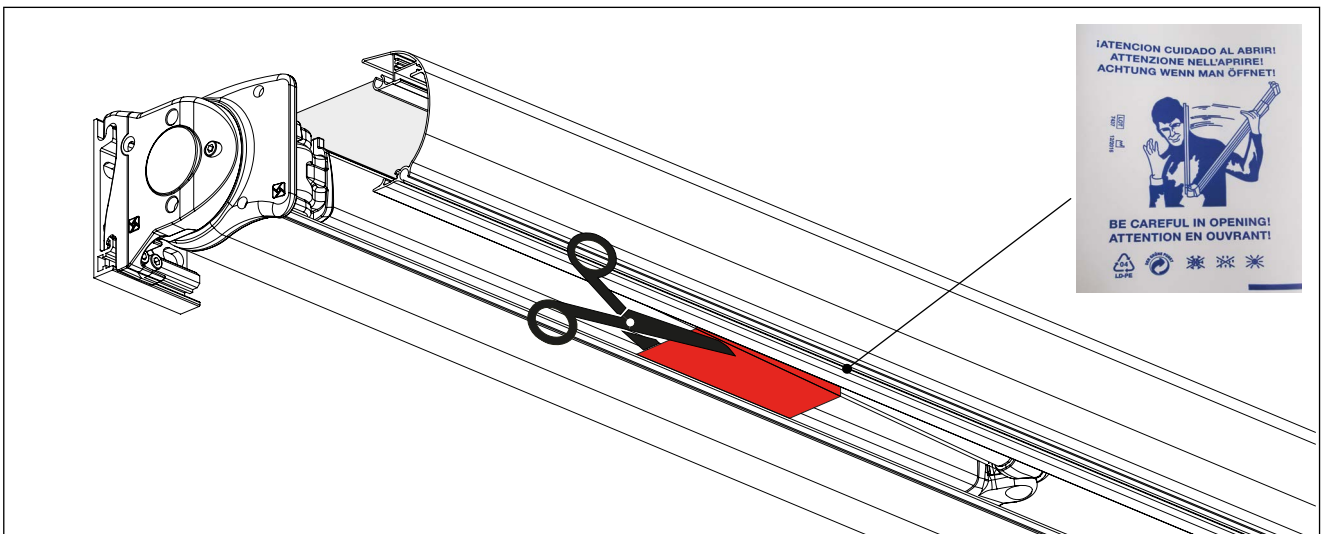


Fig. 18

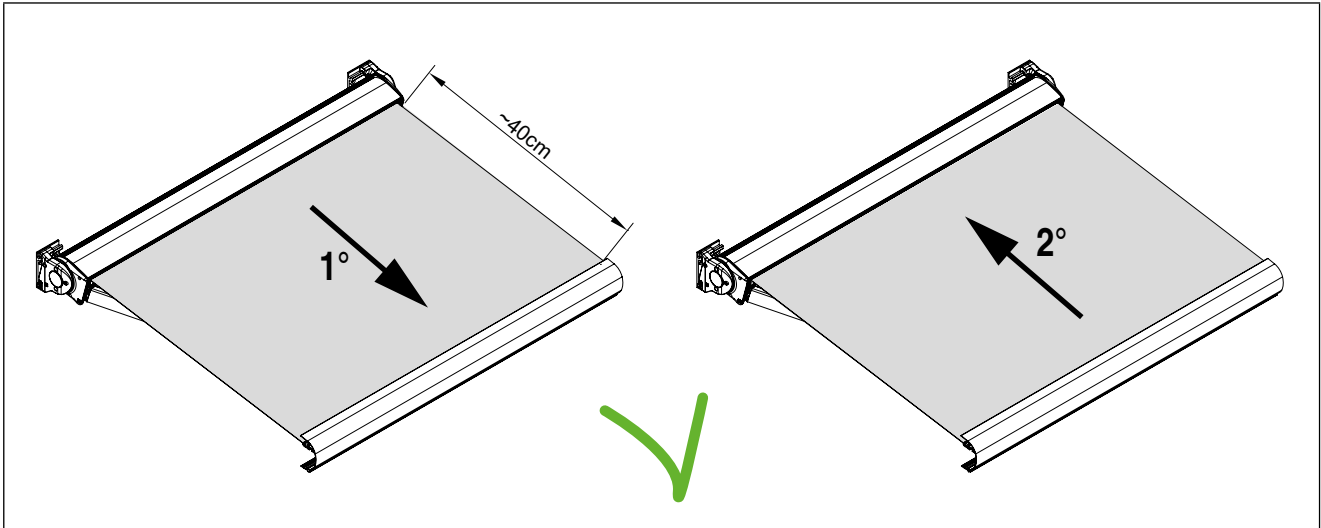


Fig. 19

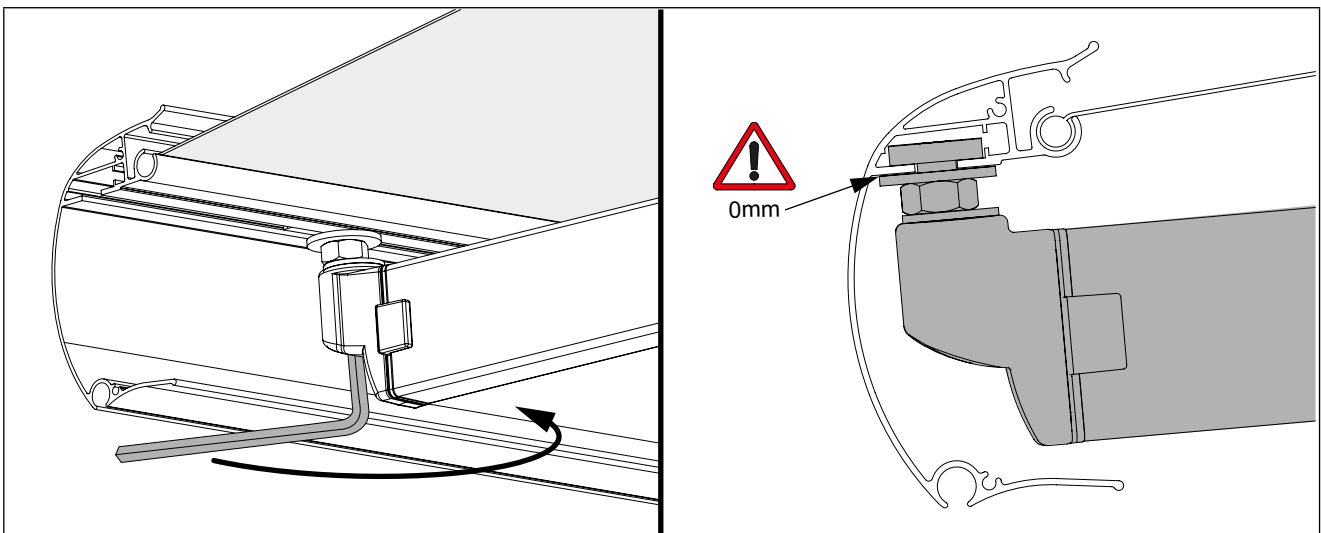


Fig. 20

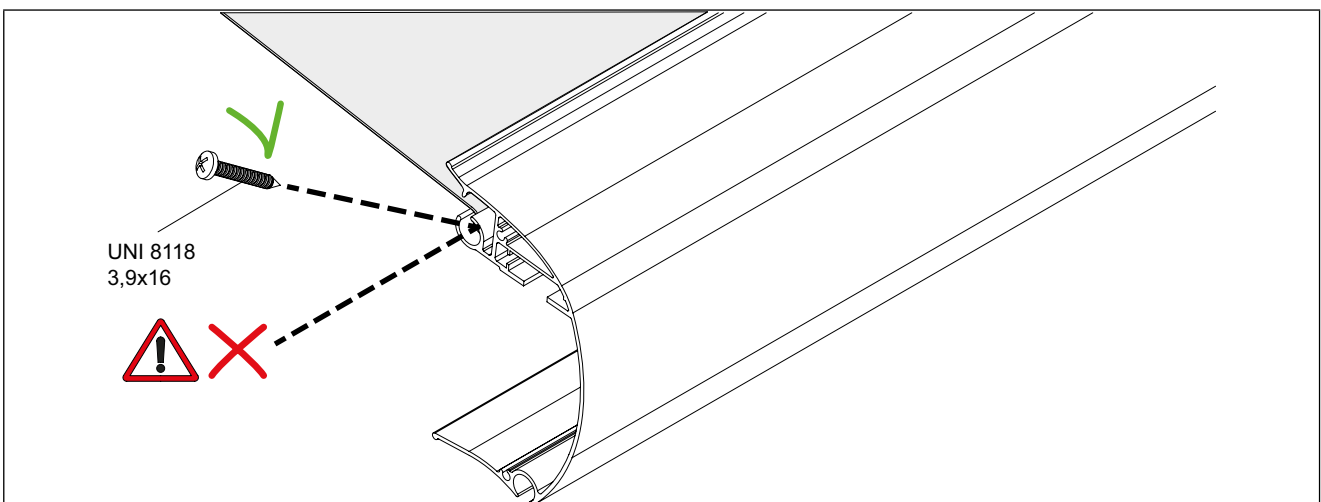


Fig. 21

Installation manual

6.2 Arm alignment

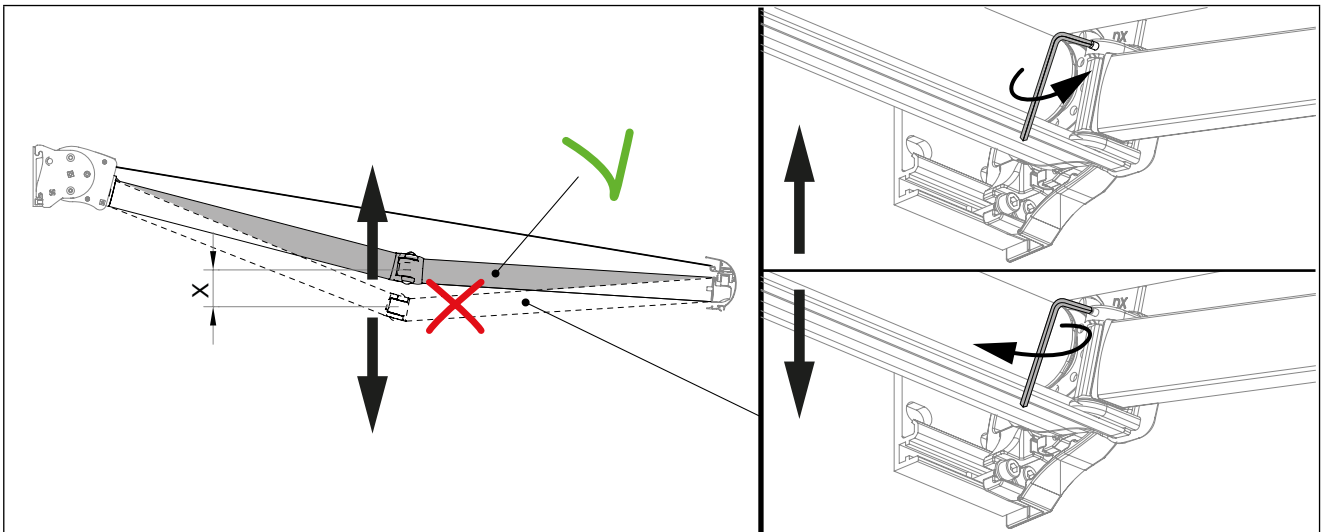


Fig. 22

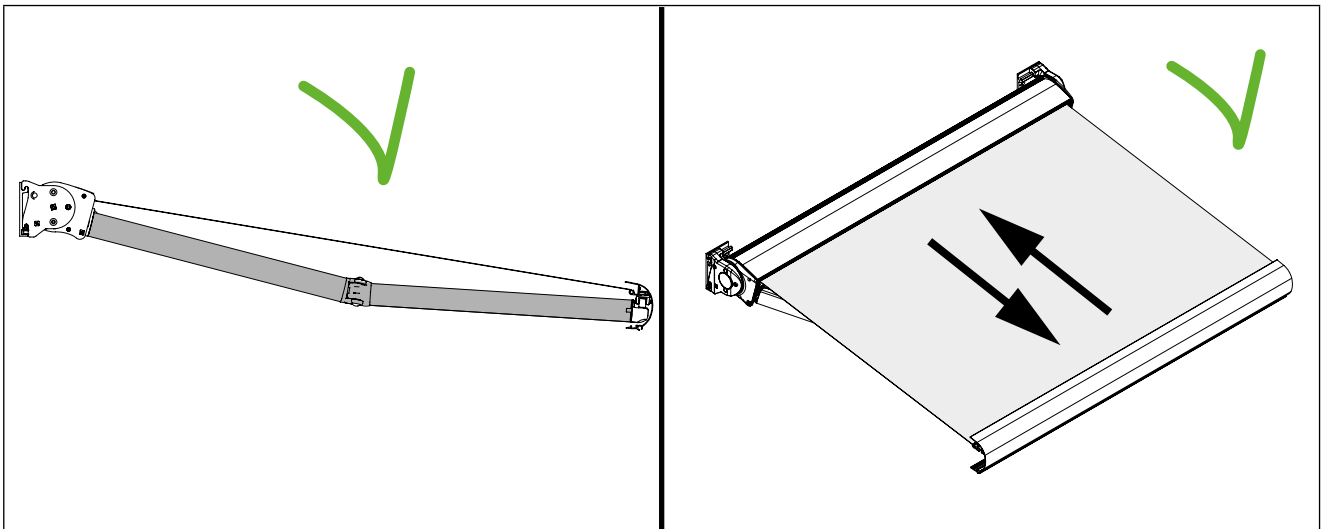


Fig. 23

7 Completing the product

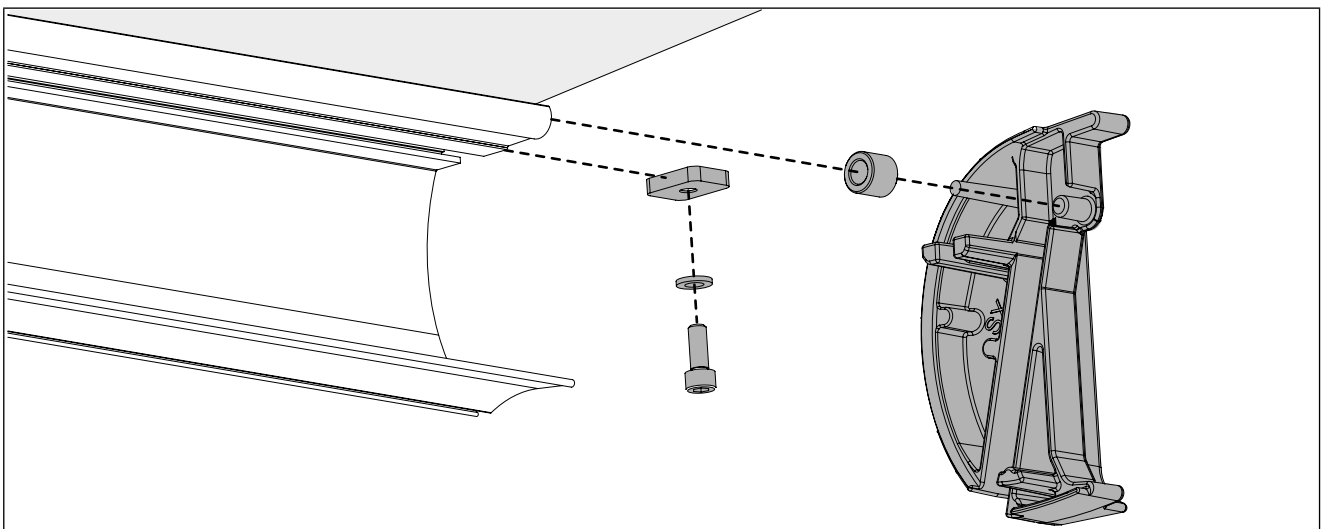


Fig. 24

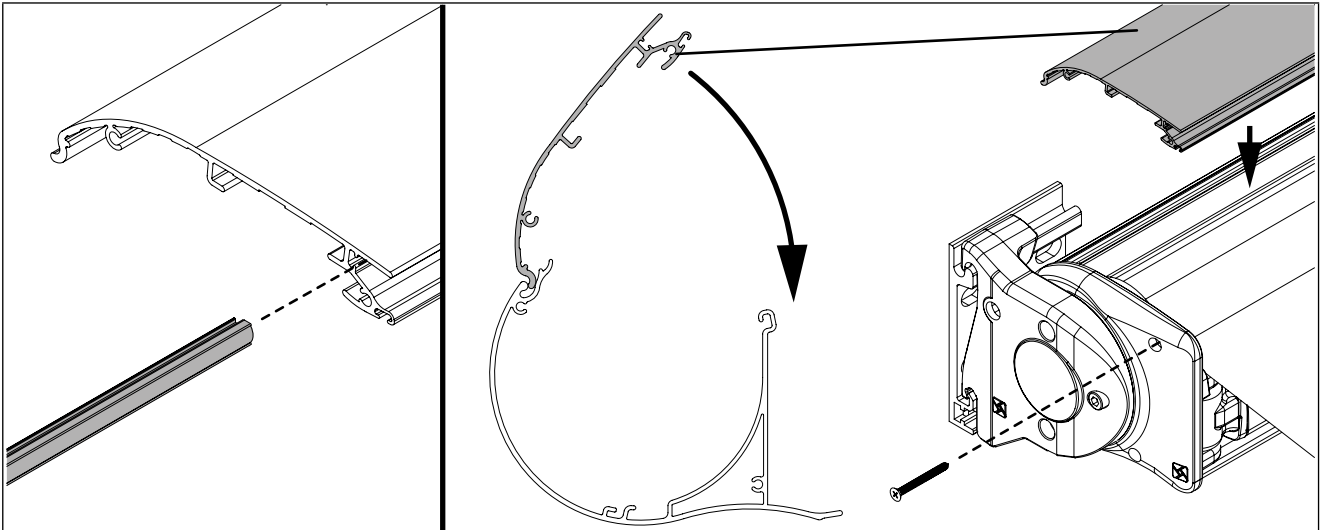


Fig. 25

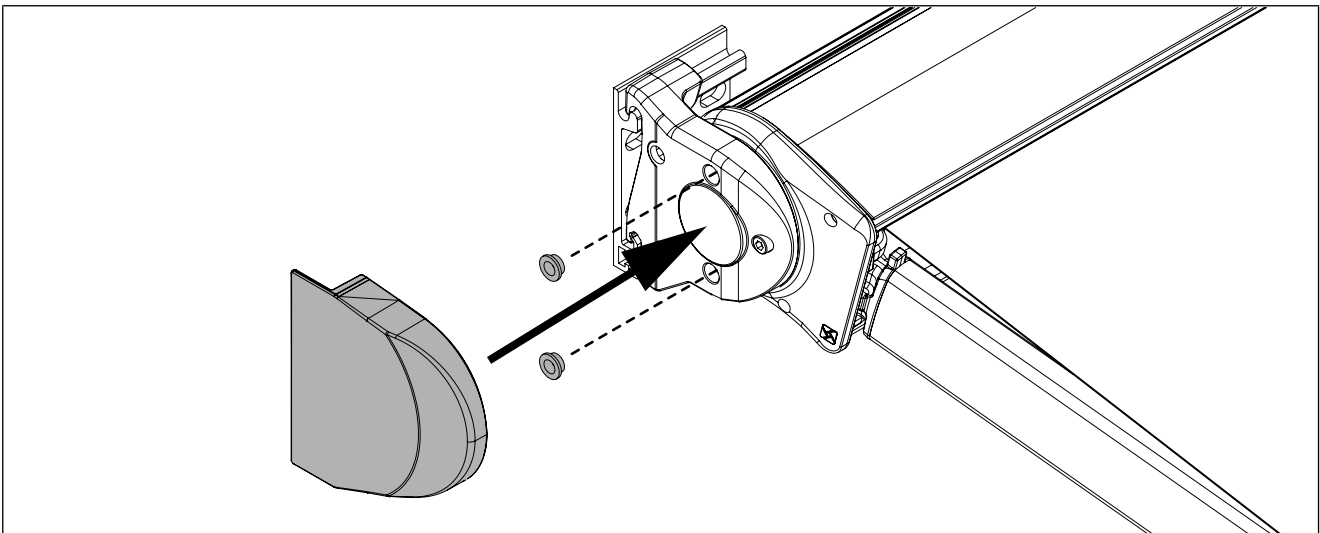


Fig. 26

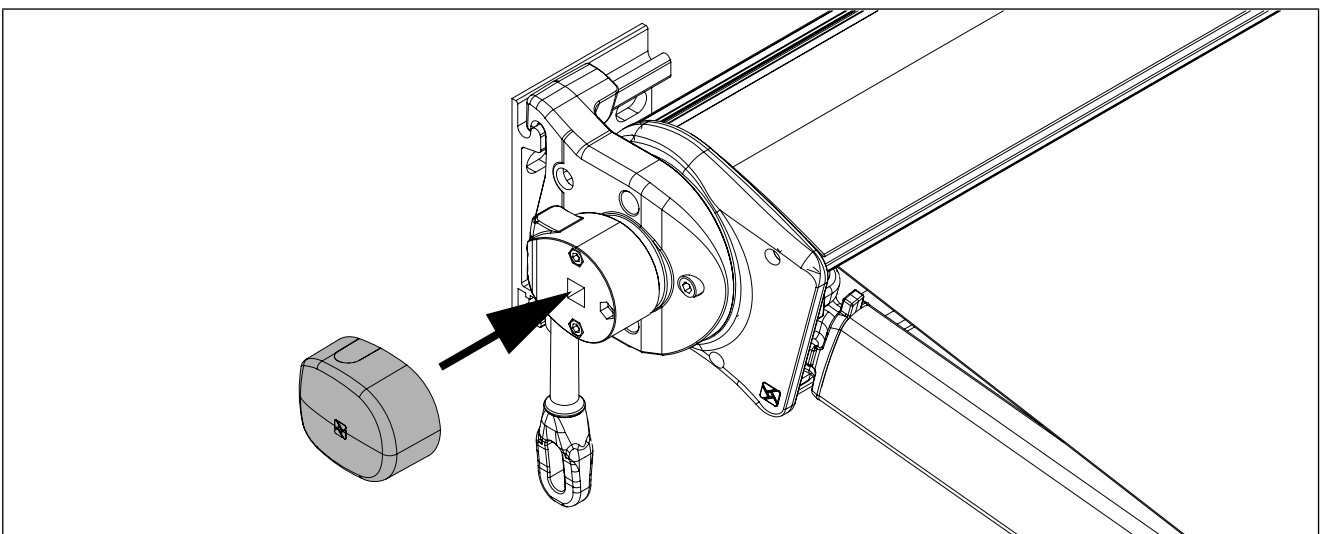


Fig. 27

