

## VERANDA HRV80-ZIP-2P

### WARNINGS

Installation must be carried out by qualified personnel in compliance with EN and local safety regulations relating to domestic electrical systems.

See also product technical data document.

Consult these instructions before you start using this product.

The tightening of springs creates significant forces. Be very careful and ensure solid footing whilst operating.

Provide sufficient light in the installation area. Remove obstacles and dirt. Make sure that, except for the fitters, no other people are present in the installation area. Unauthorised persons might be in the way, thus jeopardising themselves and others.



This symbol indicates the possibility of injury to persons or damage to the product.



This symbol denotes a warning.



This symbol means it is necessary to use force during the operation shown.

Use electric screwdrivers set the correct torque value.



This symbol indicates the need of a visual control.



This symbol indicates an optional element.

The manufacturer accepts no liability for any inaccuracies or printing errors that may be contained in this manual. The manufacturer reserves the right to introduce any modifications to the product that are considered necessary or in the interests of the user and which do not alter the essential operational and safety characteristics of the appliance. No modification of the design or configuration may be carried out without first consulting the manufacturer. The end user must receive the product's operation instructions.

## GENERAL GUIDELINES

Several safety measures must be taken for safe use and maintenance of this product. Comply with the following instructions for your safety and the safety of others. If in doubt, contact your supplier.

This manual describes how to use and control standard shading products. In addition to instructions given in this document, instructions given in other documents may apply to some components (e.g. electrical). Consult these instructions before you start using this product.

All components supplied are intended for this specific product. Adding other product may adversely affect the safety of this product. If any components are added or modified without prior consulting the supplier, the guarantee shall become invalid.

Prevent the product from being operated by unauthorised persons (especially children), as they may be put at risk caused by these activities. No right shall be derived from this manual. We reserve the right to carry out technical modifications without having to inform the customers. Your supplier is required to supply the shading technology in accordance with the locally valid standards and requirements. Check whether the product is indicated with the CE marking and whether all documents were supplied.

THE VERANDA IS A LARGE AND HEAVY MOVING OBJECT. MISHANDLING, DEFECTS AND NEGLECT MAY POSE RISK TO PERSONS OR CAUSE INJURY. CONTACT YOUR SUPPLIER SHOULD YOU HAVE ANY QUESTIONS OR NEED EXPLANATION OF MATTERS INSUFFICIENTLY DESCRIBED IN THIS MANUAL. PROCEED WITH CAUTION EVERY TIME YOU USE THIS SHADING TECHNOLOGY.

		
CAUTION: RISK OF SQUEEZING OR CATCHING!	CAUTION: RISK OF CUTTING	CAUTION: HAZARD!



CAUTION: SAFETY INSTRUCTIONS FOR SHADING PRODUCT



Improper installation, maintenance or operation may pose risk to persons or cause injury. This shading product must be labelled with CE sign.

Observe the following safety instructions:

- A. Ensure that all installation, maintenance and repair works are carried out by qualified and experienced persons.
- B. Consult this manual prior to any installation, maintenance and repair works. Do not start any works if you do not have a manual for the given product at hand.
- C. Keep sufficient safe distance from the moving sun screen, as it may pose risk to persons or cause injury.
- D. Prevent the product from being operated by children.
- E. Have the sun screen in sight every time you operate it as its movement may be obstructed by persons (especially children).
- F. Watch your fingers in the vicinity of moving extension poles, drums, box and other moving parts of the sun screen.
- G. Ensure regular checks and maintenance of the sun screen.

**CAUTION:**

SPRINGS IN THE BOTTOM SECTION AND THE PULL CORDS ARE UNDER A HEAVY MECHANICAL STRESS. NEVER ATTEMPT TO REPAIR, ADJUST, OR REMOVE THEM ON YOUR OWN.

The above may pose risk to persons or cause injury. Send for a qualified technician! Consult this manual before installation and each repair of the product.

Consult this manual before performing any works on the product. To ensure personal safety, it is necessary to comply with instructions specified in this manual.

Store this manual in a safe place. If you sell or transfer the sun screen to another person, you are required to hand this manual over to the new owner.

The supplier shall not be held responsible for any losses or damages caused by improper use of the product.

## OPERATION

The box includes a winding cylinder on which the fabric rolls up. When unrolling, the cord and spring system (under tension) pushes the bottom section outwards and keeps the fabric taut. Optimum fabric tension is attained in the lowest position of the bottom section. The bottom section moves in sliding blocks in the guide rails.



NEVER ATTEMPT TO DISASSEMBLE THE LOWER SECTION, SLIDING BLOCK, CORD, SPRING, LATERAL FRAME, BRACKET OR ANY OTHER PART OF THE SUN SCREEN ON YOUR OWN. THESE OPERATIONS MAY ONLY BE CARRIED OUT BY QUALIFIED PERSONS.

## OPENING AND CLOSING



HAVE THE SUN SCREEN IN SIGHT WHEN OPENING AND CLOSING AND ENSURE THAT NO PERSONS AND OBSTACLES OBSTRUCT FREE MOVEMENT OF THE BOTTOM SECTION.

CLOSE THE SUN SCREEN FOR THE NIGHT. THE USER MUST ALWAYS BE AWARE WHETHER THE SCREEN IS OPEN, OR CLOSED.



PREVENT CHILDREN AND UNAUTHORISED PERSONS FROM OPERATING OR PLAYING WITH THE SUN SCREEN. THE SAME APPLIES TO SWITCHES AND REMOTE CONTROLLERS. ALWAYS STORE THE REMOTE CONTROLLER OUT OF REACH OF CHILDREN.

IF ANY WORKS ARE CARRIED OUT NEAR THE SUN SCREEN, THE SCREEN MUST BE CLOSED AND THE AUTOMATIC CONTROLS AND POWER SUPPLY MUST BE SWITCHED OFF.

The sun screen is driven by an electric motor.

If you hear irregular noises during the operation, immediately switch off the screen and inform your technician.

The following is a concise overview of user instructions. For more detailed instructions, refer to the operating instructions for the electric drive.

### OPENING

Press the “down” button on the switching unit, remote controller or automatic control device (or keep the button pressed – applies to button switches).

## STOPPING

Press the stop button on the switching unit, remote controller or automatic control device.

## CLOSING

Press the “up” button on the switching unit, remote controller or automatic control device (or keep the button pressed – applies to button switches).

## CLOSING THE SUN SCREEN



BEAR THE FOLLOWING IN MIND WHEN CLOSING THE SUN SCREEN:

TO PREVENT THE RISK OF BEING SQUEEZED, KEEP YOUR HEAD, FINGERS AND OTHER BODY PARTS AWAY FROM THE BOX WHEN THE BOTTOM SECTION MOVES TO THE REST POSITION ON THE BOX.



PREVENT THE RISK OF BEING SQUEEZED (LOOSE GARMENTS) NEAR THE CYLINDERS. A RISK OF SHEAR EXISTS WHERE THE EXTENSION POLE PASSES THROUGH THE CYLINDERS. THIS MAY LEAD TO SEIZING AND SQUEEZING.

## IMPROPER USE

The shading system is designed as sun protection, and it cannot therefore be used as an all-weather awning. Improper use may lead to serious hazards.

### SAFETY MEASURES:

Do not subject the product to wind loading exceeding the values specified in the handover protocol. Excessive wind loading may seriously damage the fabric, mechanism, as well as fittings and fasteners. The wind resistance class actually achieved after installing the awning depends on the fasteners used, surface to which the system is attached, and the place of installation. Do not use the product if the wind force exceeds the wind resistance class determined by the installation specialist. This value may be lower than the wind resistance class specified by the manufacturer.

Do not open the awning in the rain. This way, you will prevent the risk of water accumulation on the fabric surface. Accumulated water will increase the awning weight and this may lead to the fabric ripping, damage to the mechanical components, awning detachment from the installation surface, and/or injuries of by-standers and user (by falling).

Do not open the awning in the snowfall or when it is freezing (risk of damage).

Do not roll up the awning if there are any objects on the fabric or in the box. First remove these objects to prevent the risk of damaging the awning (by falling).

Do not open the awning if any persons and obstacles obstruct free movement of the awning. There is a risk of injury to persons.

Do not hang any items (like flower-pots) to the bottom section, guiding sections, and the box, as this may lead to damaging the awning and the risk of falling.

Max. force of irretractable parts = 800 Pa.

3	up to wind resistance class 3 = wind force 6 Bft. = 49 km/h max. permitted		HRV08-ZIP	HRV80-ZIP	HRV80-ZIP-2P
2	up to wind resistance class 2 = wind force 5 Bft. = 35 km/h max. permitted	HRV52	HRV08-ZIP	HRV80-ZIP	HRV80-ZIP-2P
1	up to wind resistance class 1 = wind force 4 Bft. = 27 km/h max. permitted	HRV52	HRV08-ZIP	HRV80-ZIP	HRV80-ZIP-2P
0	up to wind resistance class 0 = wind force ≤3 Bft. = ≤20 km/h max. permitted	HRV52	HRV08-ZIP	HRV80-ZIP	HRV80-ZIP-2P

## SAFETY ELEMENTS

Automatic controller: wind protection.

Automatic controller: wind/sun control system.

Read the operation manual carefully.

**Note:** The user must always be aware whether the screen is open, or closed. The automatic controller may malfunction in abnormal conditions like power failure, defect, sudden storm, etc., and this may lead to the awning damage and risk of falling.

If you are aware of your absence for a longer period of time, switch the automatic controller to manual control and roll up the awning before leaving.

If the lower section moves at a height less than 2.5 metres above the ground level, the awning must be controlled by a pulse switch (if you release the switch, the motor stops). This will ensure the user has always a good view of the moving awning and injury to persons is prevented.

The motor-operated awning cannot be rolled up after power failure. In areas with high wind force levels and frequent power failure, it is recommended to use a special motor-generator assembly as an emergency power unit.

## REPAIRS, MAINTENANCE, AND DEFECTS

Regular inspections and maintenance (at least once a year) is recommended for optimal use of the awning. To ensure your personal safety, we recommend concluding a maintenance contract with an awning installation company – preferably with the person who installed your awning.

The awning requires regular inspections for wear and damage to the fabric and frame. It is forbidden to use damaged awnings.

In the event of failure, contact the maintenance company. If regular, annual maintenance using original spare parts is not carried out by a specialised company, any and all guarantee claims will be rendered void.



**MAINTENANCE AND REPAIRS OF THE SUN SCREEN, ESPECIALLY OF ITS FOLDING ARMS, MOTORS, AND SAFETY ELEMENTS, MAY ONLY BE CARRIED OUT BY AUTHORISED PERSONS. MOTORS MAY SWITCH ON UNEXPECTEDLY. IT IS THEREFORE NECESSARY TO DISCONNECT THE MOTORS FROM THE MAINS (E.G. BY SWITCHING OFF THE CIRCUIT BREAKER) WHILE CLEANING OR MAINTENANCE IS CARRIED OUT.**

**OUR PRODUCTS MUST BE INSTALLED IN A MANNER THAT ENSURES ALL PARTS ARE ALWAYS ACCESSIBLE FOR MAINTENANCE AND REPAIRS. THE MANUFACTURER SHALL NOT BEAR ANY ADDITIONAL COSTS (E.G. FOR DEMOLITION WORKS, REPAIRS OF THE FACADE AND INTERIOR WALLS) CAUSED BY FAILURE TO COMPLY WITH THIS REQUIREMENT.**

The following simple maintenance and inspection works can be carried out by the users:

Maintenance of the mechanic parts:

- Check of damage and/or wear of pull cords (once in 3 months).
- Check of position of the cords in the pulleys (once in 3 months).
- Regular cleaning of areas in the guiding sections where the sliding block castors move (once in 3 months, or more frequently, if required).
- Lubrication of the sliding block castors (at least once a year).

- Lubrication of castors under the end of the guiding sections (at least once a year).
- Lubrication of bearings opposite the operating side (at least once a year).
- Lubrication of cylinder bearings (at least once a year).
- Lubrication of the hanger pins of the folding arms and of the bearings opposite the control mechanism, using silicone-based dry lubricant (at least once a year).

Note: Do not soil the fabric.

Maintenance of the sections:



- Clean the sections regularly with lukewarm water and a neutral detergent, e.g. car shampoo, then rinse with fresh water (at least twice a year).
- Never use corrosive or aggressive products. We strongly advise you not to use steel wool or other abrasive materials.

Maintenance of the fabric:

- The VERANDA fabric is covered by a special contamination-resistant layer.
- Remove the dust from the fabric by a vacuum cleaner, blowing, beating out, or brushing.
- Water stains should be wetted thoroughly and cleaned using a clean rag. Detergents like soap or other chemicals should only be used if other methods fail.
- Fingerprints and other grease spots should be cleaned using a clean rag with a drop of mild dishwasher (never use trichloroethane III).

Bear the following in mind:

- Never open the awning in heavy rain, strong wind, when it is freezing and snowing.
- If the fabric is permanently exposed to all atmospheric conditions, it is very likely that sediments caused by air contamination will build up, decreasing the fabric quality.
- It is possible to roll up the fabric for a short period of time even if it is wet. It is then necessary to dry the fabric in open position. If the wet fabric remains rolled up for a long time, mould or rot is likely to develop.

		
<p>THIS PRODUCT MAY ONLY BE DISASSEMBLED AND REMOVED BY QUALIFIED FITTERS. COMPONENT DISASSEMBLY IS HAZARDOUS AS THE CORDS, SPRINGS AND EXTENSION POLES ARE UNDER A HEAVY MECHANICAL STRESS. ALWAYS SECURE THESE HAZARDOUS COMPONENTS BEFORE DISASSEMBLING.</p> <p>ENSURE DISPOSAL OF THE DISASSEMBLED SCREEN IN ACCORDANCE WITH LOCAL ENVIRONMENTAL REGULATIONS. IF NECESSARY, CONSULT YOUR LOCAL ENVIRONMENTAL PROTECTION AUTHORITY.</p>		<p>CONTACT YOUR SUPPLIER SHOULD YOU HAVE ANY QUESTIONS OR NEED EXPLANATION OF MATTERS INSUFFICIENTLY DESCRIBED IN THIS MANUAL.</p> <p>THE VERANDA IS A LARGE AND HEAVY MOVING OBJECT. MISHANDLING, DEFECTS AND NEGLECT MAY POSE RISK TO PERSONS OR CAUSE INJURY.</p>

## Measurement and assembly instructions

### 1. General information

To a great extent, the HRV80-ZIP-2P veranda screen allows regulating the sunlight penetration into a room and thus avoids unpleasant high amount of light and heat. The fabric is protected when rolled in the box which is closed by bottom section in the fully retracted position. The box is attached to a wall behind the screen using wall and fixing brackets.

This system is designed to easily overcome any small tolerances of roof construction. The whole system is made from corrosion-resistant materials.

Veranda HRV80-ZIP-2P is equipped with a zipper system that ensures the fabric stays properly taut in every position of the bottom section and avoids fabric slipping out from the guide rails. The individual parts of the fabric are always fitted with a zipper on both the left and right side, while the thicker part locks with the plastic zipper section inserted in an aluminium guide rail.

The HRV80-ZIP-2P system consists of the following parts:

- Box with an easily removable, motor-driven winding cylinder,
- Fabric with a zipper, wound in the box,
- Guide rails for easy connection of the zipper section,
- Bottom section with a spring and cords that keep the fabric taut, plus water draining,
- Stands on which the sections rest,
- Frontal cross bar that ensures horizontal connection of the stands,
- Zipper guiding and tightening system.

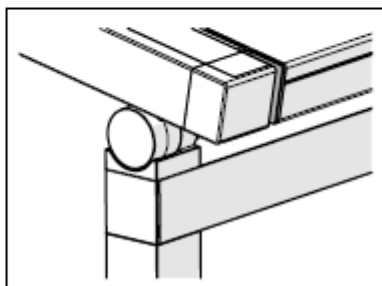
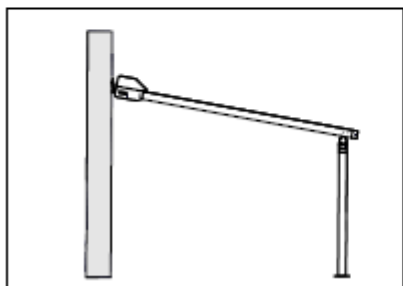
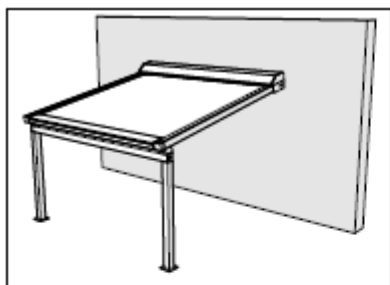
### 2. Installation options

This type of sun screen can only be installed to a wall.

The rear side of the box is equipped with supporting brackets that allow attaching the box to already installed brackets.

Following the box installation, the stands (with the cross bar) are to be placed to the front part and connected to the sun screen using articulated joints.

If water-proof fabric is used and the minimum angle is observed, water will drain over the front rail.



### 3. Installation

Note: Ensure perpendicularity of installation at all times, otherwise fabric wrinkling will occur.

The maximum overhang is 1000 mm.

Make sure the box and the bottom profile can always be opened and that the mechanical parts inside are accessible at all times. Should you fail to follow this rule, ISOTRA cannot be held responsible for the cost of demolition work!

#### 3.1 Wall bracket (standard)

For wall mounting.

Width: 90 mm, with two oval M12 openings.

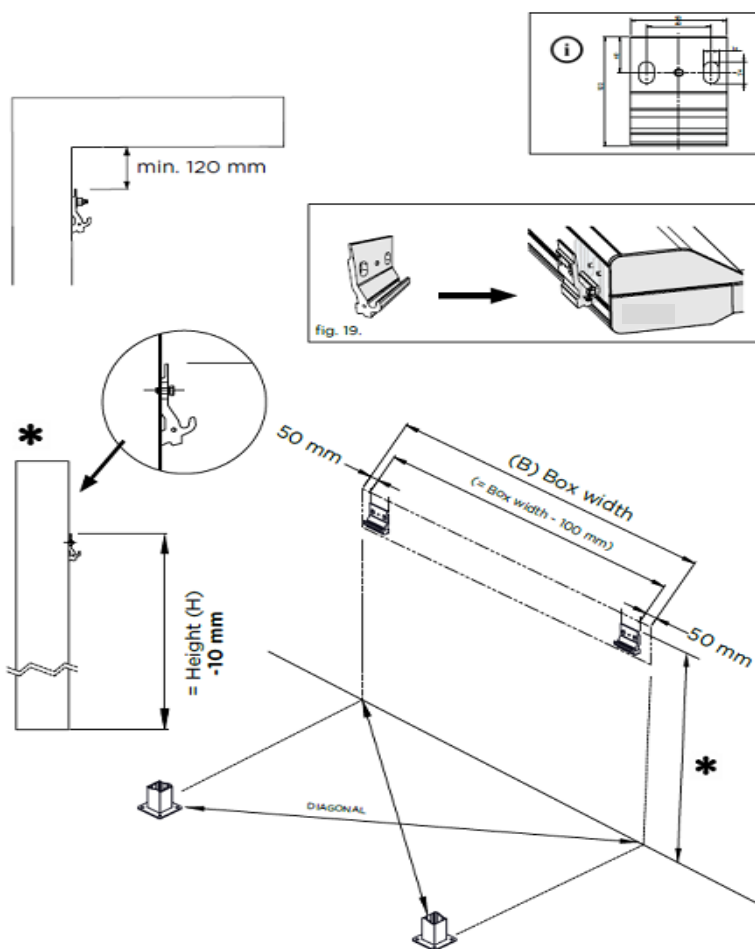
The front side features a hook that supports the spindle (wall bracket, part 2).

The number of wall brackets supplied always depends on the type of sun screen.

Two brackets per one part of the box are supplied.

Fasteners must always be selected depending on the type of wall material.

Must be ordered independently: Additional wall bracket on the box. Another wall bracket between the box and the wall can be supplied for greater box widths.





#### 4. Measuring

##### Guidelines for correct measuring

Ensure the system is perfectly parallel and squared. An accurate measurement ensures a quicker and easier assembly.

Ensure exact levelling of the system.

Ensure that the foundation is sufficiently solid to install the foot supports.

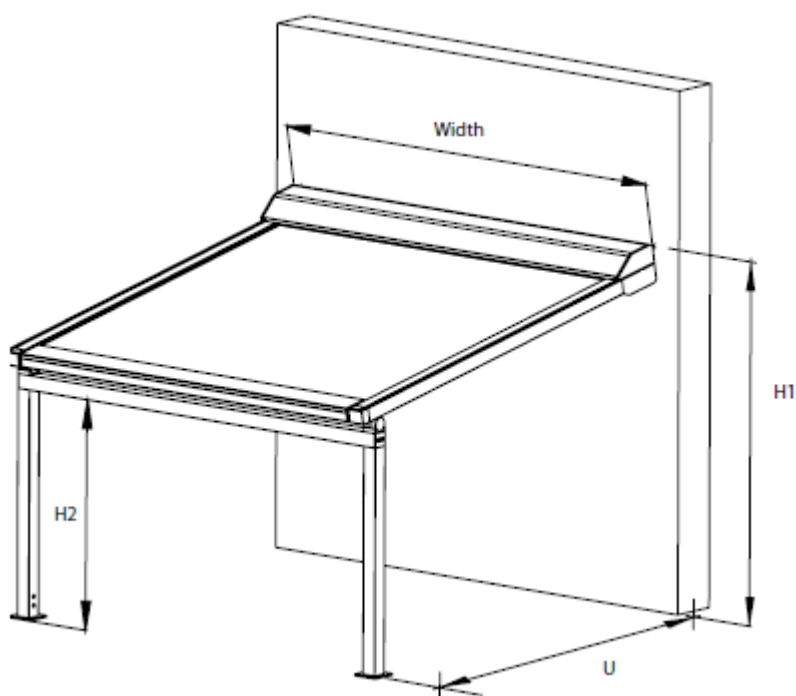
Be careful with relatively weak walls: the standard fixings are not part of the supply. Seek advice from your supplier of connecting material.

Overall width = from the outer part of the left bracket to the outer part of the right bracket. The stand structure has the same width as the box.

Projection (U): depth measured horizontally from the wall to the front side of the vertical stand.

The final position of the bottom section can be set flush with the end of the guide rail cover.

Clearance (H2) = height in the front part between the stands, measured from the floor (zero level) to the lower part of the horizontal cross bar.

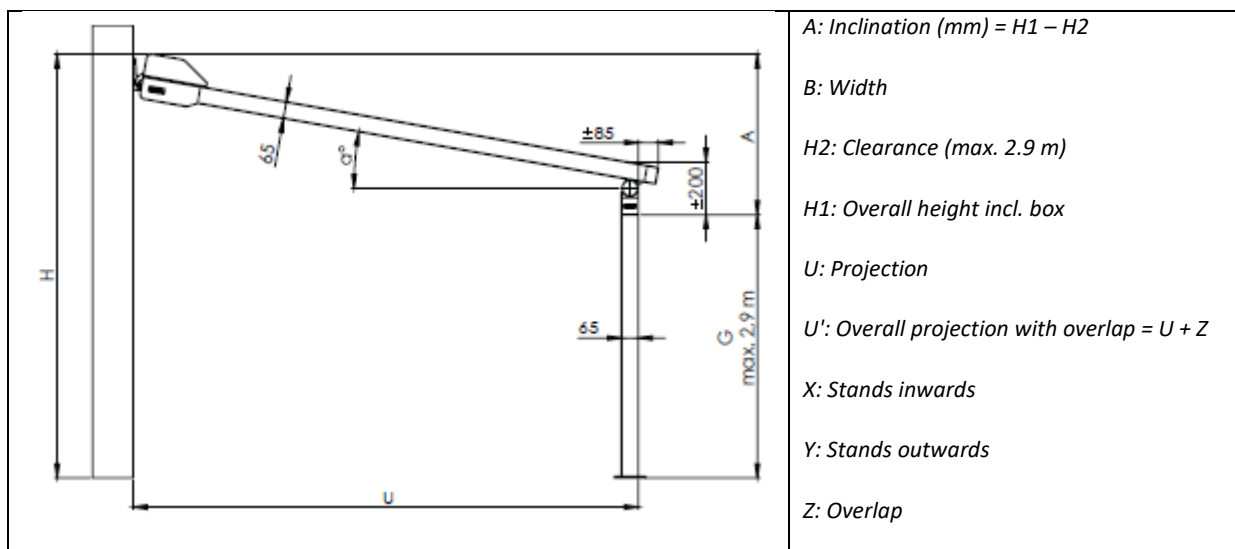


(U) Projection

(H2) Clearance

(H1) Height

**Note:** In the standard version, the stand structure has the same width as the veranda.


**INCLINATION (A) in MM**

	Inclination	8°	10°	14°
<b>Projection (U)</b>	1500	490	535	645
	2000	560	620	770
	2500	630	705	895
	3000	700	970	1020
	3500	770	1055	1145
	4000	840	1145	1270
	4500	910	1230	1395
	5000	980	1310	1520

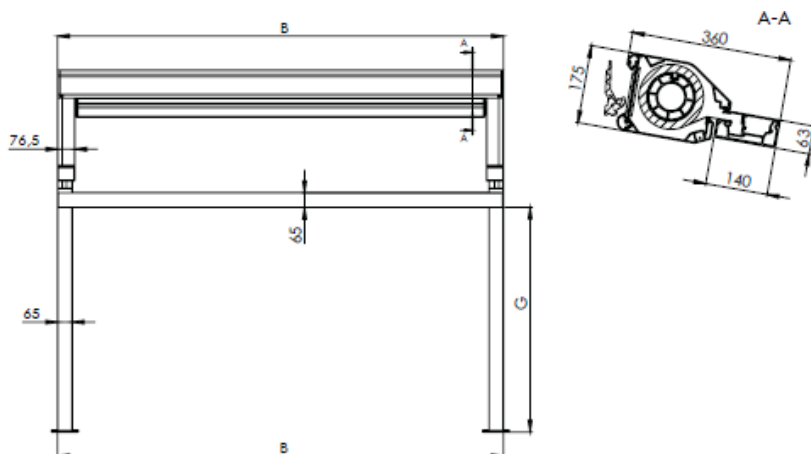
**\* MINIMUM INCLINATION = 8°**

**MAXIMUM INCLINATION = 30°**

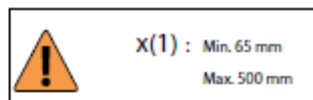
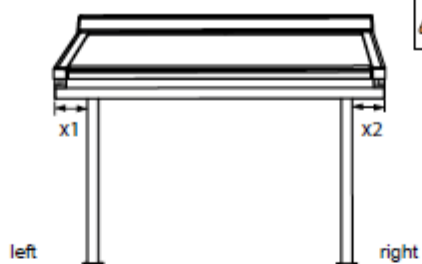
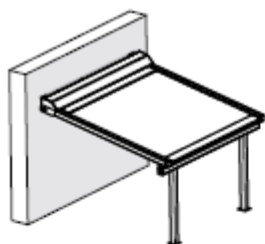
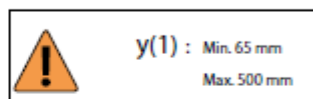
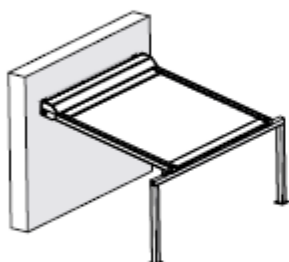
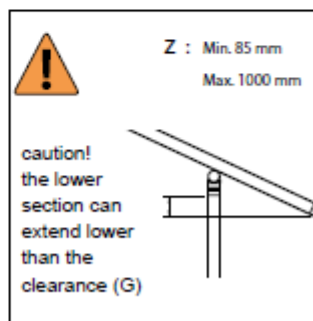
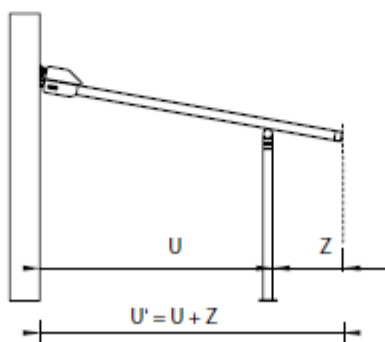
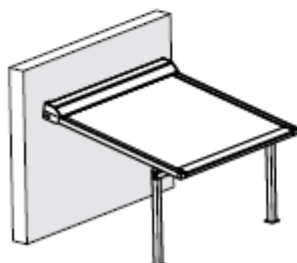
*\* min. 10° with LED lighting*

**CAUTION. CHECK WHETHER THE STRUCTURE INCLINATION IS GREATER THAN OR EQUAL TO THE VALUE SPECIFIED IN THE ABOVE TABLE IN ORDER TO ENSURE GOOD WATER DRAINING ON THE FRONT SIDE.**

*If the system inclination (A) is insufficient for good water draining, ISOTRA only guarantees the product function as sun screen; in this case, complaint cannot be filed against the company in case of a breakdown or damage caused by poor water draining.*



## OPTIONS

 OPTION 1  
stands inwards

 OPTION 2  
stands outwards

 OPTION 3  
overhang


$$U' = \text{MAX. } 4\text{m}$$

Make sure it is possible to open the box and lower section at all times to provide access to the mechanical parts inside. If this rule is not followed, ISOTRA cannot be held responsible for the cost of demolition work!

**OPTIONS**
**Wall insert**

If necessary, it is possible to place a wall insert to the gap between the box and the wall to create a water-tight seal. Aluminium sections are placed on each side and complemented with cover sheets. A rubber band is inserted to the section where it touches the box.

- tilting: can be easily removed to access the box
- has the same colour as the rest of the structure

**Wall insert – wall section, part 1**

Material: extruded aluminium, powder-coated

Wall thickness: 2 mm

**Wall insert – wall section, part 2**

Material: extruded aluminium, powder-coated

Wall thickness: 2 mm

With rubber band

**Wall cover**

Material: aluminium, powder-coated

The sheet is to be formed during the installation to attain the right angle

**Side wall cover**

Material: stainless steel



wall section, part 1



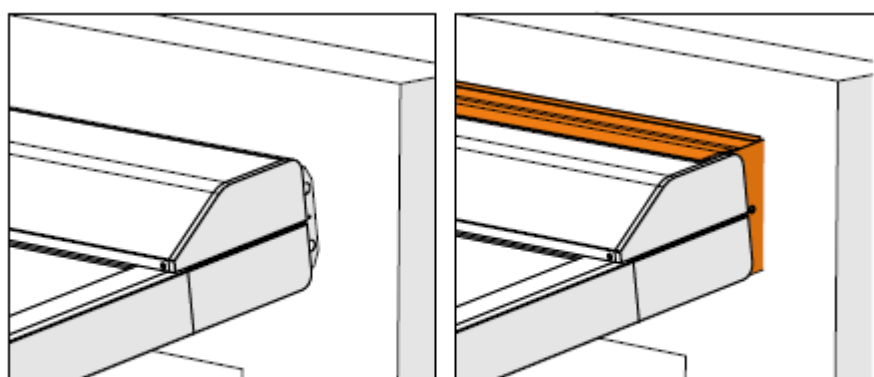
wall section, part 2



Side wall cover



Wall cover



Standard

Wall cover

\* If attached to the wall: must be packed

## 5. Design

The fabric has zippers on the sides, and if the guide rails are properly installed, these zippers ensure the fabric remains taut in any position of the bottom section thanks to the strain between the zipper and the guide rails.

Cracking may be heard when retracting the screen, which is caused by the fabric tension and by pushing the air from under the fabric when winding up. Creases may also form on the zipper side, caused by different material thicknesses and expansion factors.

In blackout blinds, the zippers are placed on the Soltis side of the fabric, not on the side with the blackout film, in order to attain better adhesion and reduced fabric movement. It is therefore possible that due to wind or if seen at an angle, a small part of the zipper can be seen, but this is insignificant when compared with the overall view or the fabric tension (reduced creasing).

When the 86/92 fabric is used, the zippers are always on the rear side of the fabric – i.e. on the window side. In addition to placing an inscription or a logo to the fabric, it is also possible to inverse the fabric colour or the fabric side on the sun screen.

## 6. Fixtures and fittings

All fixtures and fitting are made from stainless steel, and all accessories are always part of the supply. Fixtures and fittings for the walls and anchoring to the ground are not part of the supply.

## 7. Packing

The Veranda HRV80-ZIP-2P is supplied packed in robust cardboard boxes.

## 8. Use and maintenance

Proper use and maintenance greatly increases the lifetime of the sun screen.

- Do not use the screen as protection against rain or wind. If water-proof fabric is used, water will drain to lateral sides of the lower section. There is no water outlet (gutter) under the rails.
- Regular maintenance prevents excessive wear and operational problems.
- Cleaning the frame: use soft water instead of aggressive substances that may affect the coating and protective layers.
- Cleaning the fabric: when dry, with a semi-stiff brush.
- Clean stubborn stains using warm water and light detergent solution, rinse with copious amounts of clean water.
- Always let the fabric dry fully before rolling it up (even after an unexpected rain shower).
- It is recommended to offer a maintenance contract for the product to the end user.
- Does not provide 100% rain protection (rain water may penetrate between the wall and the box).

## 9. Safety

To ensure safety of the end user, the veranda must be installed in strict accordance with the installation instructions.

## 10. LED lighting

Optional:

- Remove the aluminium clip section from the lower front side of the box.
- Attach the LED strip to the resulting opening and overlap the opening with a small diffuser section.
- Power supply: 230 VAC / 24 VDC.
- Each part of the box is to be equipped with the LED strip and diffuser, all with own external power supply, and placed outside the box. IO or RTS or switch (switch is not part of the supply).

- The LED strip is always to be installed across the sun screen width. Less light may be experienced at the ends, depending on the LED strip length.
- The LED strip is powered by 24 VDC supply unit, 9.6 W/m.
- LED unit can only be used as supplementary lighting. The LED light colour is white.

**Controls:**

## 1. Dimmable IO controls:

- Dimmable lighting cannot be controlled by the Smoove IO controller.

## 2. IO controls:

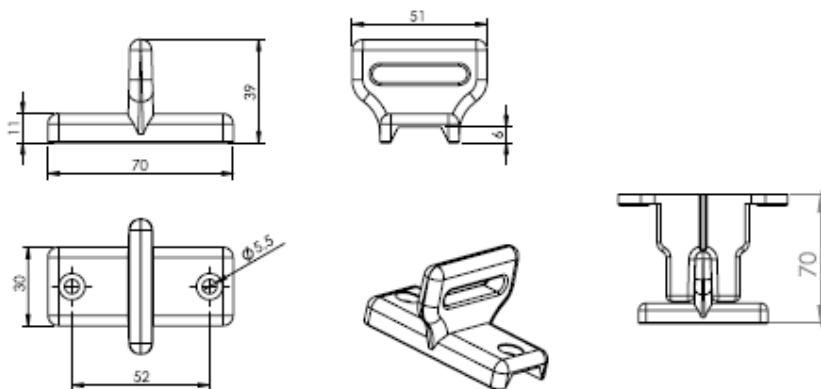
- LED lighting may be controlled by all IO controllers.

## 3. RTS controls:

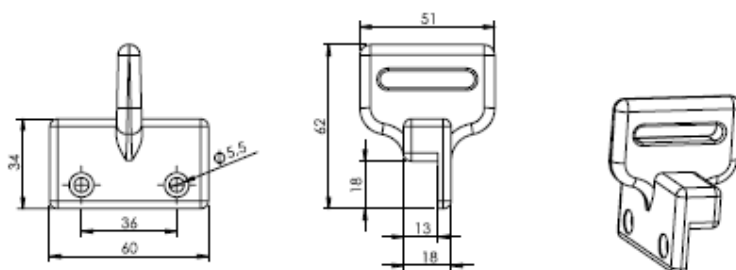
- LED lighting may be controlled by all RTS controllers.

## 4. No controls:

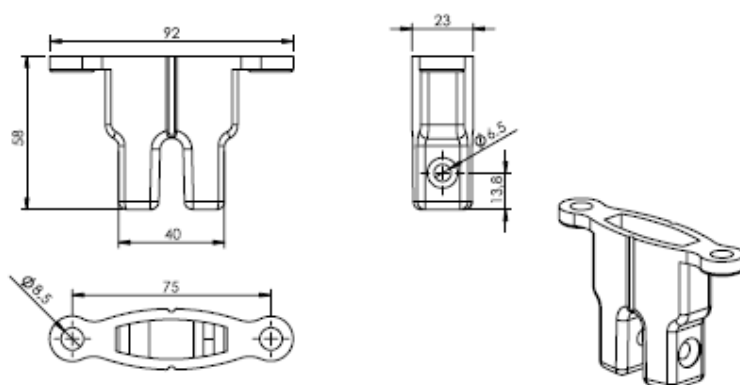
- The supply includes a supply cable that can be connected to a switch (switch is not part of the supply).



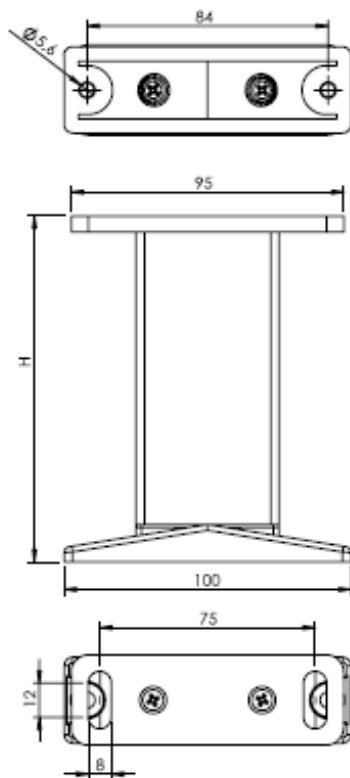
SA bottom bracket – Alu



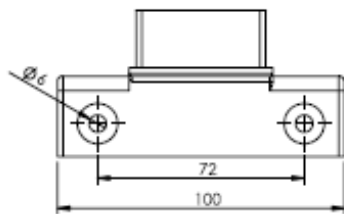
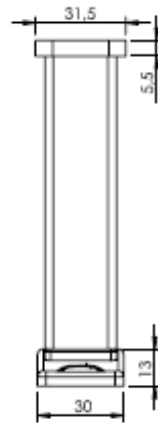
SB upper bracket – Alu



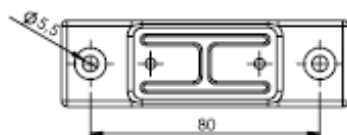
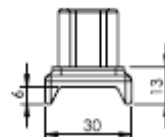
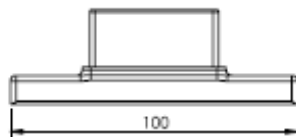
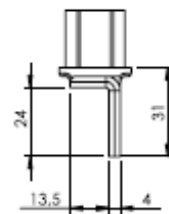
Upper side of the bracket – Alu



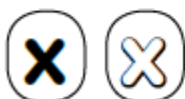
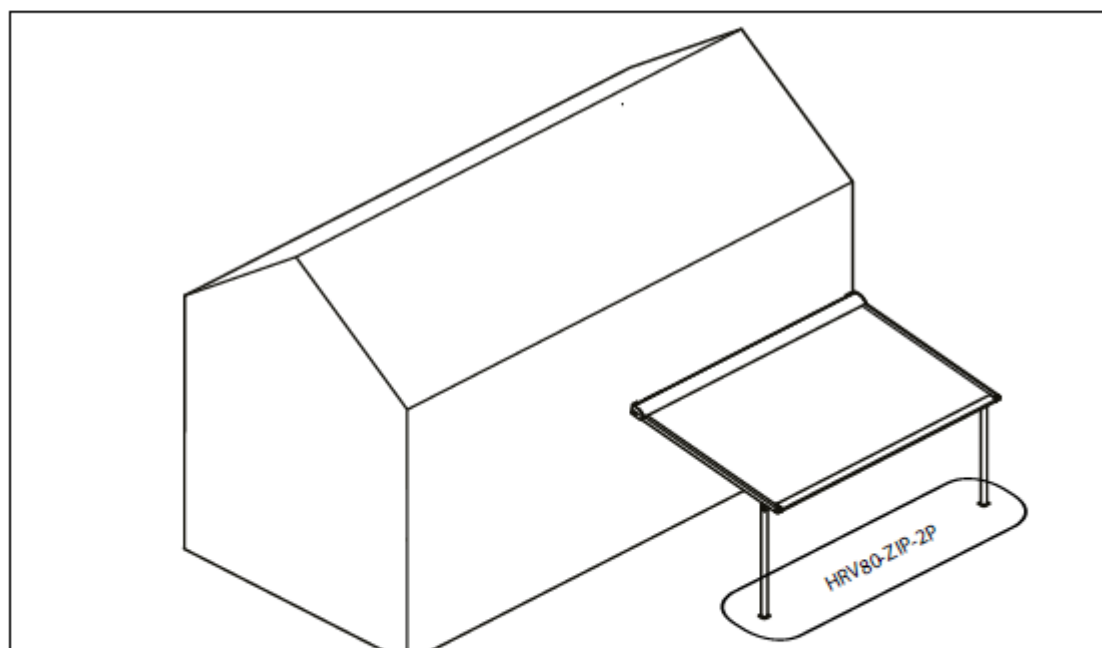
Cv raised bracket – Alu



Bv raised bracket foot – Alu



Av raised bracket foot – Alu



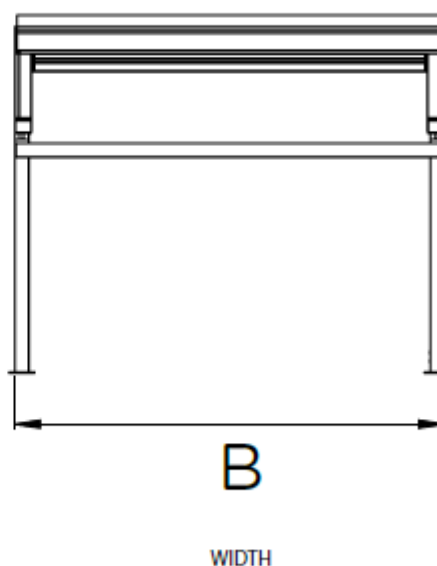
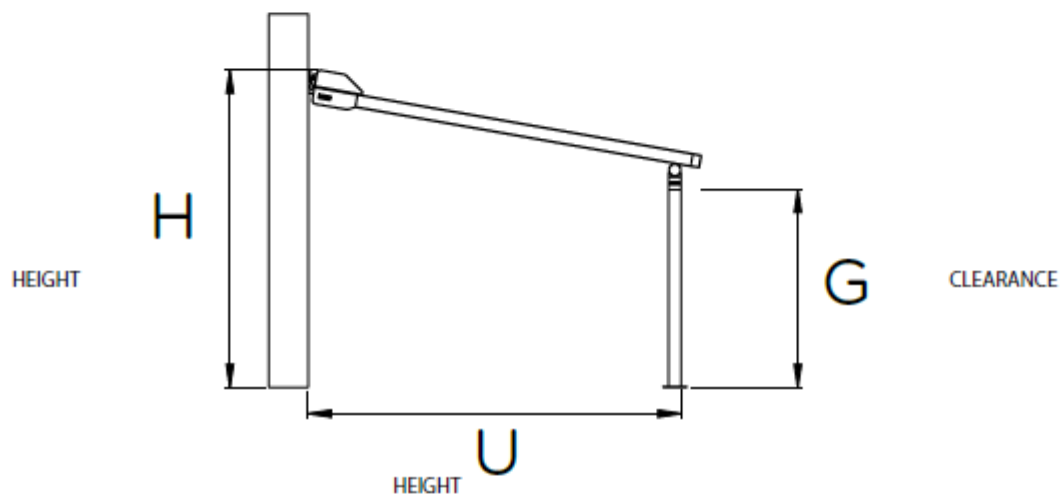
ASSEMBLY STEPS



INTERMEDIATE STEPS

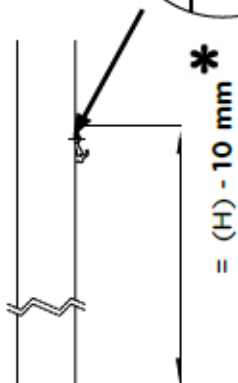
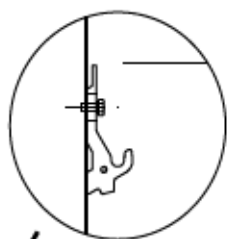
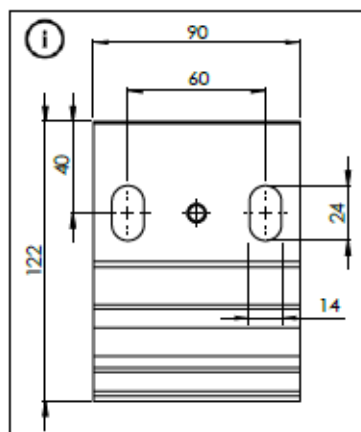
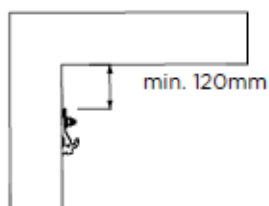
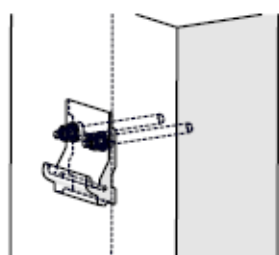


VERANDA HRV80-ZIP-2P

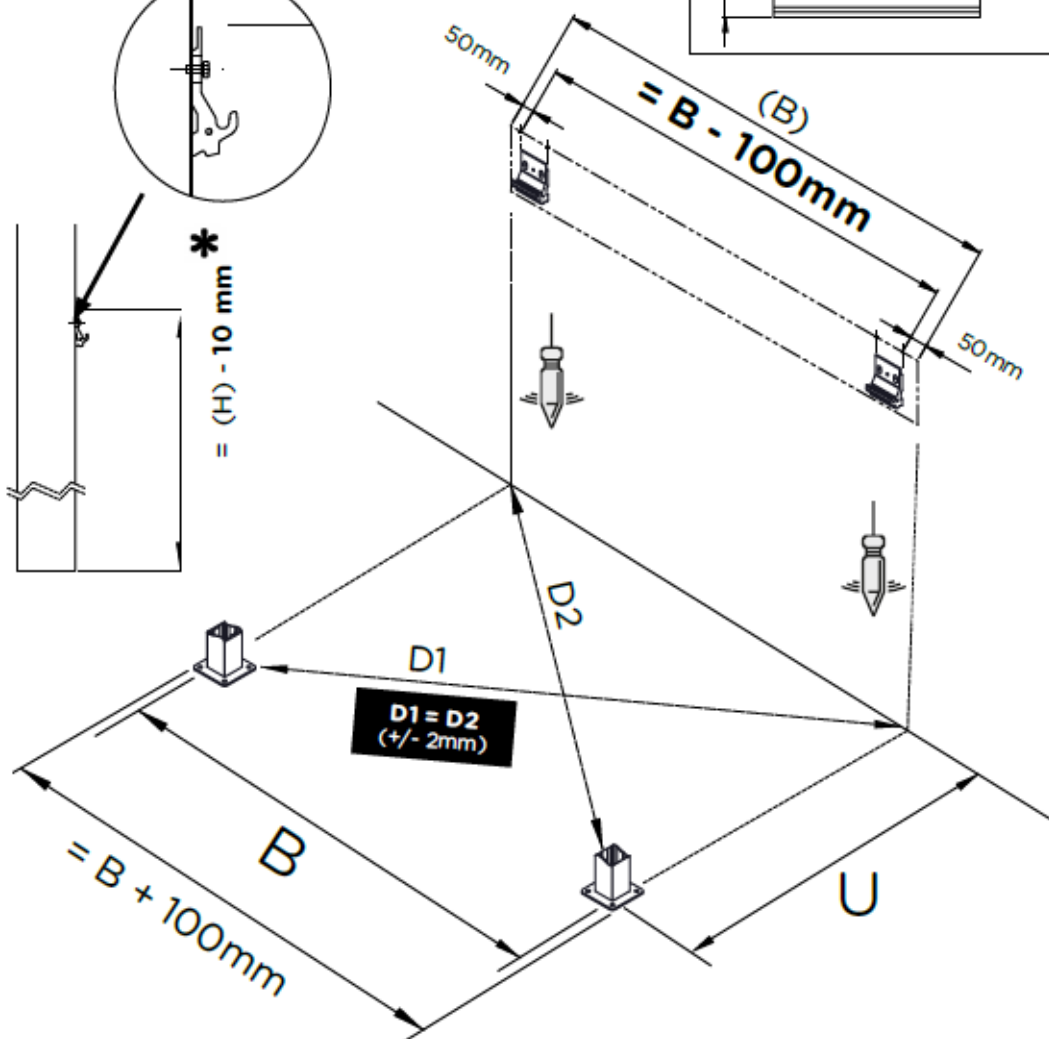




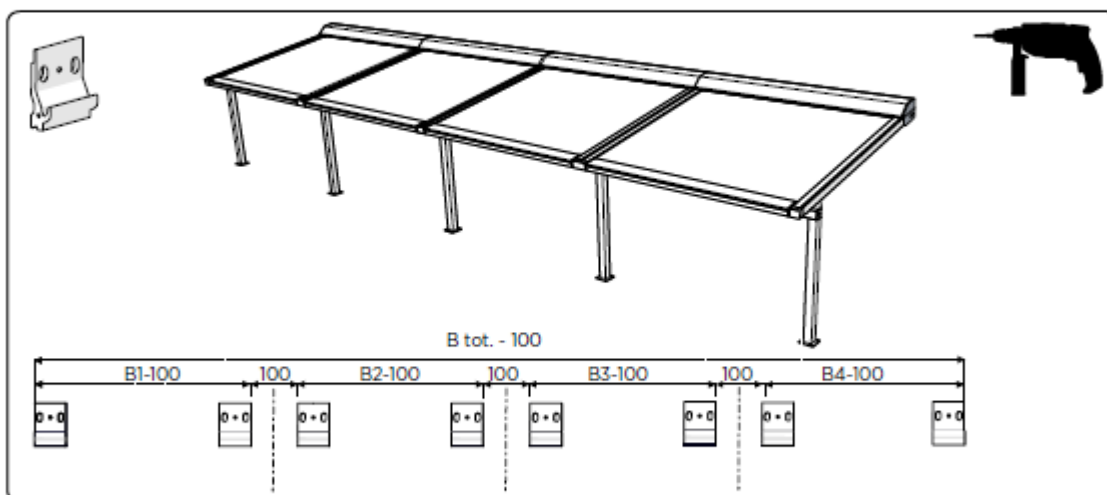
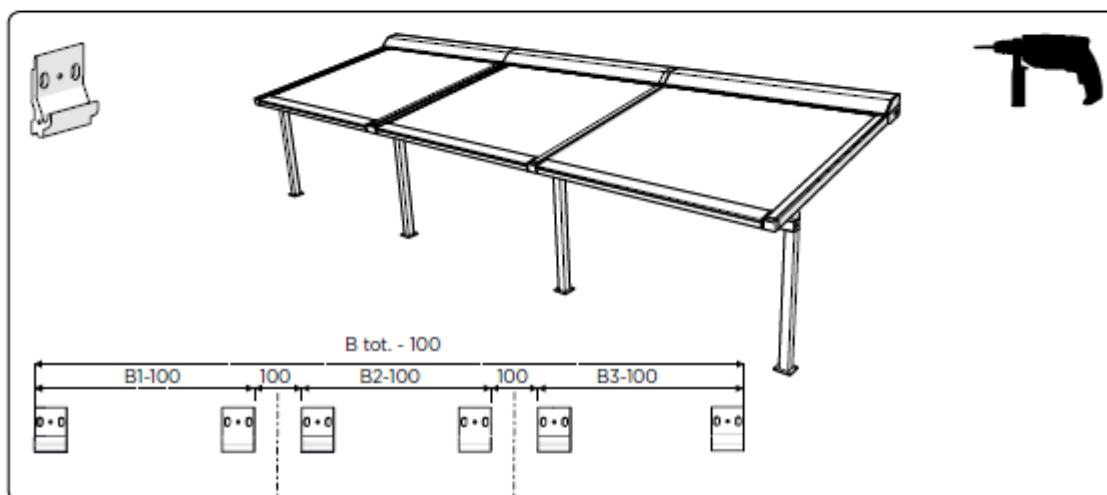
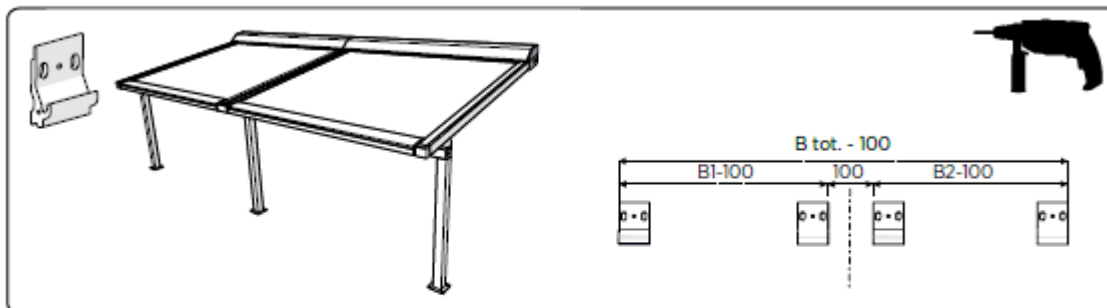
**max. 4m**

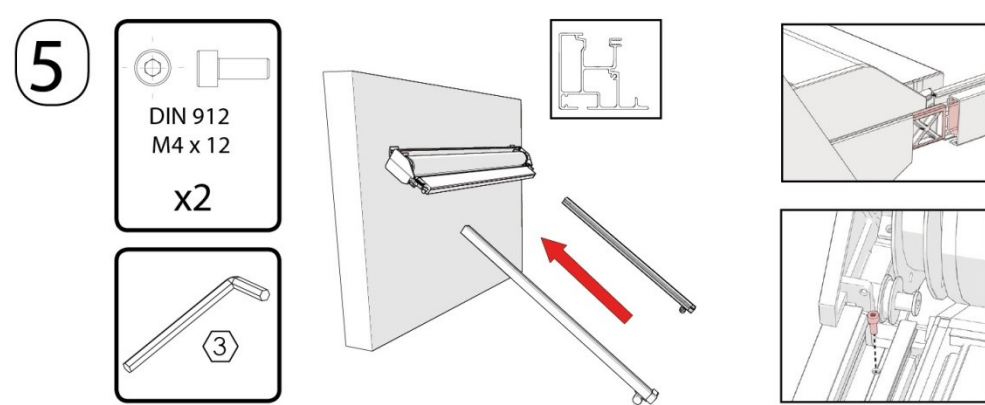
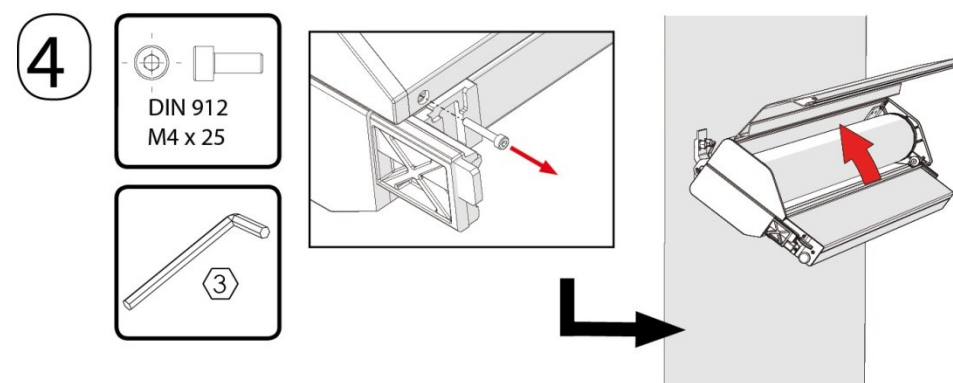
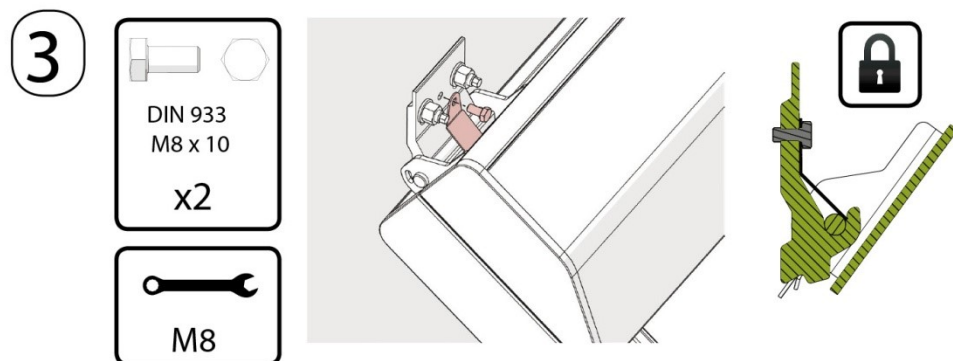
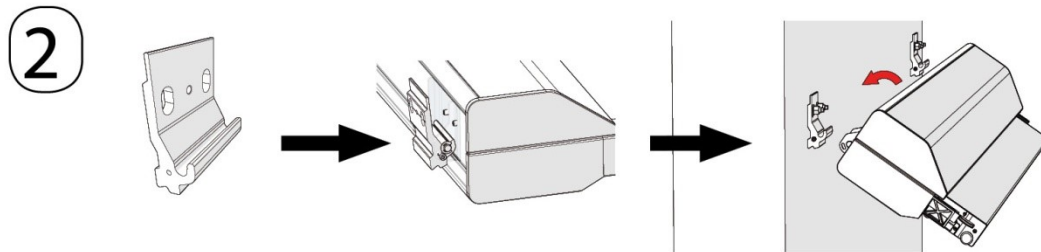


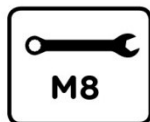
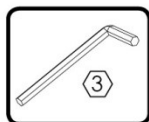
\*  
= (H) - 10 mm



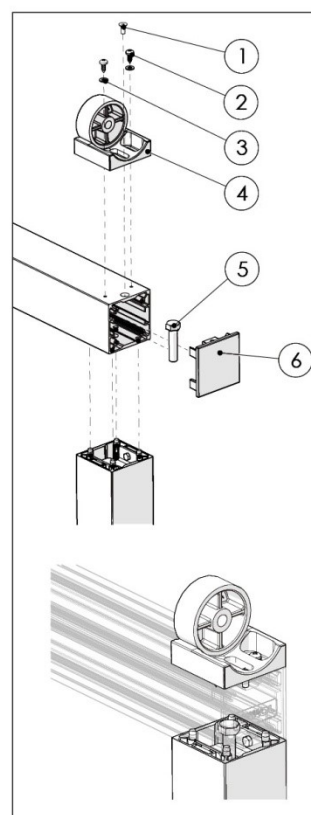
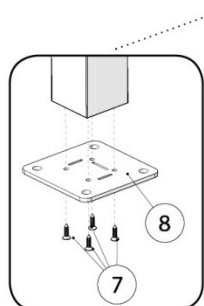
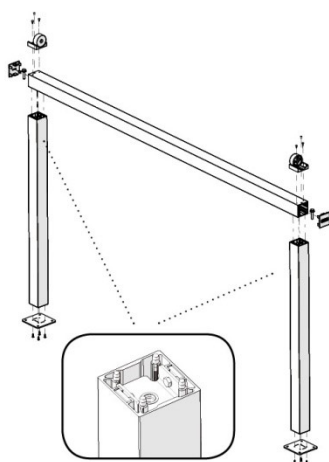
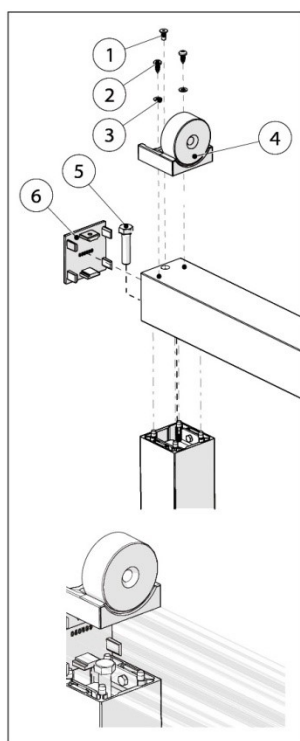
## COUPLED

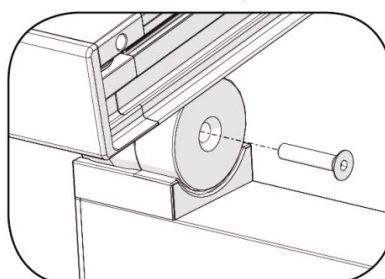
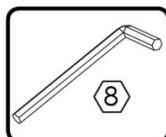
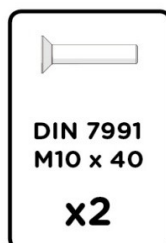
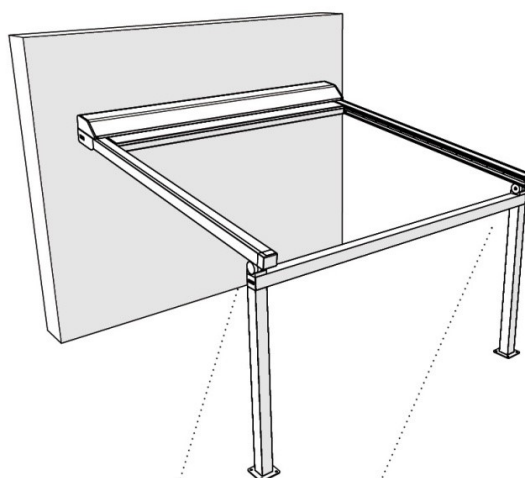
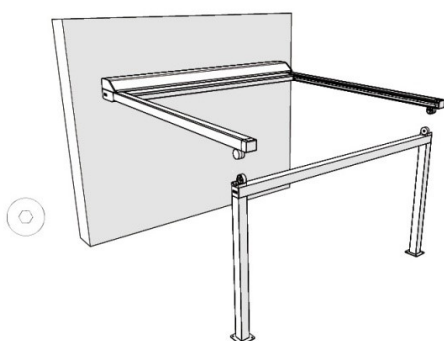
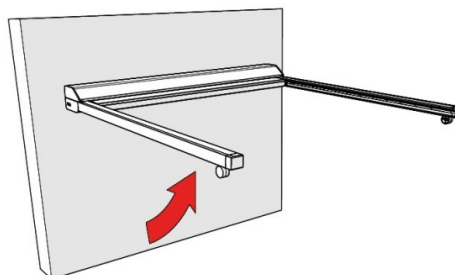




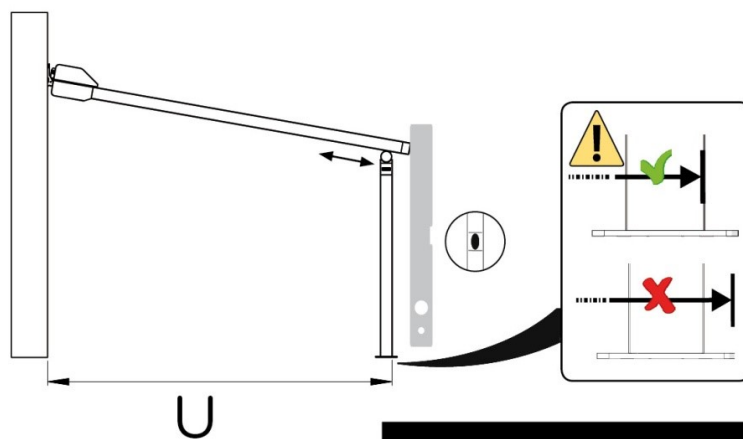
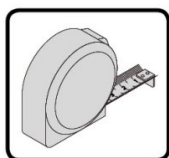
**6**


1	Din 7991 M4 x 12		2
2	Din 7981 4,8 x 13 mm		4
3	Din 125 - M5		4
4	050905		2
5	DIN 933 - M10 x 35		2
6	050699		2
7	DIN 7982 4,8 x 19		8
8	050940		2

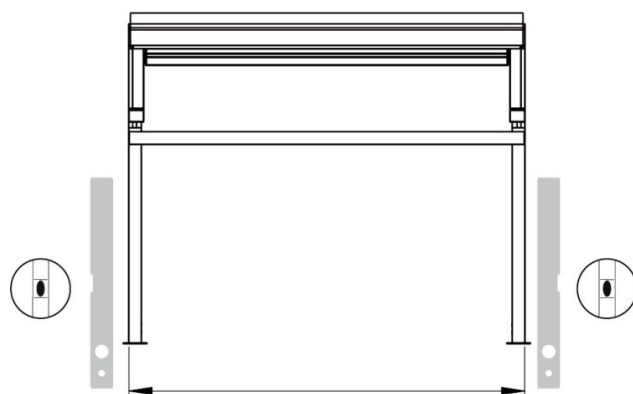


**7**

8

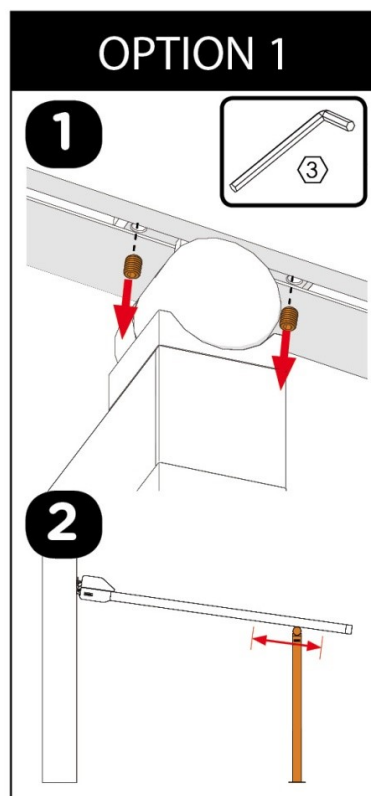


INCLINATION



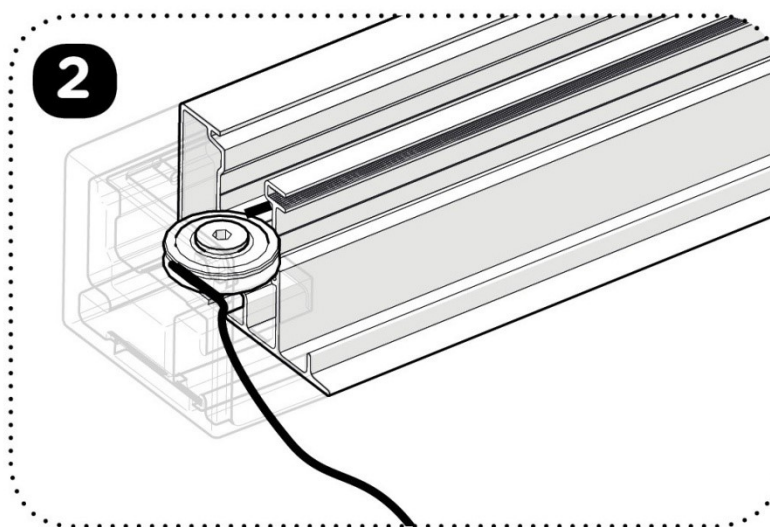
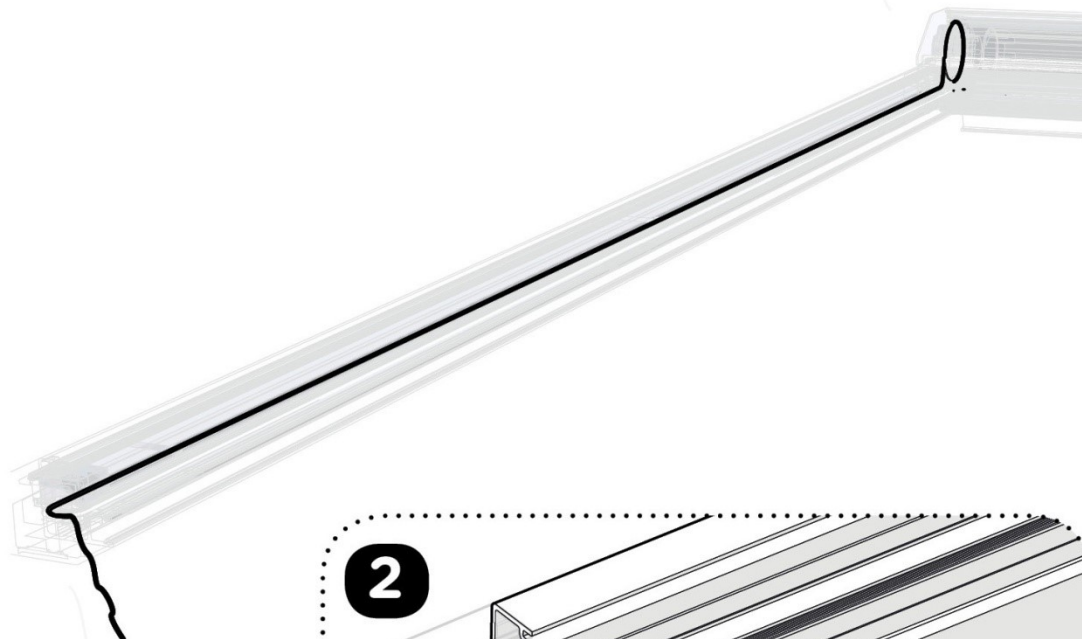
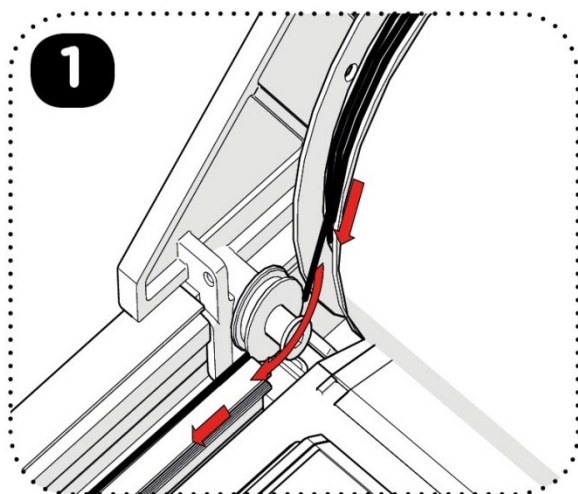
B

WIDTH



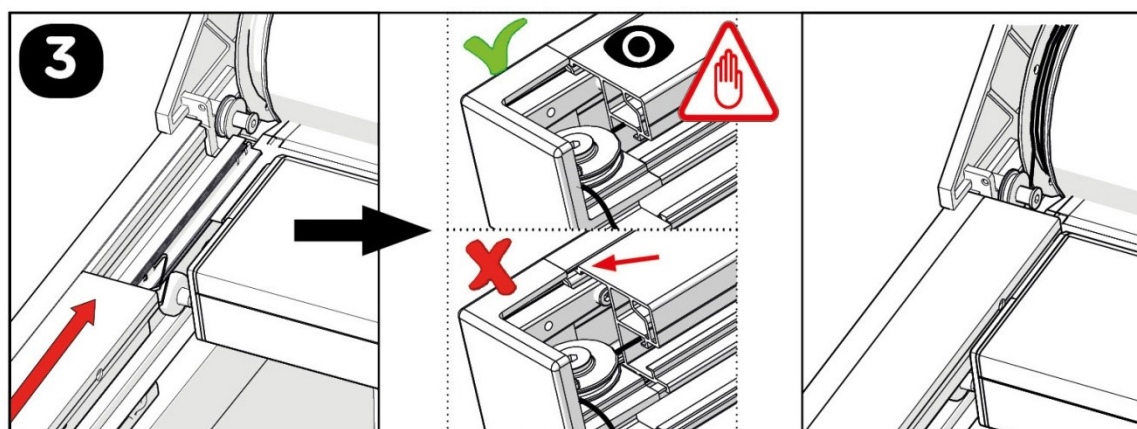
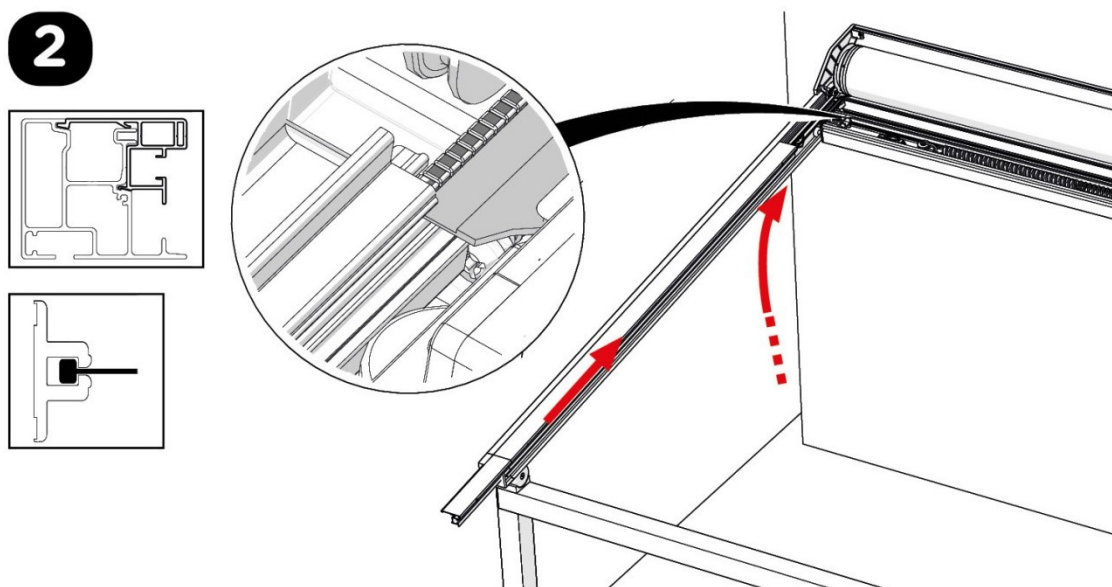
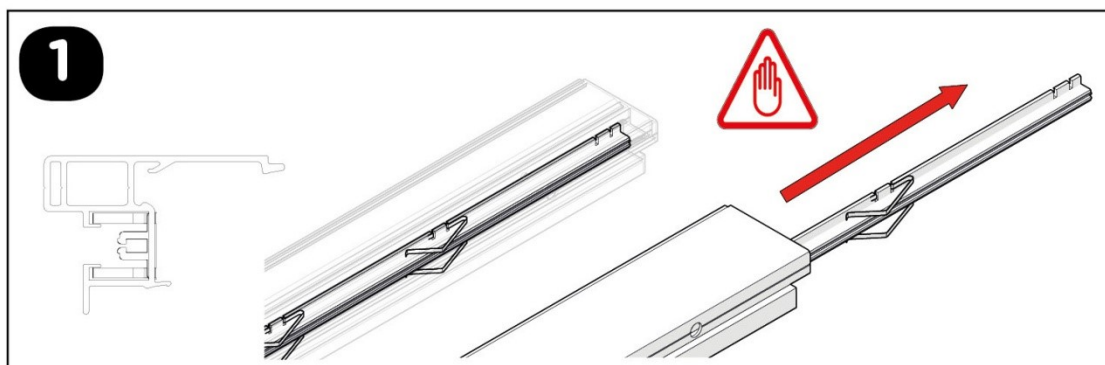
**DO NOT ANCHOR THE STANDS TO THE GROUND YET!**

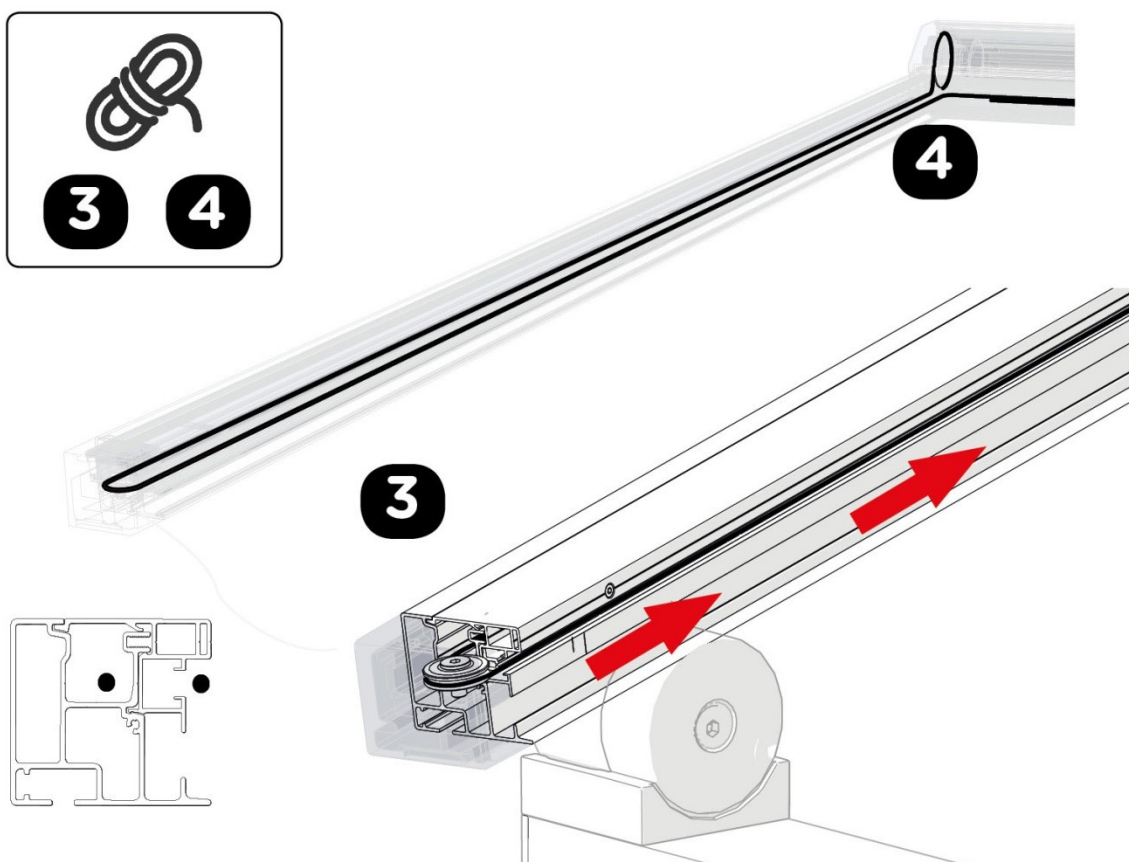
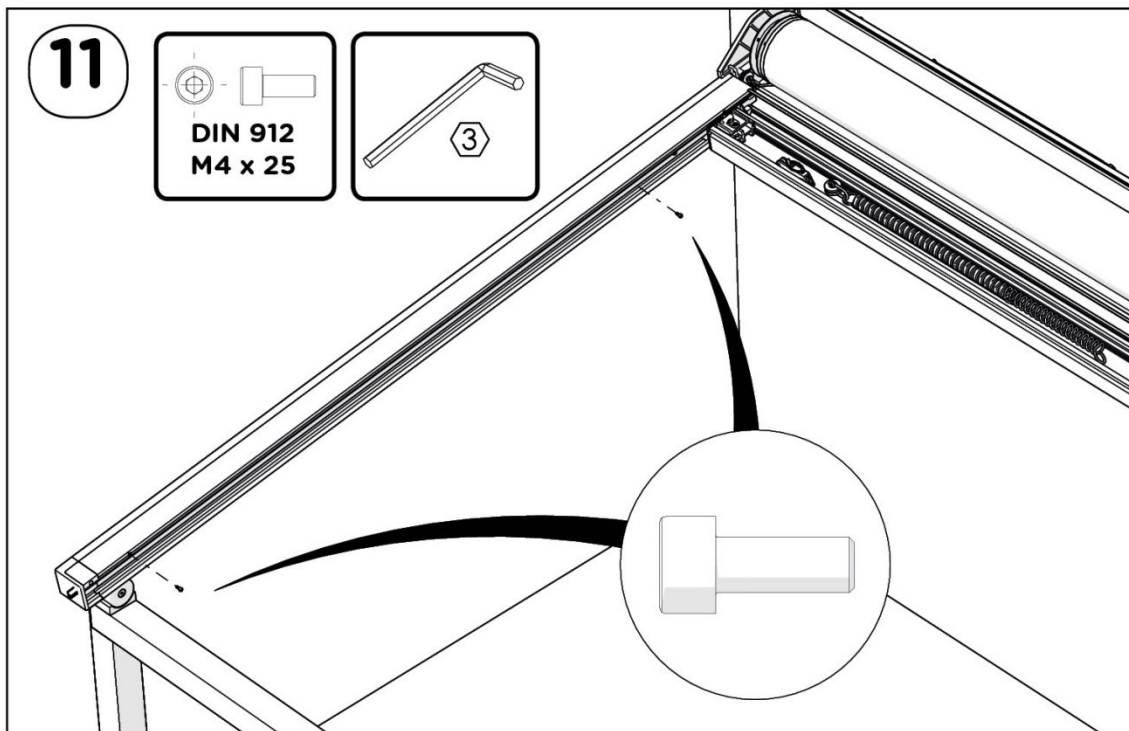
**9**

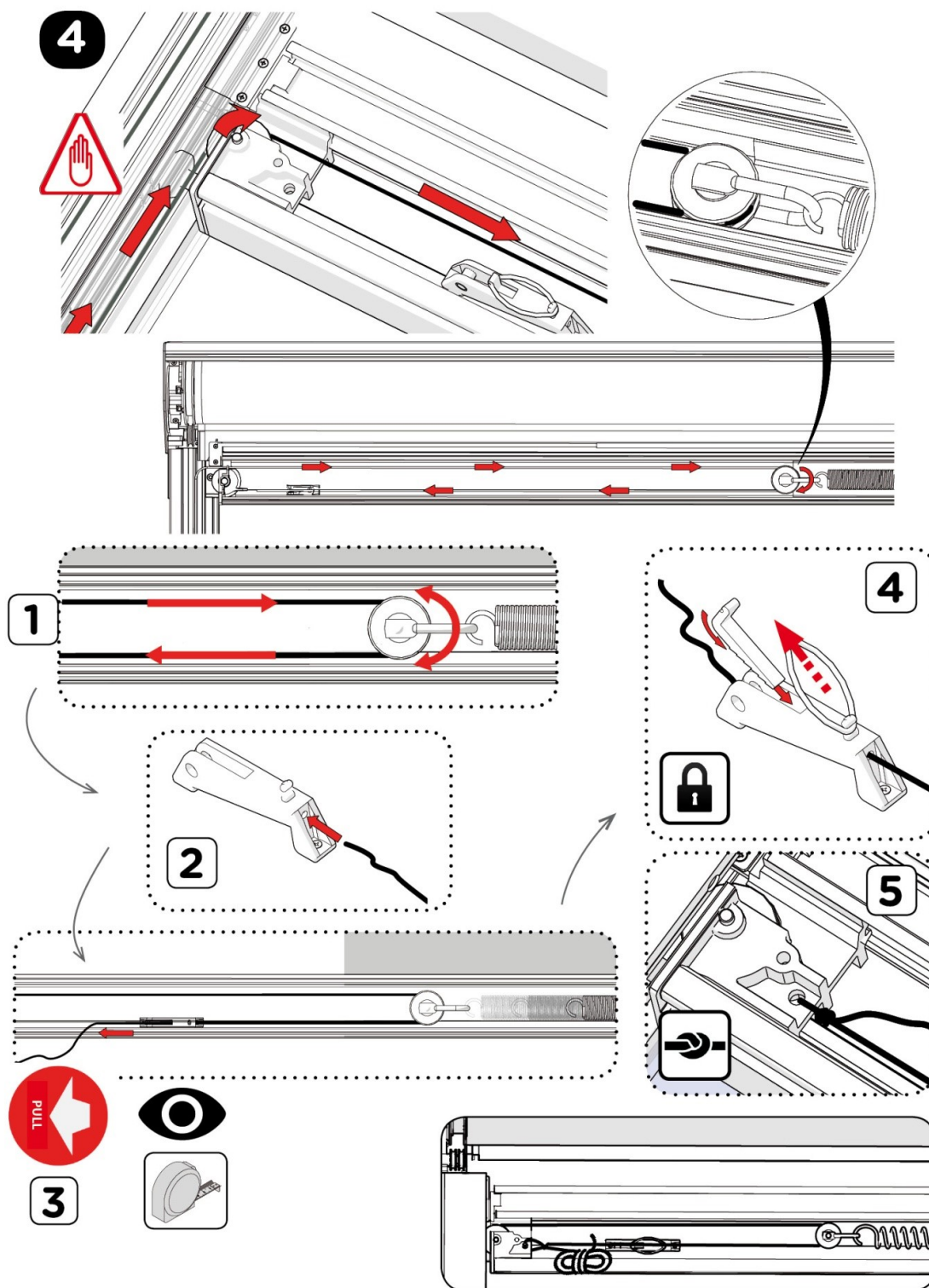




**10**







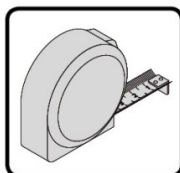
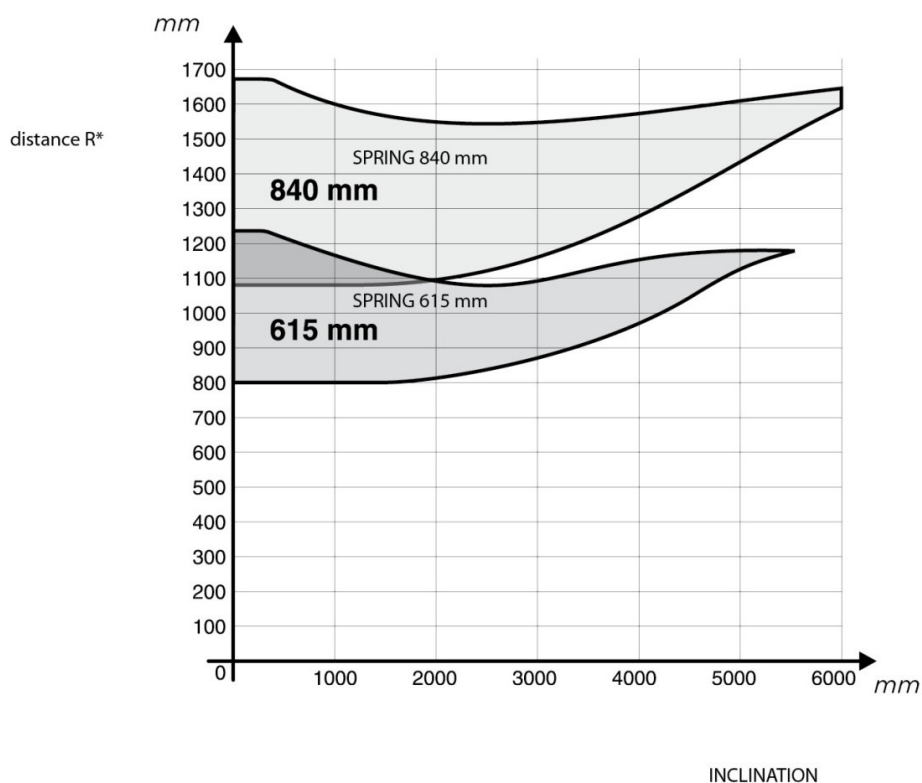
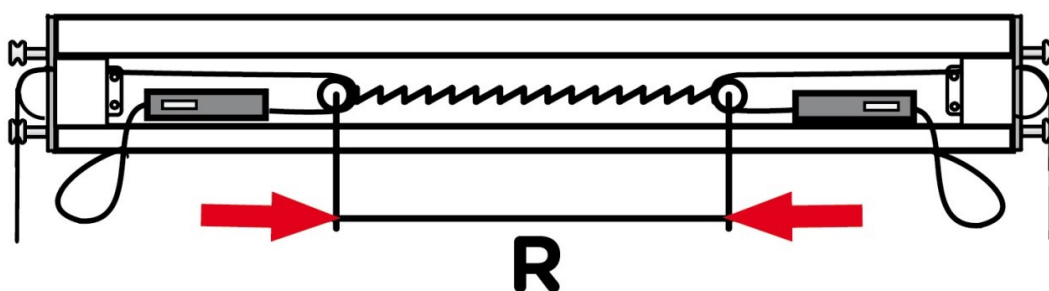
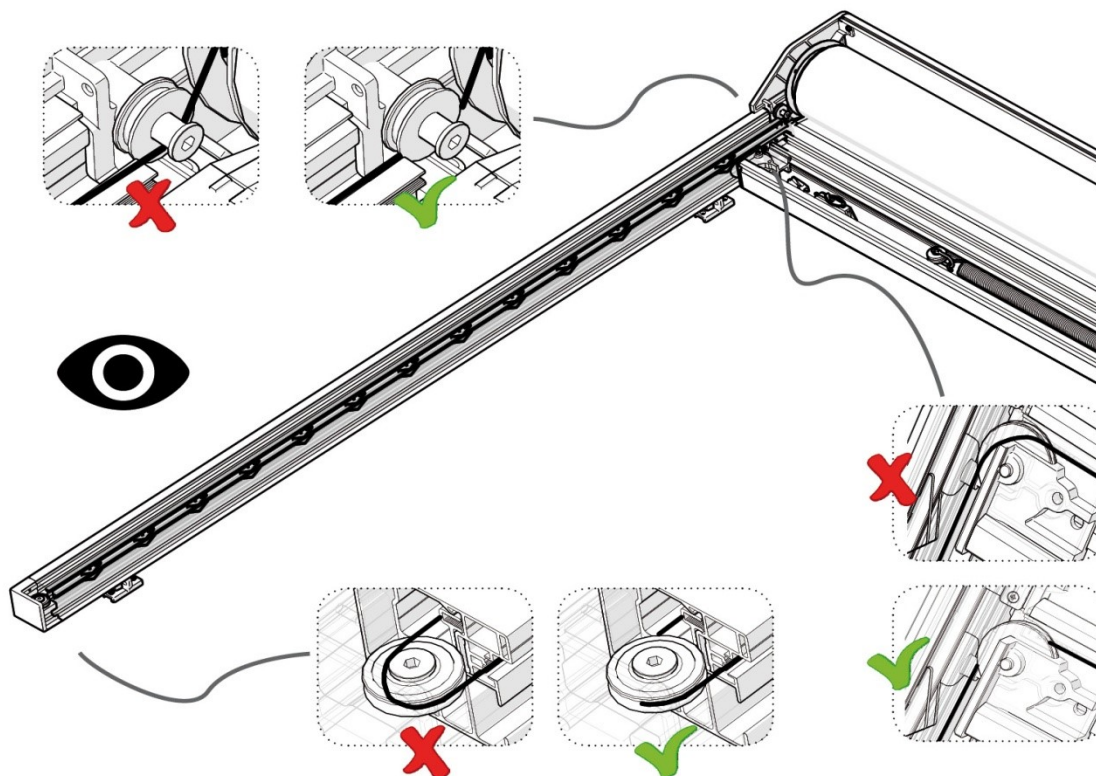
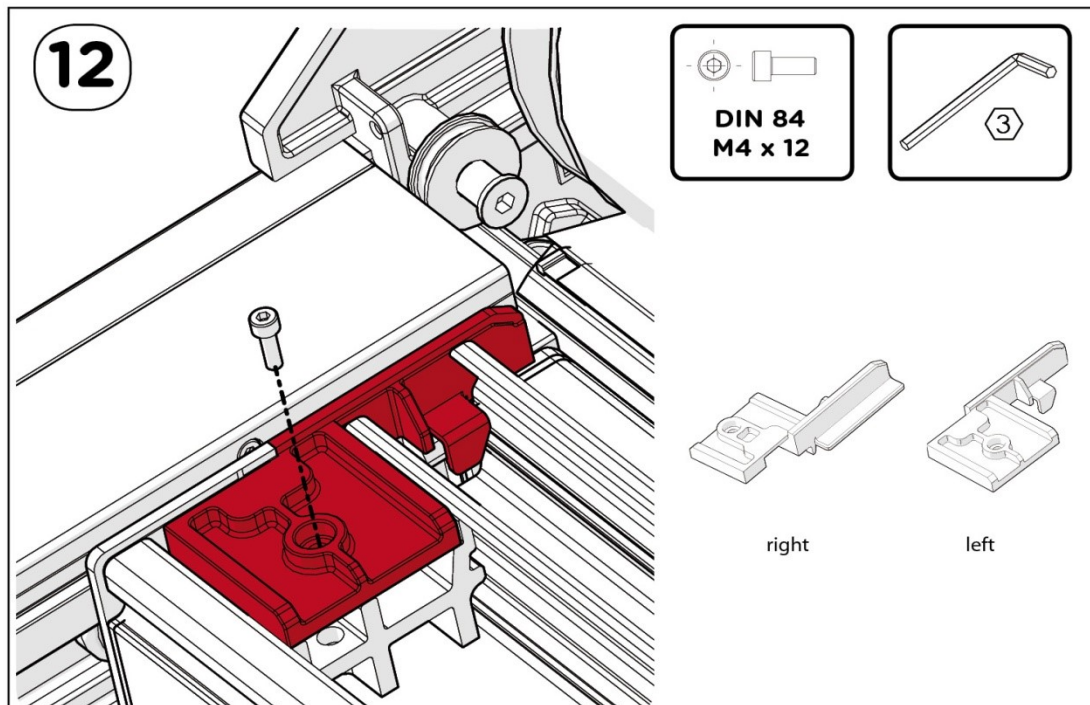
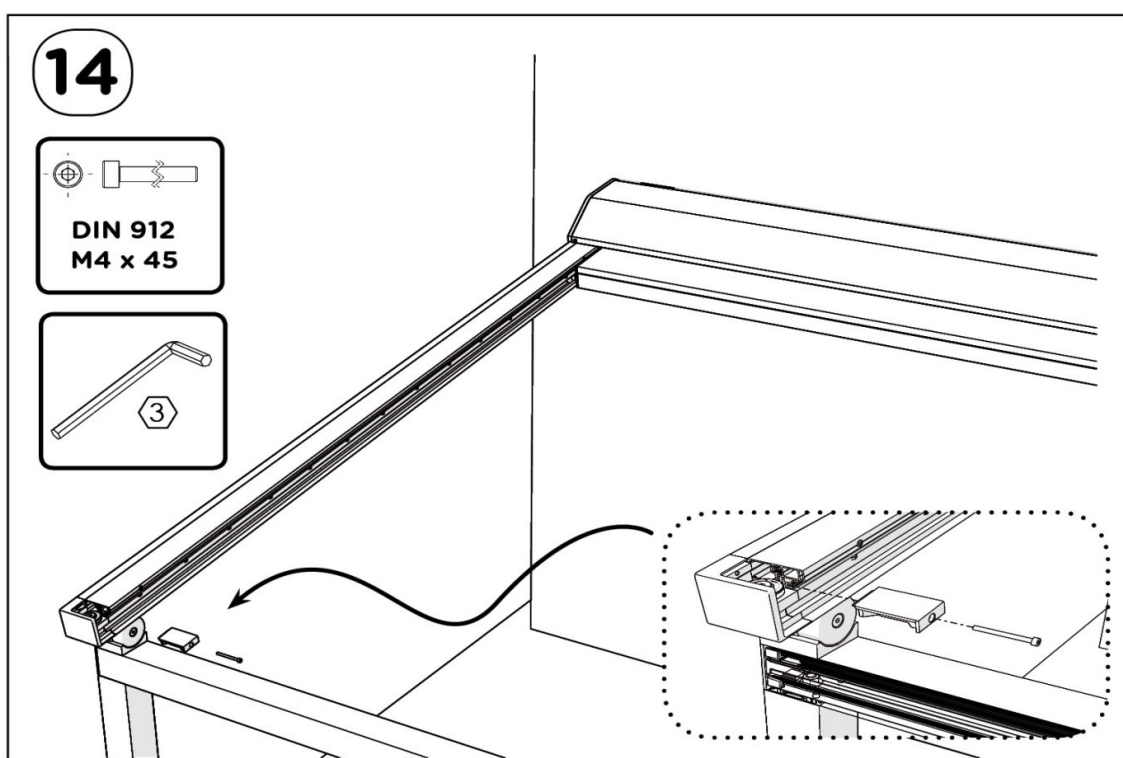
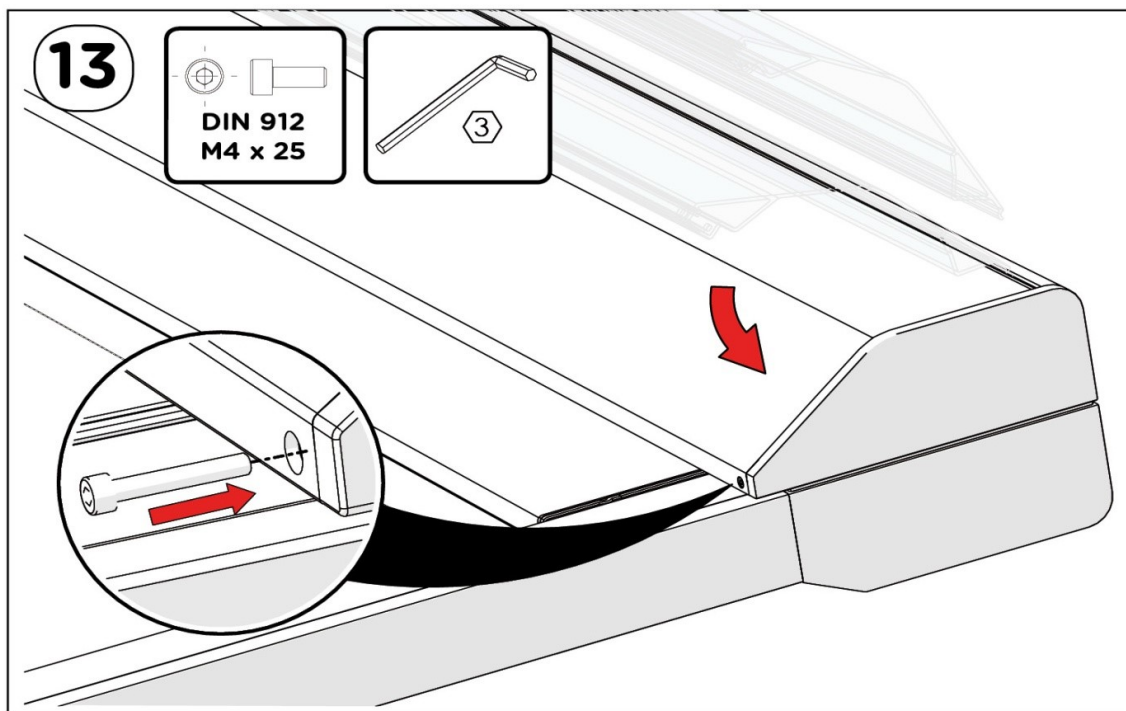


TABLE – spring distance R (in mm)

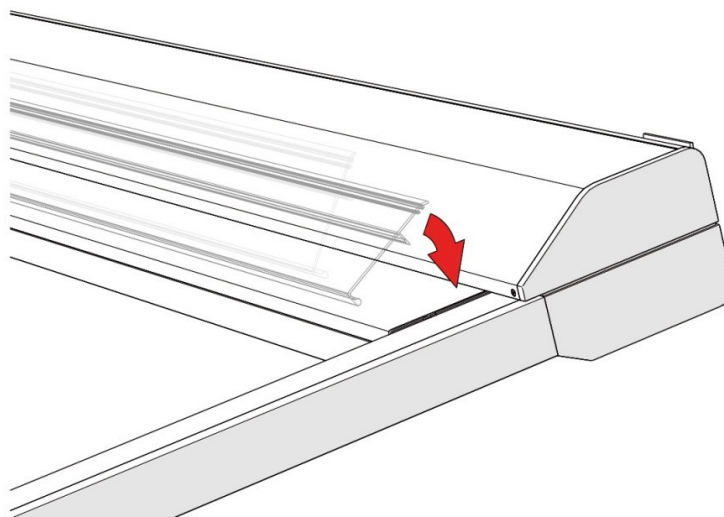
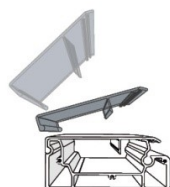




\* READ THE DISTANCE R IN THE COLOUR ZONE DEPENDING ON THE TYPE OF SPRING (650 mm / 850 mm).






**15**



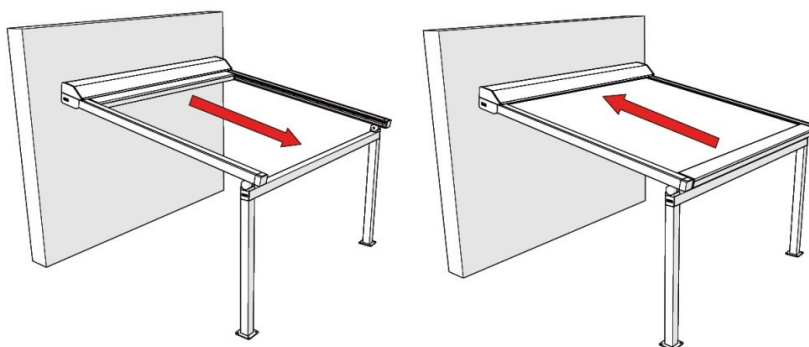
**somfy.**  
www.somfy.com



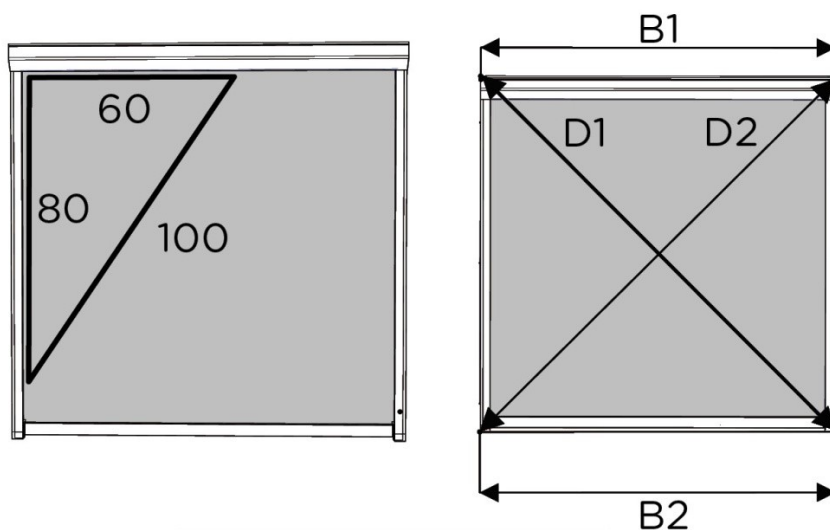
see Somfy instruction manual (included)

OREA 50 WT 25/17  
 OREA 50 WT 40/17  
 Orea 25/17 LT50 RTS  
 Orea 40/17 LT50 RTS  
 Sunea 50 IO 25/17  
 Sunea 50 IO 40/17

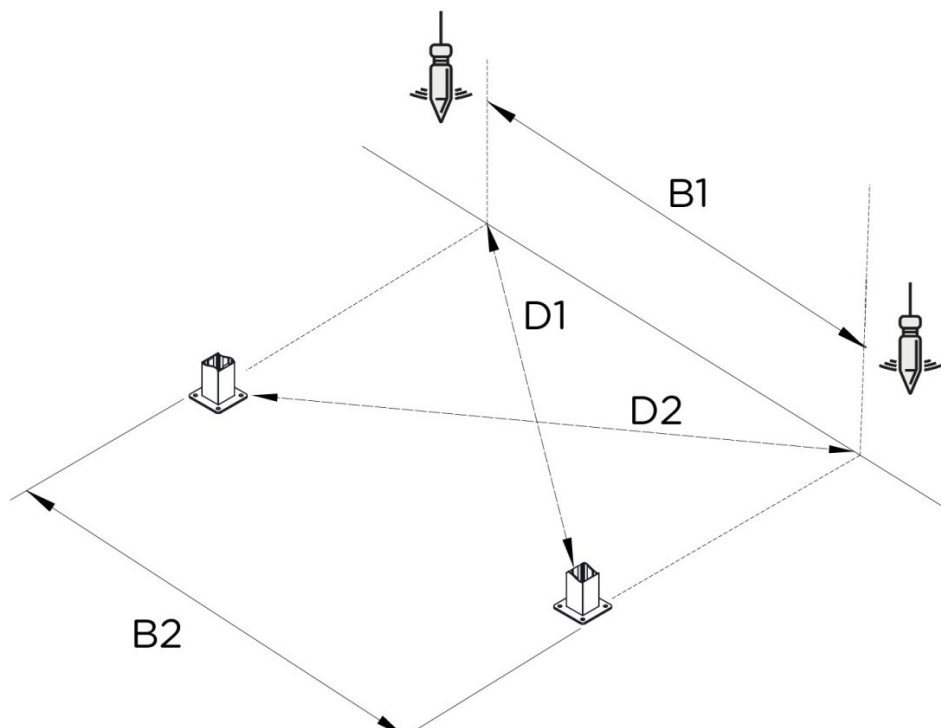
**16**



# 17 CHECKING



**$B1 = B2$  &  $D1 = D2$**   
 (+/- 2mm) (+/- 2mm)

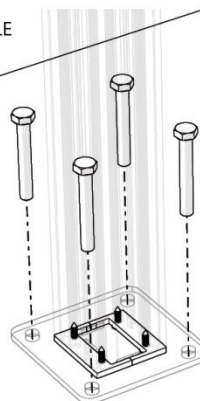




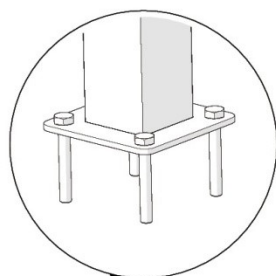
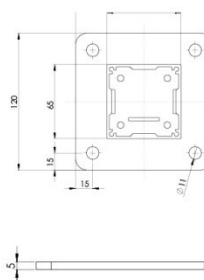
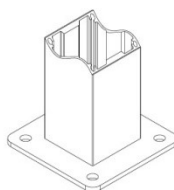
**18**



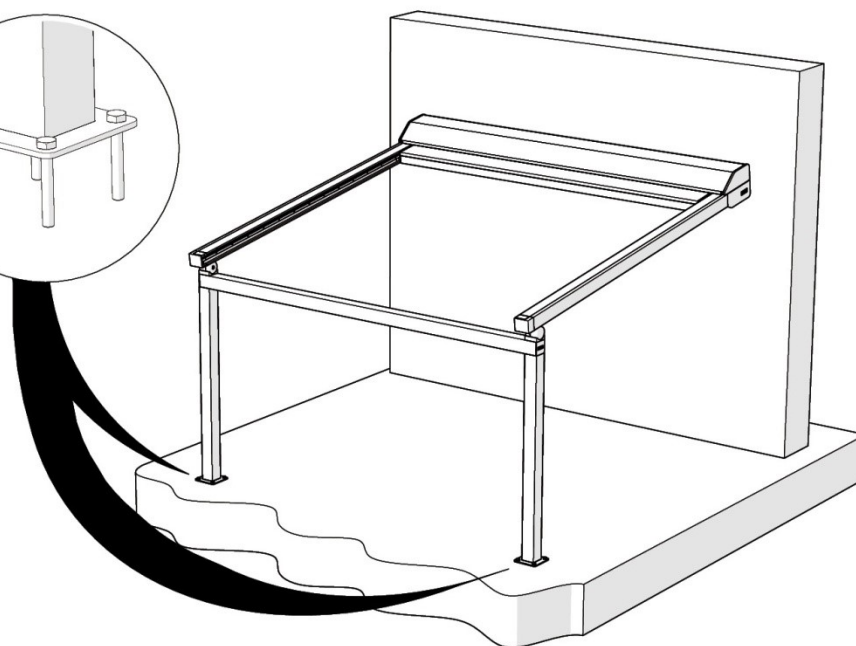
EXAMPLE



USE FIXTURES AND FITTINGS THAT CORRESPOND TO THE CONDITIONS IN THE PLACE OF INSTALLATION!



EXAMPLE

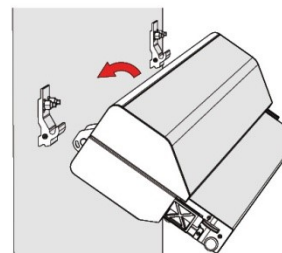
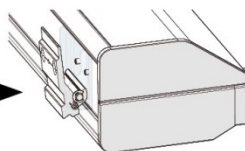
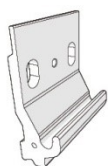


**COUPLED**

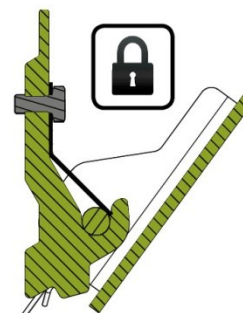
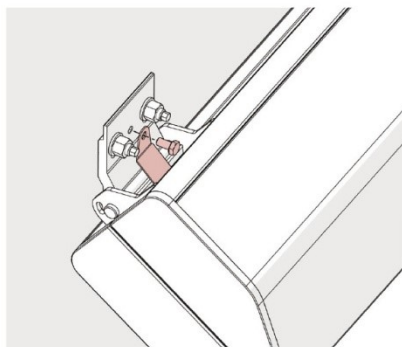
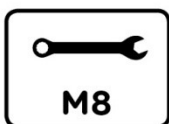
1



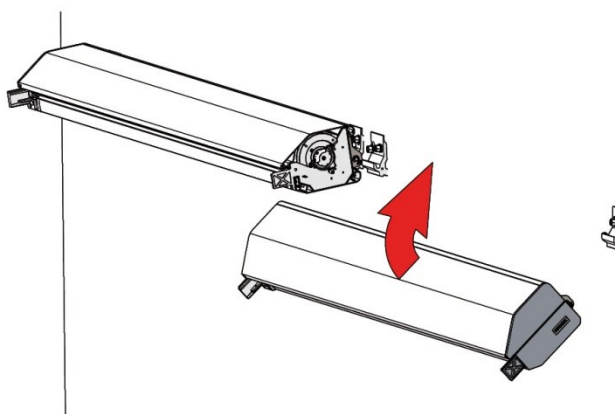
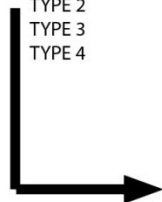
2

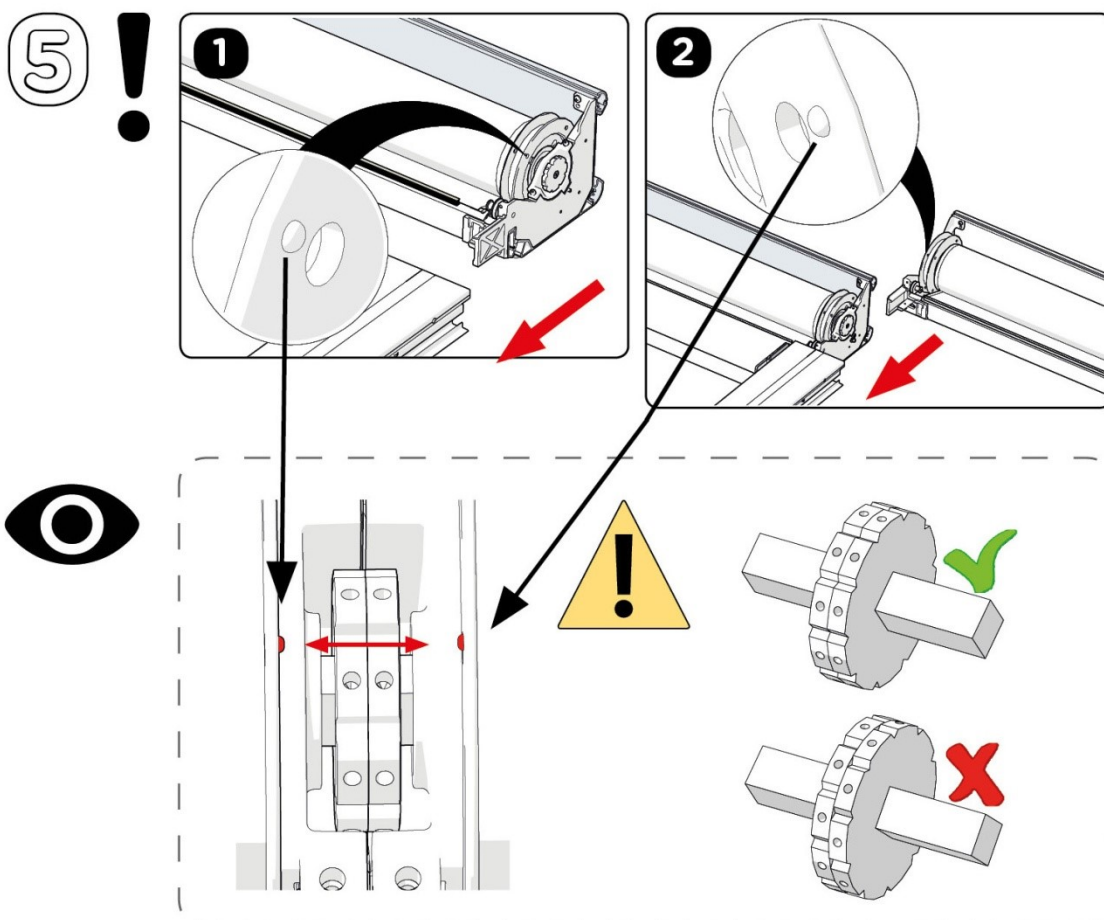
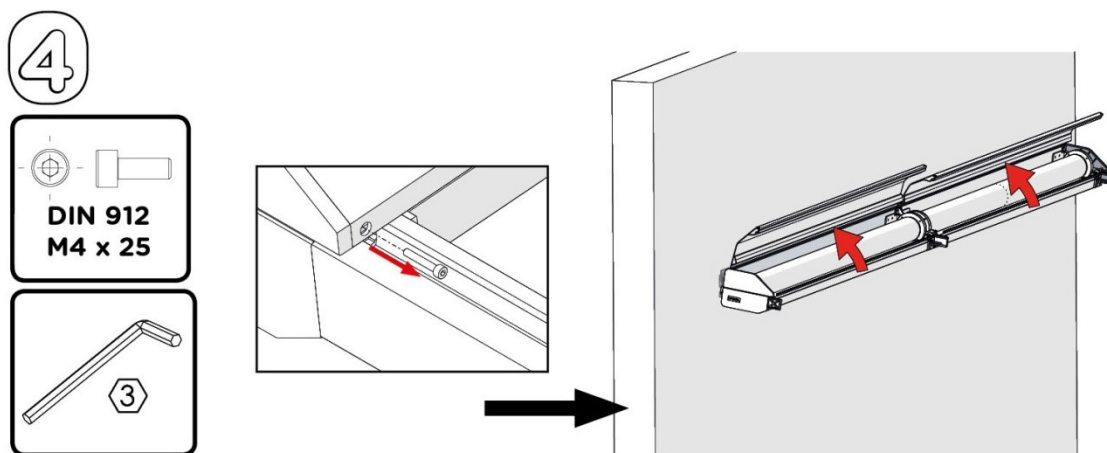


3

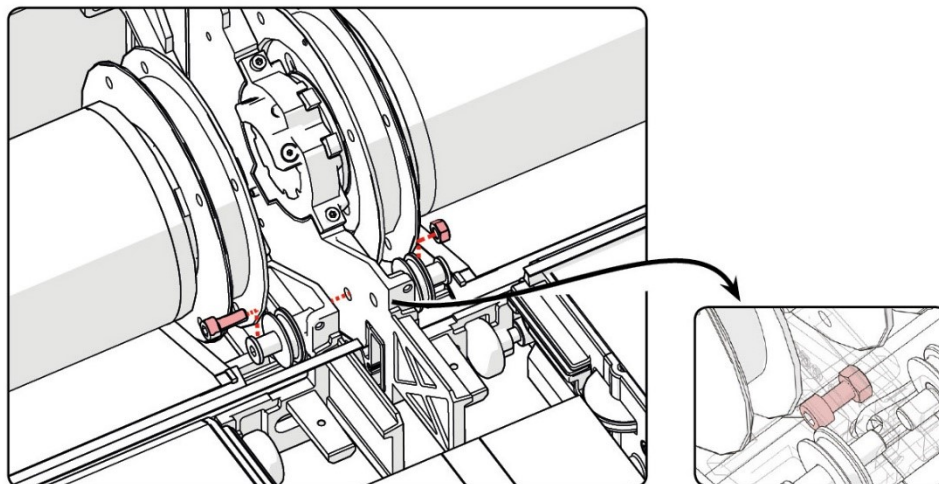
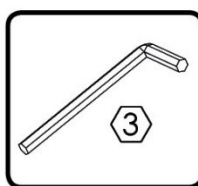


TYPE 2  
TYPE 3  
TYPE 4

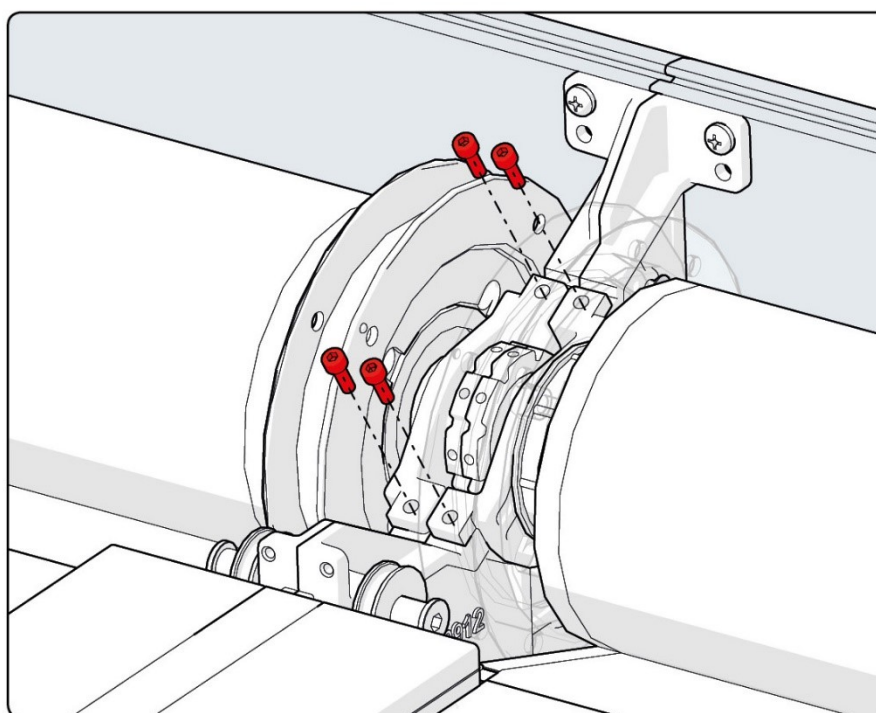
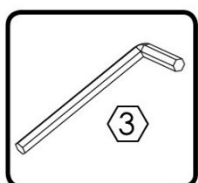




6

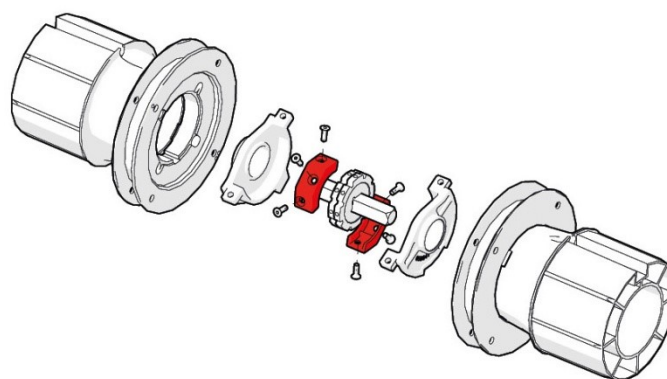
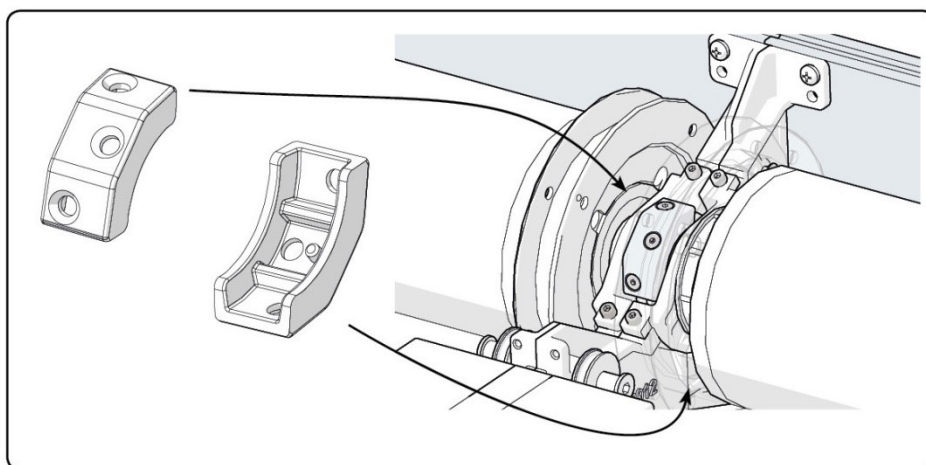
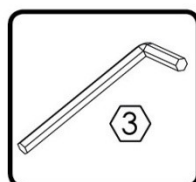


7



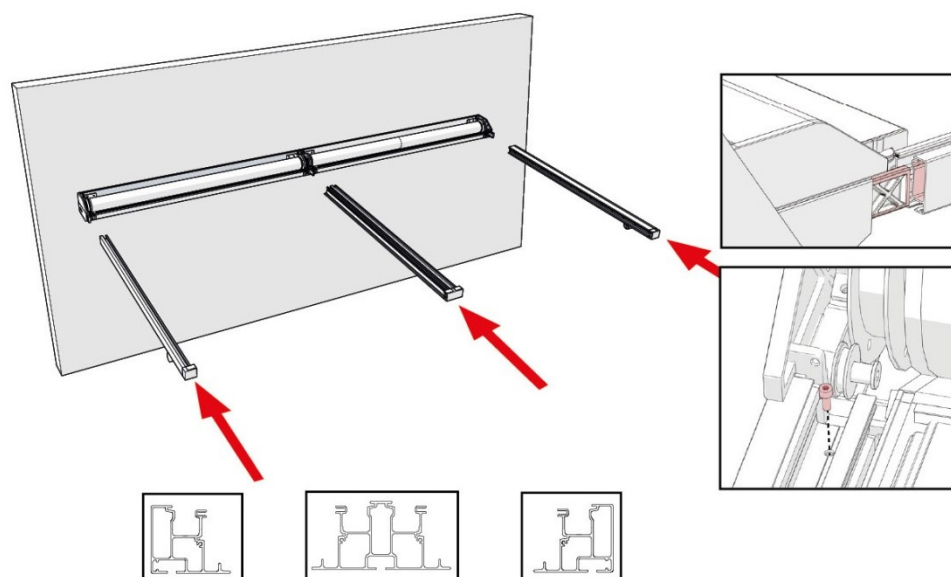
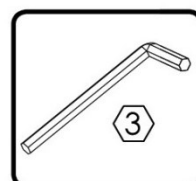
8

DIN 912  
M4 x 12  
**x2**



9

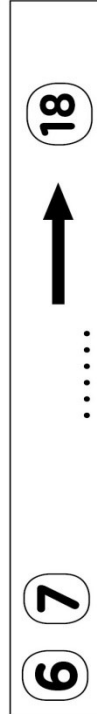
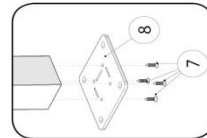
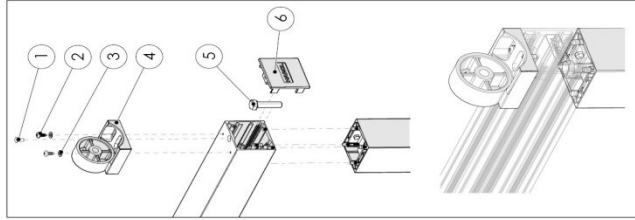
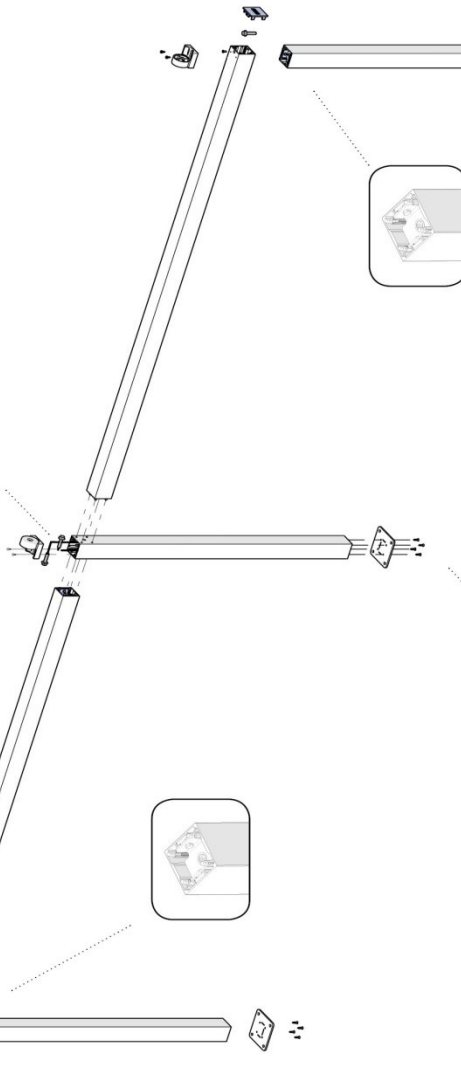
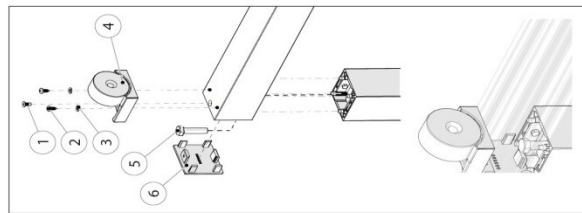
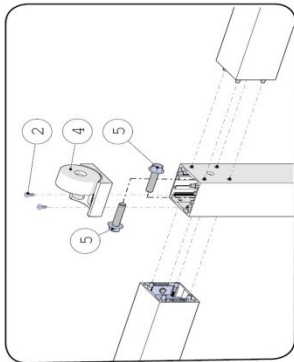
DIN 912  
M4 x 12  
**x2**



1	Din 7991 M4 x 12		2
2	Din 7981 4.8 x 13 mm		6
3	Din 125 - M5		4
4	050905		3
5	DIN 933 - M10 x 35		4
6	050699		2
7	DIN 7982 4.8 x 19		8
8	050940		2



**TYPE 2**



**TYPE 3-4**

