

# VERANDA HRV52

## ALERTS AND WARNINGS

Installation must be performed by qualified personnel in accordance with EN and locally applicable safety regulations on electrical systems for households.

See also the document with the product technical data.

Study this manual in detail before utilising the product.

The stretching of springs creates considerable forces. Be very careful and stand on a firm surface during the work.

Ensure good lighting of the assembly area. Remove obstacles and impurities. Ensure that no other persons except the fitters are present in the work area. Unauthorised persons are likely to get in the way and endanger themselves and other people.



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



This symbol indicates warning.



This symbol indicates that force must be used during the activity.

Only use electric screwdrivers with the proper torque set.



This symbol indicates the need of visual check.



This symbol indicates an optional element.

The manufacturer does not accept any responsibility for any inaccuracies or typographical errors that may be found in this manual. The manufacturer reserves a right to carry out alterations of the product which it deems necessary or in the user's interest and which do not change the basic operating and safety characteristics of the device. It is forbidden to make changes of any kind to the design or configuration without prior consultation with the manufacturer. The end user must receive operating instruction for the product.

## GENERAL INSTRUCTIONS

Several safety measures must be adopted for the safe use and maintenance of the Veranda. Observe the following instructions for your own safety and safety of other persons. Should you have any doubts, contact your supplier.

This manual describes the use and operation of standard shading products. In addition to the instructions given in this document, instructions for some components (e.g., electrical) may also be included in other documents. Read this manual carefully before using the product.

All components supplied are designed for this particular product. Adding other products may adversely affect the safety of this product. If any components are added or modified without consultation with the supplier, the warranty shall become void.

Do not allow unauthorised persons (especially children) to operate this product. They may be exposed to danger during operation. No rights shall be derived from this manual. We reserve the right to make technical modifications without having to inform the customers. Your supplier shall be obliged to supply shading technology to you in accordance with locally applicable standards and requirements. Check that the product is CE marked and that all documents have been supplied.

THE VERANDA IS A LARGE AND HEAVY MOVING OBJECT. IMPROPER OPERATION, DEFECTS, AND NEGLIGENT ACTIVITIES MAY POSE A DANGER OR PERSONAL INJURY. CONTACT YOUR SUPPLIER SHOULD YOU HAVE ANY QUESTIONS OR MATTERS THAT ARE NOT EXPLAINED OR INSUFFICIENTLY EXPLAINED IN THIS MANUAL. ALWAYS PROCEED WITH CAUTION WHEN USING THIS SHADING PRODUCT.

		
CAUTION: PINCH OR TRAP HAZARD!	CAUTION: CUT HAZARD	CAUTION: HAZARD!



CAUTION: SAFETY INSTRUCTIONS FOR SHADING PRODUCT



Improper installation, maintenance, or operation may pose a danger or personal injury. This shading product must be CE marked.

### Observe the following safety instructions:

- 1) Ensure that installation, maintenance, and repairs be performed by qualified and skilled persons.
- 2) Study this manual prior to performing any installation works, maintenance, or repairs. Do not commence any works unless you have a manual for the given shading product available.
- 3) Maintain safe distance from the moving sunshade. The moving sunshade is likely to pose a danger or cause personal injury.
- 4) Prevent operation of the product by children.

- 5) When operating the sunshade, always have it in sight. Its movement may be obstructed by persons (especially children).
- 6) Watch your fingers when in vicinity of the moving telescopic poles, drums, box, and other moving parts of the sunshade.
- 7) Ensure regular checks and maintenance of the sunshade.

**ATTENTION!**

SPRINGS IN THE LOWER PROFILE AND THE PULL CORDS ARE UNDER A VERY HIGH MECHANICAL TENSION. NEVER ATTEMPT TO REPAIR, ADJUST, OR DISASSEMBLE THEM YOURSELF.

The above may pose a danger or cause personal injury. Call a qualified technician! Read this manual before installing or repairing the product.

Study this manual before performing any work on the Veranda. To ensure personal safety, it is essential to follow the instructions in this manual.

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

The supplier shall not be responsible for any loss or damage caused by improper use of the Veranda.

**OPERATING PRINCIPLE**

The Veranda box contains a winding drum to which fabric is wound. When unwinding the fabric, a system of cords and springs (which is under tension) forces the lower profile outside, maintaining the fabric taut. Optimum fabric tension is attained in the lowest position of the lower profile. The lower profile moves in sliding blocks and guide rails.



NEVER DISASSEMBLE THE LOWER PROFILE, SLIDING BLOCK, CORD, SPRING, LATERAL FRAME, HOLDER, OR ANY OTHER PART OF THE SUNSHADE. THESE ACTIVITIES MAY ONLY BE PERFORMED BY QUALIFIED, COMPETENT PERSONS.

**OPENING AND SHUTTING**

ALWAYS HAVE THE VERANDA IN SIGHT WHEN OPENING AND SHUTTING IT, AND ENSURE NO PERSONS OR OBSTACLES PREVENT SMOOTH MOVEMENT OF THE LOWER PROFILE.

SHUT THE SUNSHADE AT NIGHT. THE USER MUST ALWAYS BE AWARE WHETHER THE SUNSHADE IS OPEN OR SHUT.

PREVENT CHILDREN AND UNAUTHORISED PERSONS FROM USING OR PLAYING WITH THE SUNSHADE. THE SAME APPLIES TO SWITCHES AND REMOTE CONTROLS. ALWAYS KEEP THE REMOTE CONTROL OUT OF THE REACH OF CHILDREN.

WHEN WORK IS BEING PERFORMED NEAR THE SUNSHADE, THE SUNSHADE MUST BE SHUT AND THE AUTOMATIC CONTROL AND POWER SUPPLY SWITCHED OFF.

The sunshade is powered by an electric motor.

If you hear abnormal noise during the operation, switch off the sunshade and inform your technician.

The following part contains a concise set of instructions for users. Detailed instructions are specified in the operating instructions for the electric drive.

## OPENING

Press the DOWN button on the switching unit, remote controller, or automatic control unit (hold the button pressed in case of press-button switches).

## STOPPING

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

## SHUTTING

Press the UP button on the switching unit, remote controller, or automatic control unit (hold the button pressed in case of press-button switches).

## SHUTTING THE SUNSHADE



ALWAYS BEAR IN MIND THE FOLLOWING WHEN SHUTTING THE SUNSHADE:

TO PREVENT THE RISK OF PINCHING, HOLD YOUR HEAD, FINGERS, AND OTHER PARTS OF THE BODY OUT OF THE REACH OF THE BOX WHEN THE LOWER PROFILE MOVES TO THE IDLE POSITION ON THE BOX.



BE CAREFUL ABOUT THE RISK OF GRIPPING (LOOSE GARMENTS) NEAR THE DRUMS. SHEAR HAZARD MAY OCCUR IN AREAS WHERE THE TELESCOPIC POLE PASSES THROUGH THE DRUMS. THIS MAY POSSIBLY LEAD TO SEIZING AND PINCHING.

## IMPROPER USE

The shading system has been designed as sun protection, and it therefore cannot be used as an awning for any weather conditions. Improper use may lead to serious danger.

## SAFETY MEASURES:

- Do not expose the Veranda to wind loads exceeding the values specified in the handover protocol. Excessive wind loads may seriously damage the fabric, mechanism, and mounting or anchoring elements. The wind resistance class actually achieved after installation of the sunshade depends on the fasteners used, surface to which the system is fixed, and the place of installation. Do not use the Veranda when the wind force exceeds the wind resistance class determined by the installer, which may be lower than the wind resistance class specified by the manufacturer.
- Do not open the Veranda in the rain. This will prevent the risk of water accumulation on the fabric. Water accumulation increases the weight of the Veranda and is likely to cause tear of the fabric, damage to the mechanical components, detachment of the Veranda from the mounting surface, or injury to the by-standers and users (by falling objects).

- Do not open the Veranda during snowfall or in frost (risk of damage).
- Do not roll the Veranda up if foreign objects are present on the fabric or in the box. First remove such objects, otherwise there is a risk of damage to the Veranda (by falling objects).
- Do not open the Veranda if persons or other obstacles are present in the direction of opening. This is likely to cause personal injury.
- Do not hang foreign objects (like flower pots) to the lower profile, guide rails, and box. This may cause damage to the Veranda and lead to the risk of fall of objects.

Maximum force on non-retractable parts = 800 Pa.

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

### SAFETY ELEMENTS

- Automatic controller: wind protection.
- Automatic controller: wind/sun control system.
- Study the respective operating instructions thoroughly.

NOTE: The user must always be aware whether the sunshade is open or shut. The controller may fail in unusual circumstances like power failure, defect, sudden storm, etc. This may cause damage to the Veranda and lead to the risk of fall of objects.

- If you know that you will not be present for a longer period time, switch the automatic controller to manual operation and roll the Veranda up before leaving.
- If the lower profile of the Veranda moves at the height under 2.5 metres above the ground, the Veranda must be operated by an impulse switch (the motor stops if you release the switch). This ensures the user always has a good view of the moving Veranda and prevents personal injury.
- The motorised Veranda cannot be rolled up in case of power failure. In areas with high wind forces and frequent power failures, it is recommended to consider using the motor-generator set as a backup drive.

## REPAIRS, MAINTENANCE, DEFECTS

To ensure optimal use of the Veranda, it is recommended to ensure its regular inspection and maintenance (at least once a year). For your own safety, we recommend that you sign a maintenance contract with the Veranda installation company – preferably with the person who installed your Veranda.

The Veranda requires regular checks for wear and damage to the fabric and frame. Veranda that needs repair must not be used.

In case of failure, contact the company that ensures maintenance for you. Any and all warranty claims shall be void unless annual maintenance is performed by a specialised company using original spare parts.



MAINTENANCE AND REPAIRS OF THE SUNSHADE, ESPECIALLY THE ARMS, MOTORS, AND SAFETY ELEMENTS, MAY ONLY BE PERFORMED BY AUTHORISED PERSONS. MOTORS MAY START ABRUPTLY. IT IS THEREFORE NECESSARY TO DISCONNECT THE MOTORS FROM THE MAINS (E.G., BY SWITCHING OFF THE CIRCUIT BREAKER) WHILE CLEANING OR MAINTENANCE IS PERFORMED.

OUR PRODUCTS MUST BE INSTALLED IN A MANNER ENSURING THAT ALL PARTS ALWAYS REMAIN ACCESSIBLE FOR MAINTENANCE AND REPAIRS, OTHERWISE THE MANUFACTURER SHALL NOT BEAR ANY ADDITIONAL COSTS (E.G., FOR DEMOLITION WORKS AND REPAIRS OF THE FAÇADE AND INTERIOR WALLS) CAUSED.

You may perform the following undemanding maintenance works and checks may:

Maintenance of the mechanism:

- Check of pull cords for damage and/or wear (every 3 months).
- Check of cord position in the roller (every 3 months).
- Regular cleaning of areas in the guide rails in which the sliding block wheels move (every 3 months, or more frequently if necessary).
- Lubrication of the sliding block wheels (at least once a year).
- Lubrication of the wheels under the end of the guide rails (at least once a year).
- Lubrication of the wheels opposite the control side (at least once a year).
- Lubrication of the drum bearings (at least once a year).
- Lubrication of the hinge pins of the arms and bearings opposite the control mechanisms using a silicone-based dry lubricant (at least once a year).

Note: Do not soil the fabric.

Maintenance of the profiles:

- Regularly clean the profiles with lukewarm water and a neutral detergent, e.g., car shampoo. Then wash with fresh water (at least twice a year).
- Never use corrosive and aggressive products. We strongly discourage using steel wool and other abrasive materials.

**Maintenance of the fabric:**

- The Veranda fabric is covered with a special layer that resists soiling.
- Dust should be removed from the fabric by a vacuum cleaner, by an air blower, by beating, or brushing down.
- Water stains should be thoroughly wetted and wiped by a clean cloth. Detergents like soap or other chemicals should only be used if absolutely necessary.
- The best way to clean fingerprints and grease spots is to use a clean cloth with a drop of a mild dish soap (never use trichloroethane III).

**Also keep the following in mind:**

- Never open the Veranda in heavy rain, strong wind, frost, and snowfall.
- If the fabric is permanently exposed to all weather conditions, it is highly probable that sediments caused by air pollution will accumulate on the fabric, decreasing the quality of the fabric.
- The fabric may be rolled up for a short time even if it is wet. After that, it is necessary to dry the fabric in unrolled position. If wet fabric remains rolled up for a long time, mildew or rot is likely to appear.

	
<p>THIS VERANDA MAY ONLY BE DISASSEMBLED AND REMOVED BY QUALIFIED FITTERS. THE DISASSEMBLY OF COMPONENTS MAY BE DANGEROUS AS THE CORDS, SPRING, AND TELESCOPIC POLE ARE UNDER A VERY HIGH MECHANICAL TENSION. SECURE THESE HAZARDOUS DANGEROUS COMPONENTS PRIOR TO DISASSEMBLY.</p> <p>ENSURE DISPOSAL OF THE DISASSEMBLED SHADING SYSTEM IN ACCORDANCE WITH LOCAL ENVIRONMENTAL REGULATIONS. IF NECESSARY, CONSULT THE LOCAL ENVIRONMENTAL PROTECTION AUTHORITY.</p>	<p>CONTACT YOUR SUPPLIER SHOULD YOU HAVE ANY QUESTIONS OR MATTERS THAT ARE NOT EXPLAINED OR INSUFFICIENTLY EXPLAINED IN THIS MANUAL.</p> <p>THE VERANDA IS A LARGE AND HEAVY MOVING OBJECT. IMPROPER OPERATION, DEFECTS, AND NEGLIGENT ACTIVITIES MAY POSE A DANGER OR PERSONAL INJURY.</p>

## MEASUREMENT AND INSTALLATION

### GENERAL INFORMATION

The Veranda HRV52 shutter is able, to a great extent, to regulate the amount of sunlight entering the room, thus reducing uncomfortably high level of light and heat. The shutter fabric is protected and rolled up in a box which is closed by the lower profile in the completely rolled-up position. The box is fastened to the guide rails.

Safe distance between the fabric and the veranda roof is ensured by guide rails and the cord-spring system that maintains the fabric taut at all times. The system has been so designed that it is able to overcome any minor tolerances in the roof structure seating. The whole system is made of corrosion-resistant materials.

There are several installation options. As a standard, the HRV52 shutter is installed above the veranda because the most efficient method of sun protection is above the glass panels. The shutter may then be installed to the veranda profiles using the holders. There are various types of holders available.

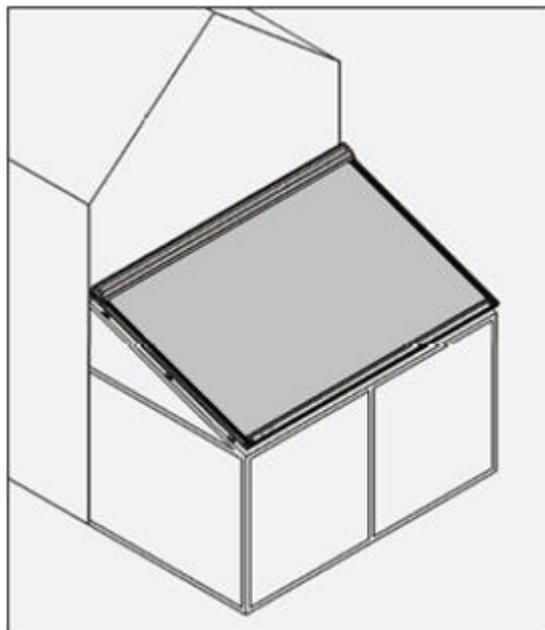
The Veranda HRV52 shutter consists of the following parts:

- Box with an easily removable winding drum with motorised control;
- fabric rolled up in the box;
- Guide rails;
- Lower profiles with a spring that maintains the fabric taut.

### INSTALLATION OPTIONS

The HRV52 shutter may only be installed to the supporting structure, top-down.

- Outdoor installation;
- The fabric is located outside;
- The sunshade is visible from the outside;
- In case of Soltis 86 and 92 fabrics, the aluminium side is facing the sun;
- In case of blackout fabrics, the grey film is facing the window.



**NOTE:** It is essential to comply with the minimum slope requirement to prevent water from accumulating on the fabric, causing its bowing with possible permanent deformation. This would cancel the guarantee. If the shutter remains open in rain, water will run off in an uncontrolled manner through the sliding blocks of the lower profile. There is no water-retention mechanism (gutter) under the guide rails.

The recommended minimum angle of slope:

- For Soltis 86 and 92 fabrics: **8°**
- With integrated LED lighting: **10°**
- For Blackout fabrics: **14°**

The maximum angle of slope for all variants is **30°**.

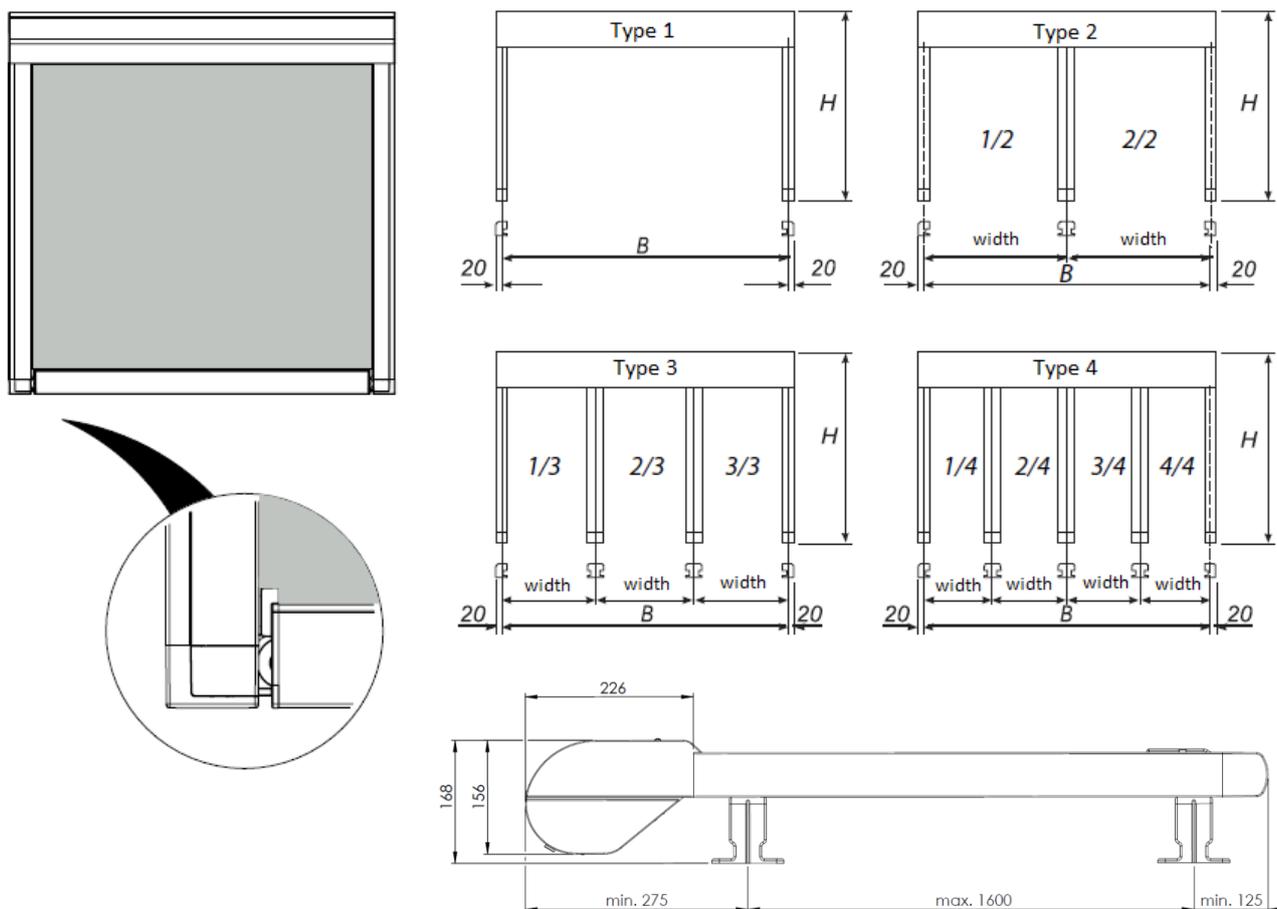
## MEASUREMENT

**Total width** = from the centre of the guide rail to the centre of the guide rail. The outer part of the box is always 40 mm (2×20 mm) wider than the centre of the guide rails or the centre of the fixing holders.

**Slope:** measured from the back side of the box on the upper side by the wall to the front side of the guide rail including the cover.

The final position of the lower profile may be set flush with the end of the guide rail cover.

NOTE: The box width is always 40 mm greater than the ordered width of the shutter.



## INSTALLATION

NOTE: Always ensure squareness of installation. If squareness is not ensured, the fabric is likely to wrinkle. See the overview of assembly holders.

### **Caution!**

- The maximum distance between two guide rail holders is 1600 mm.
- The maximum overhang is 500 mm.

Make sure that the box and lower profile can be opened at all times and that the mechanical parts inside are always accessible. If this rule is not complied with, ISOTRA a. s. shall not bear any costs associated with demolition works!

## FASTENERS

All fasteners are made of stainless steel, and all accessories are always part of the supply.

## PACKAGING

The Veranda HRV52 is supplied packed in rigid cardboard boxes.

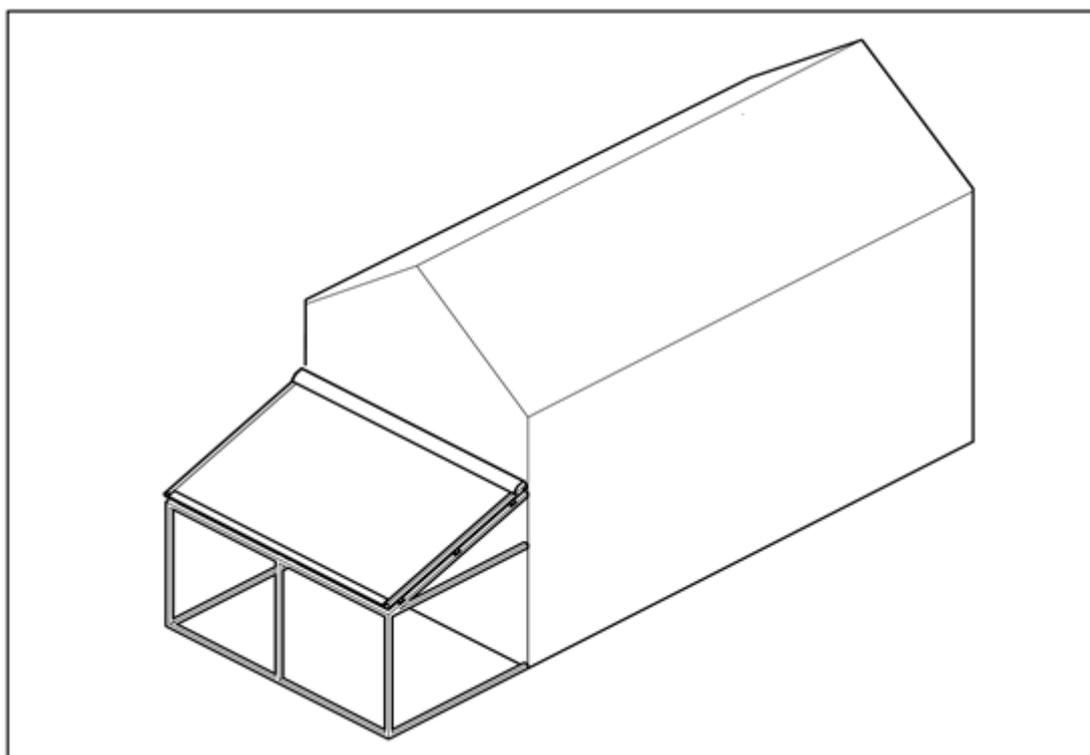
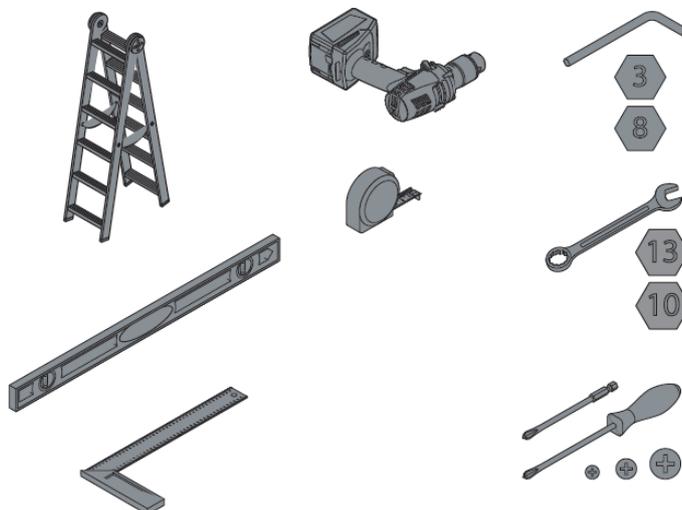
## USE AND MAINTENANCE

Proper use and maintenance substantially increase the veranda shutter's service life.

- Do not use the Veranda as rain or wind protection.
- Regular maintenance prevents excessive wear and operational problems.
- Cleaning the frame: use soft water instead of aggressive substances that are likely to damage the coating and protective layers.
- Cleaning the fabric: in dry condition, using a semi-stiff brush.
- Remove stubborn stains with warm water and a weak solution of a detergent, then rinse with plenty of clean water.
- Prior to rolling up, leave the fabric to completely dry up (this also applies in case of unexpected rain).

### LIST OF NECESSARY TOOLS

- Ladder
- Planks
- Wood blocks 60×60×300 mm
- Electric drill
- Phillips screwdriver
- Allen keys, sizes 3 and 8
- Fork or ring spanners, sizes 10 and 13
- Nail nippers with bent ends after driving
- Iron drill bit
- Ruler and pencil
- Voltmeter or test lamp, 220 V
- Masonry drill, Ø 6 mm
- Electric wire clamps
- Test cable with a switch
- Socket wrench, size 4 mm

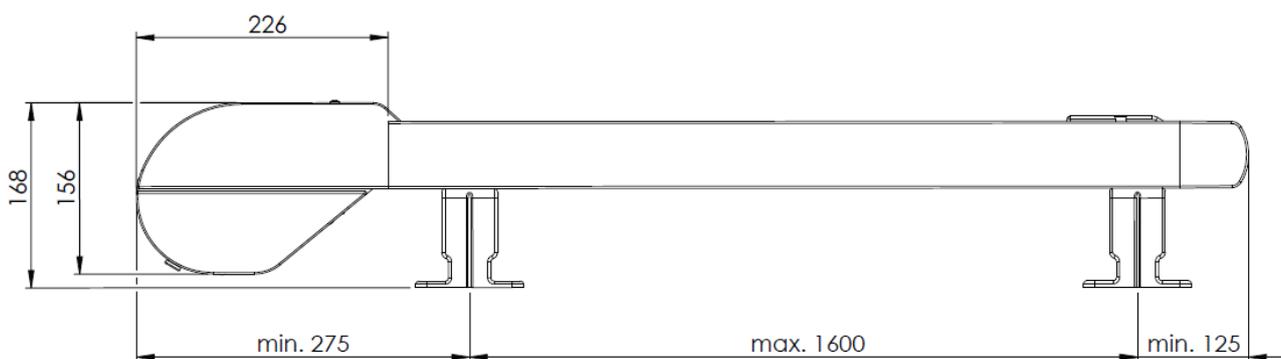
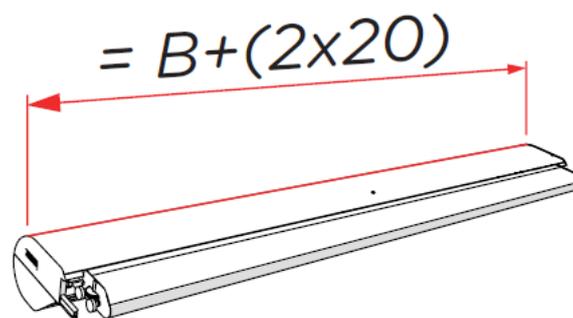
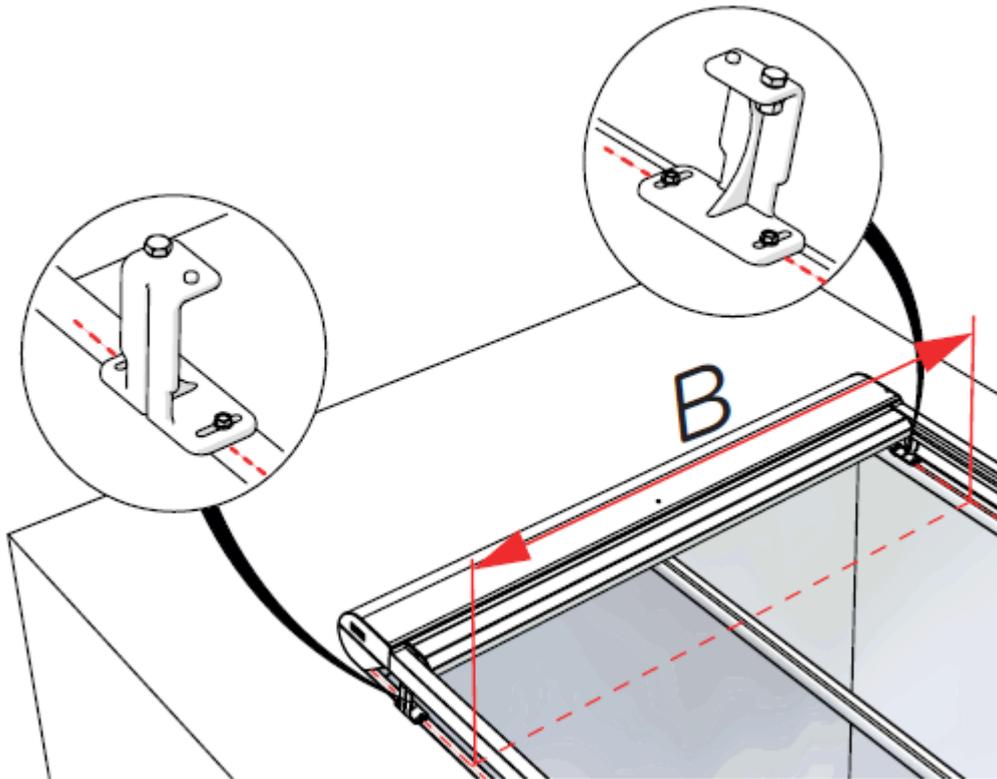


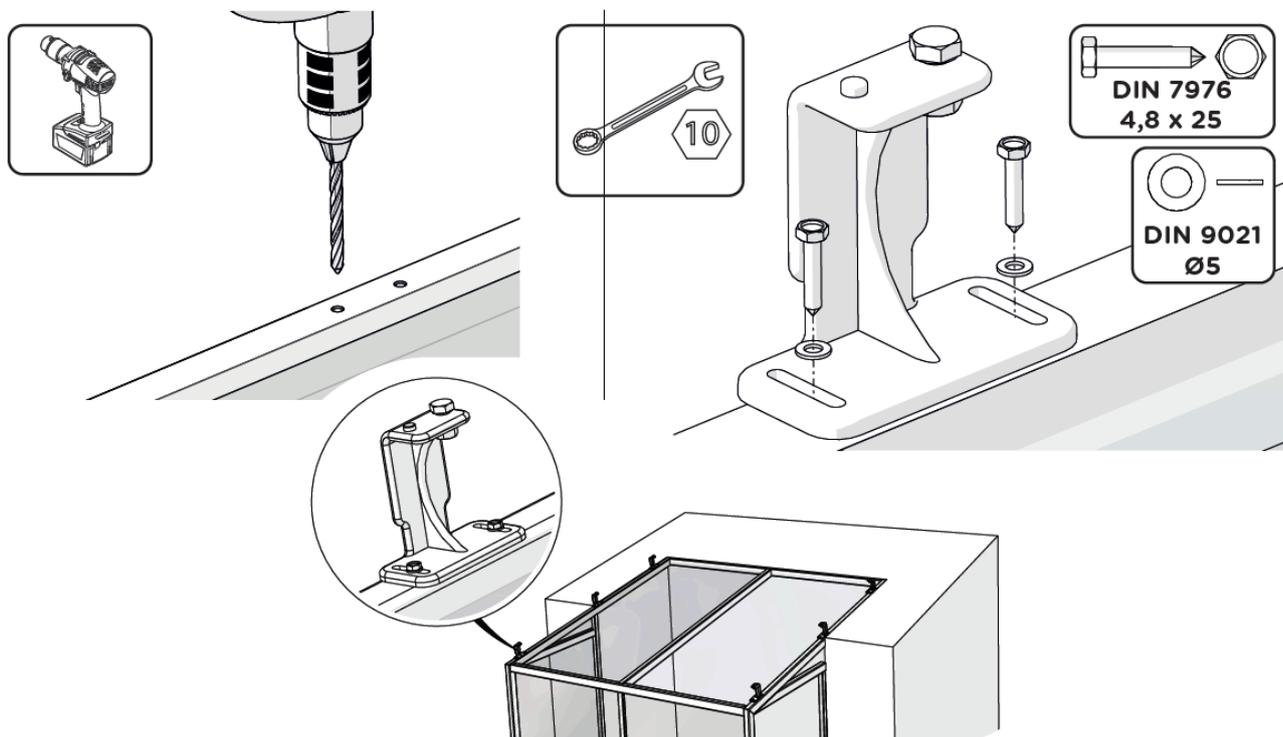
ASSEMBLY STEPS

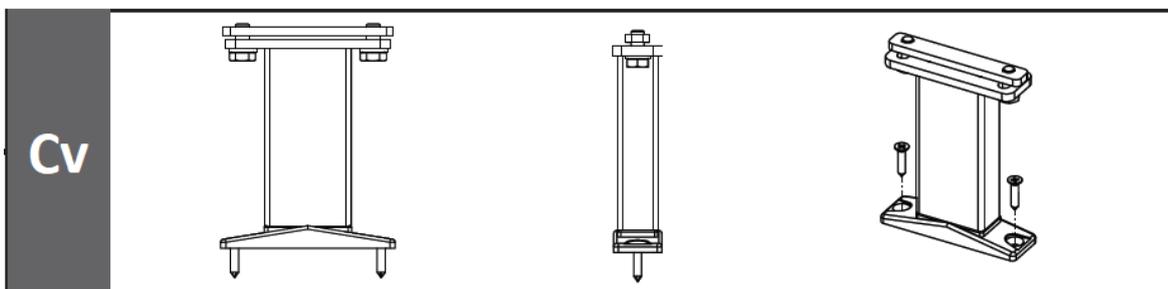
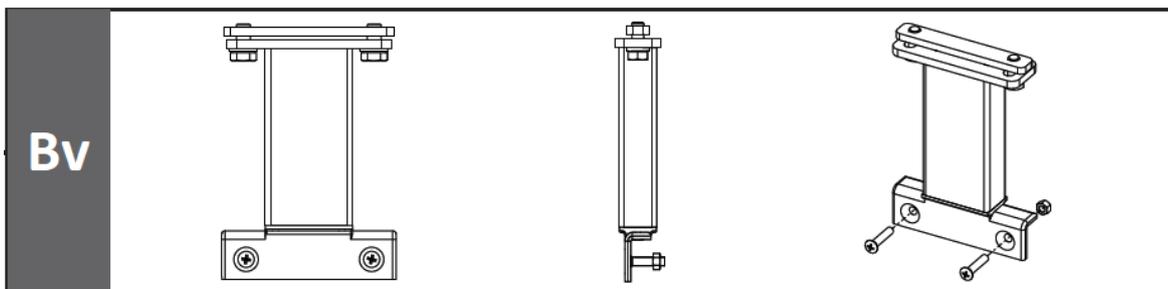
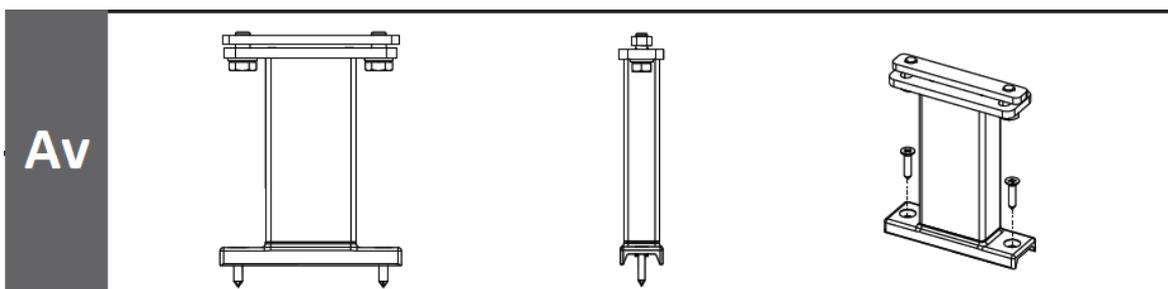
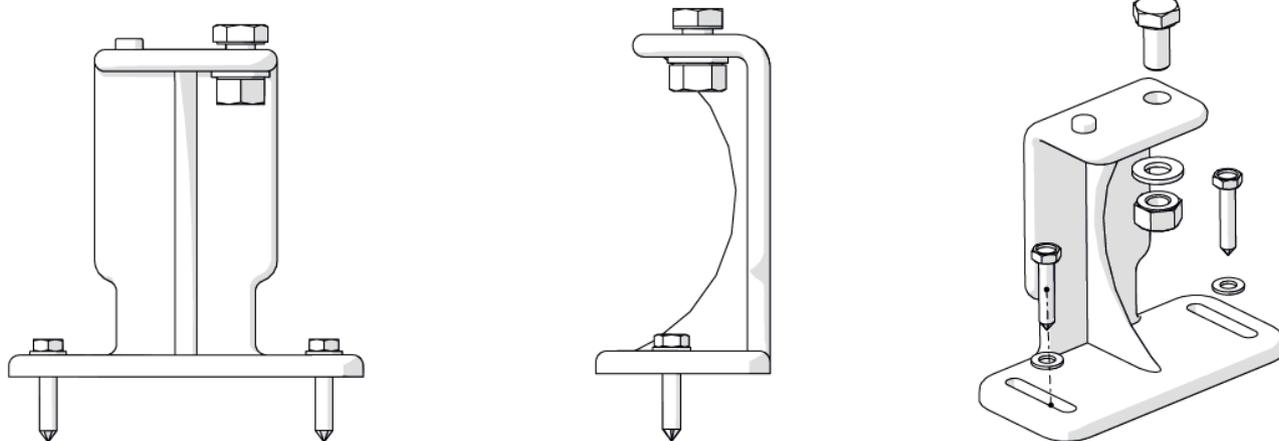


INTERMEDIATE STEPS

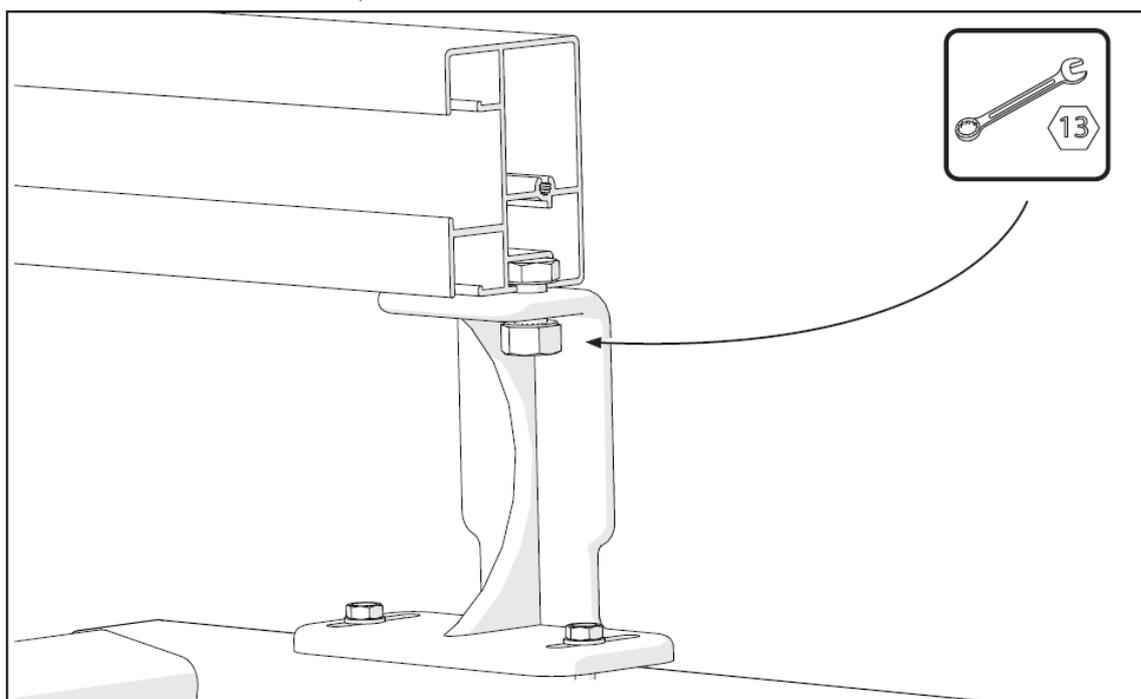
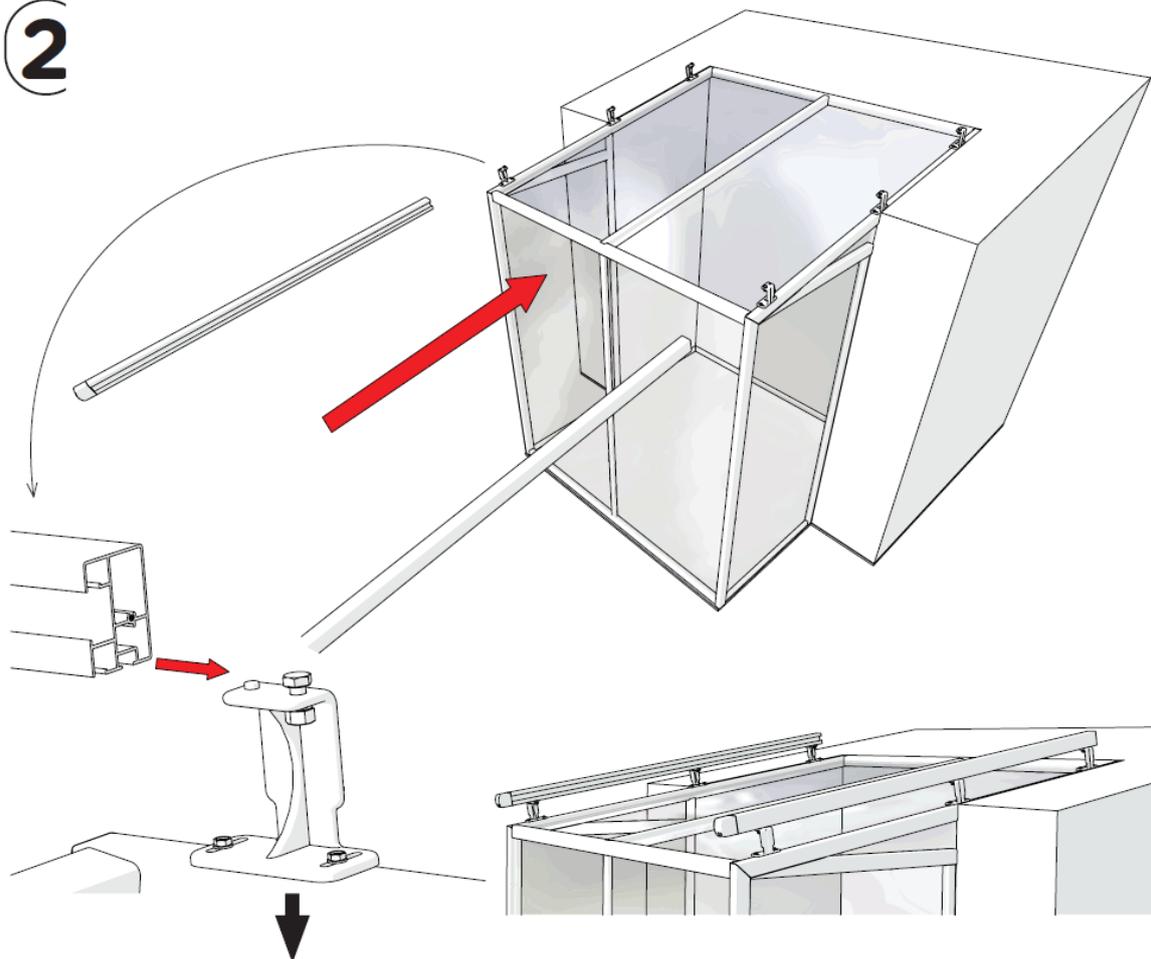
## INSTALLATION INSTRUCTIONS

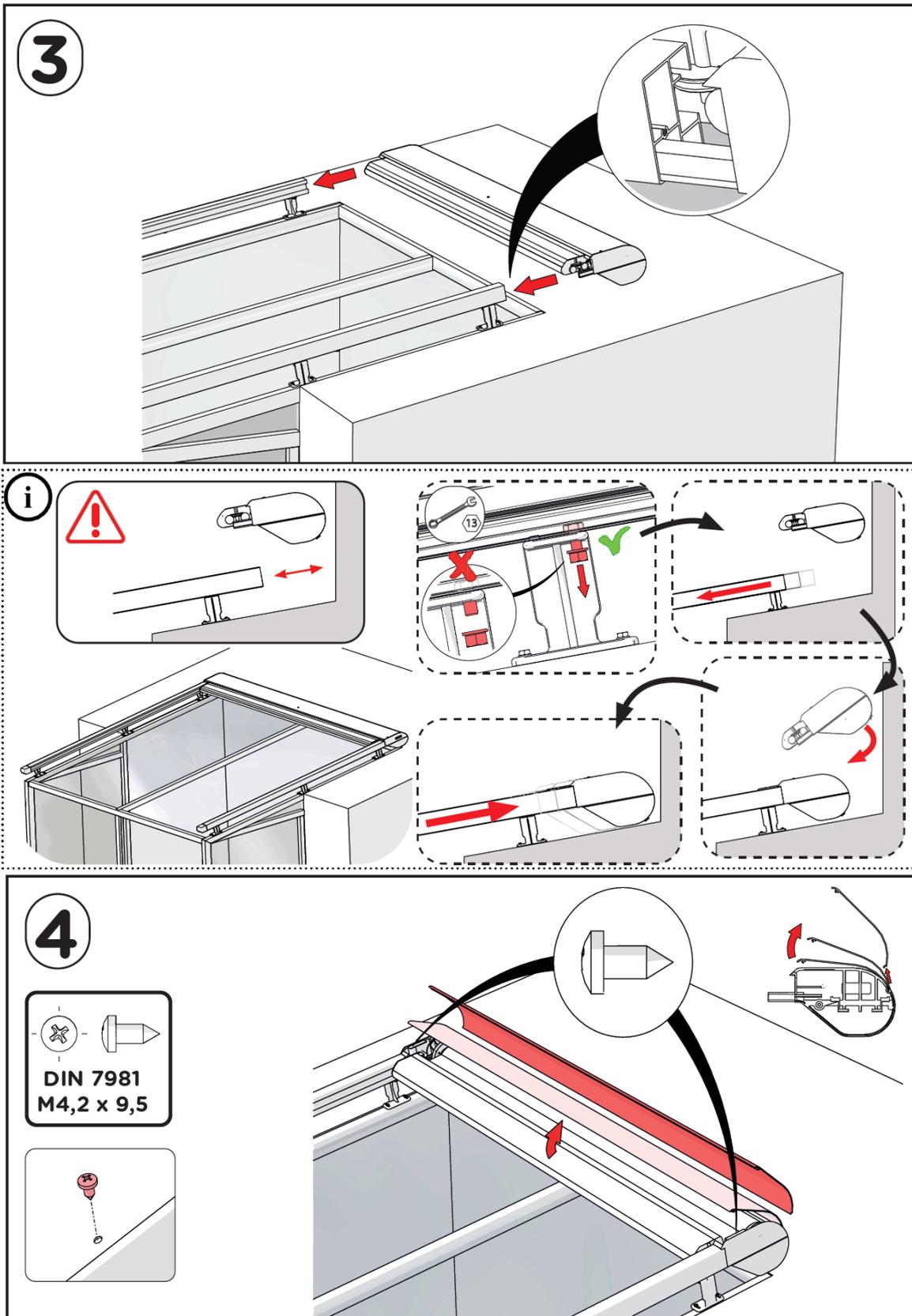




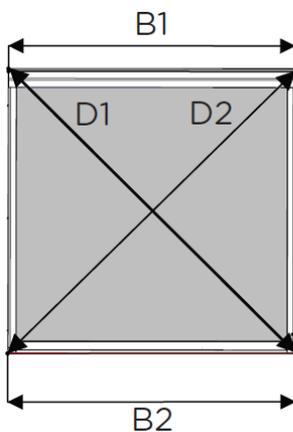
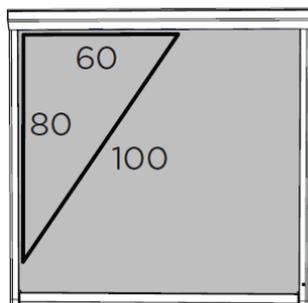
**HOLDERS – STANDARD**


2



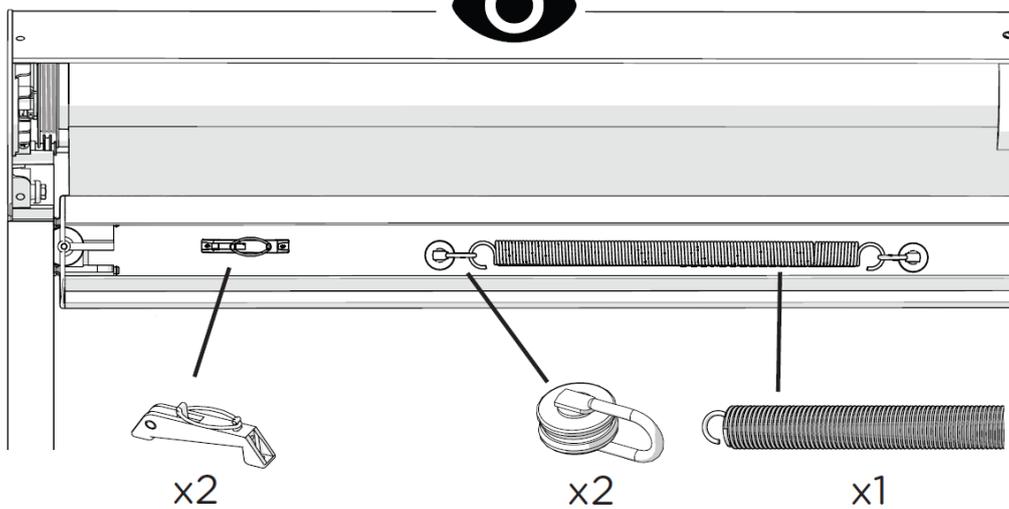
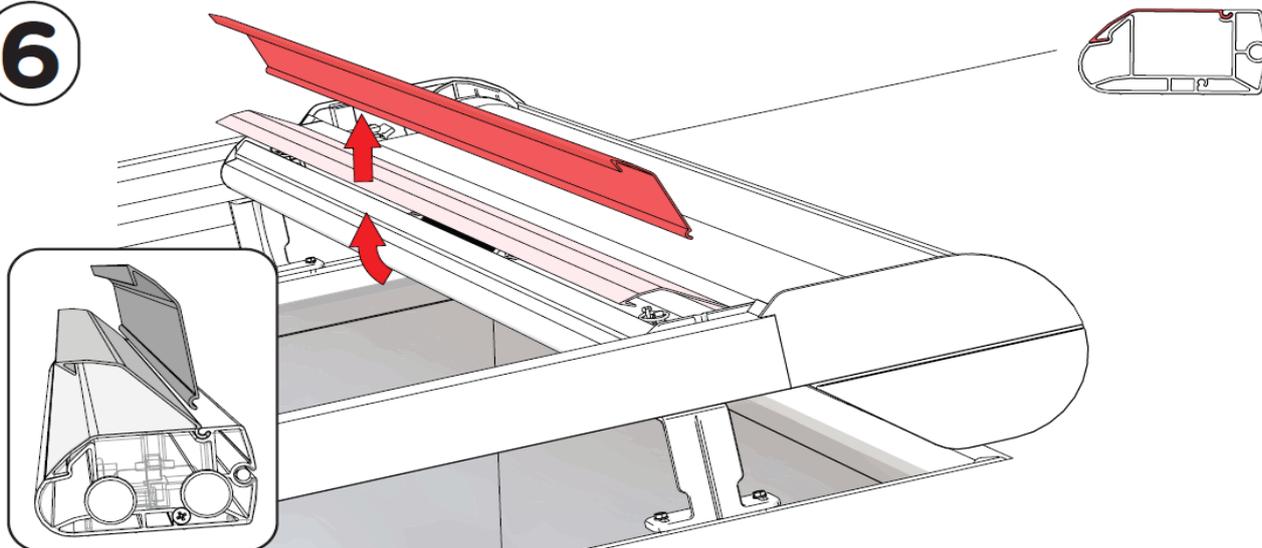


**5** CHECK



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

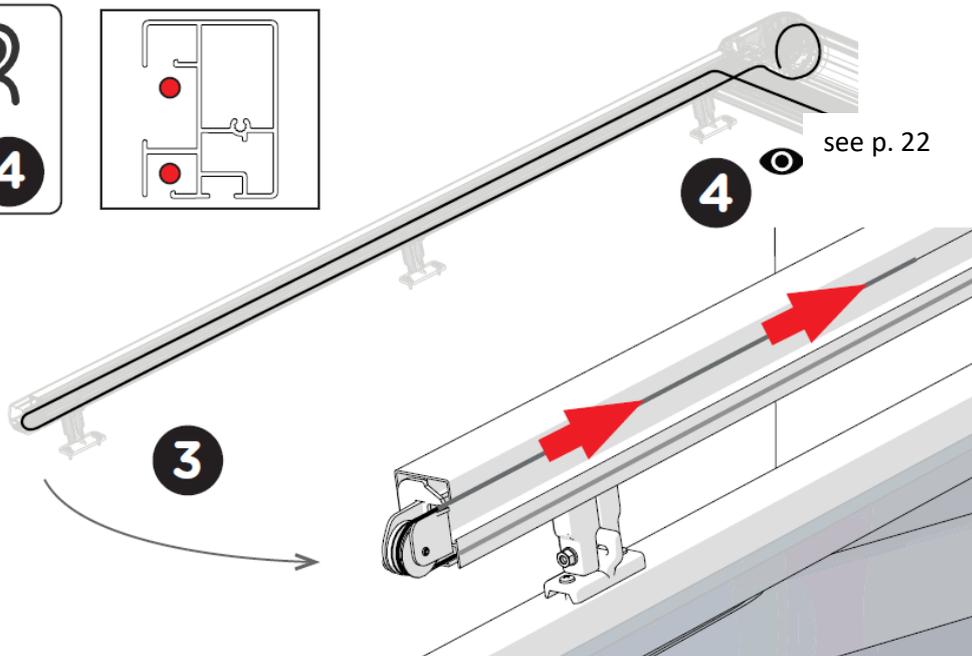
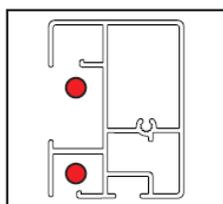
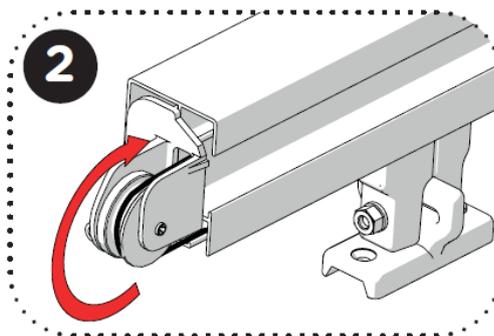
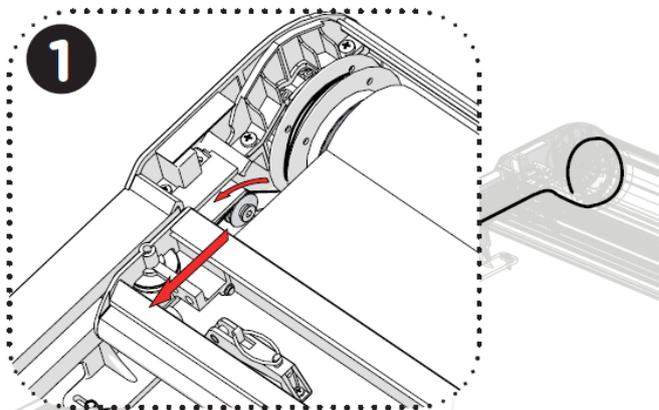
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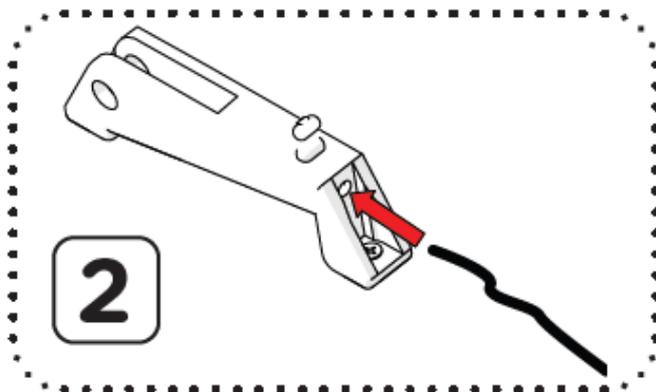
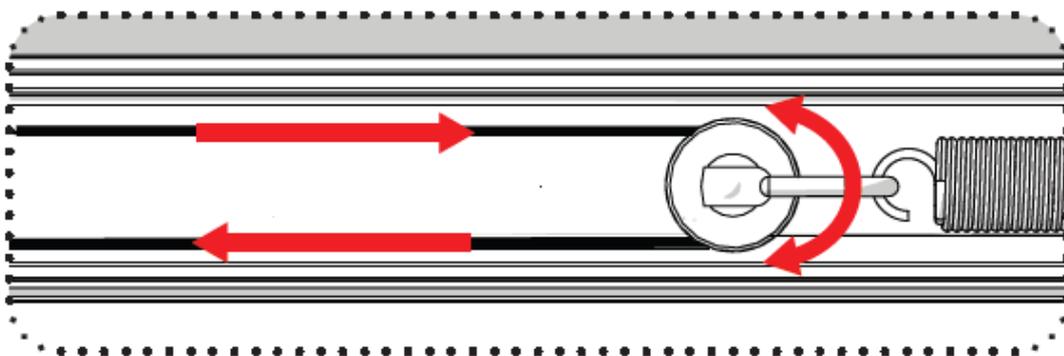
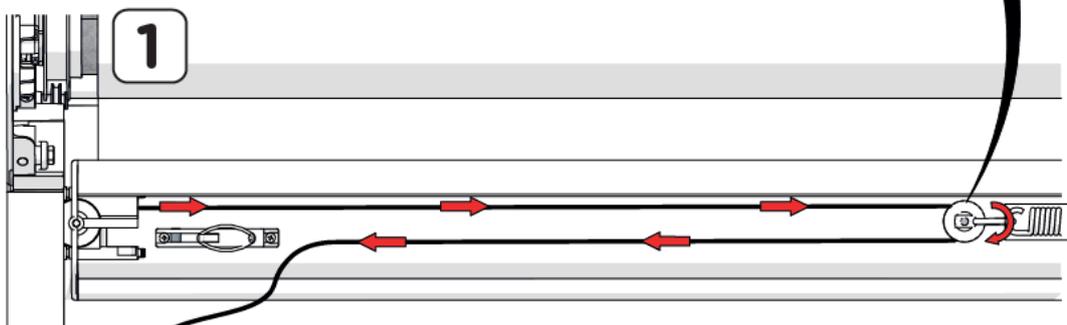
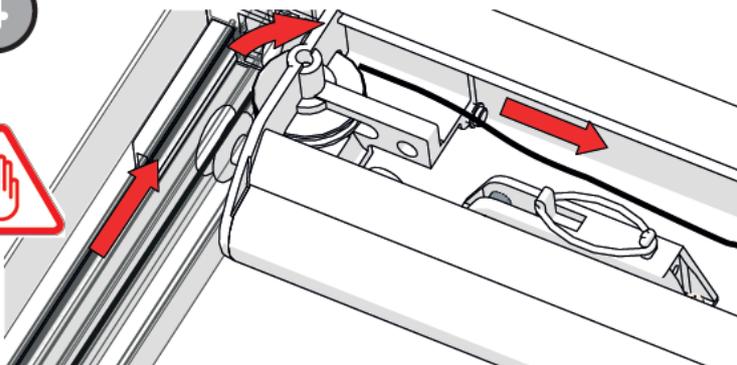


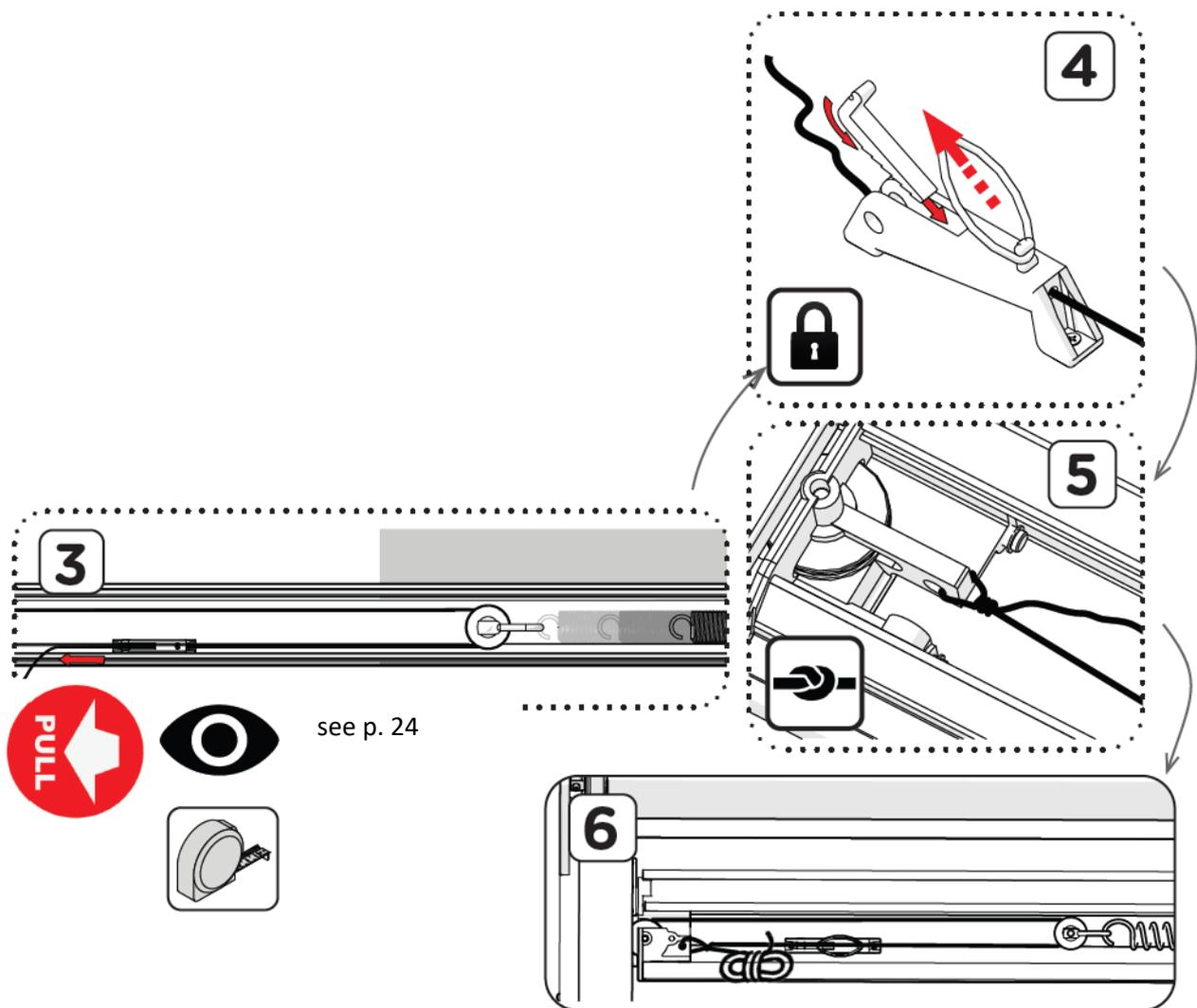
**7**



CHECK IF AT LEAST 2-3 CABLE TURNS ARE WOUND ON THE ROLLER



**4**



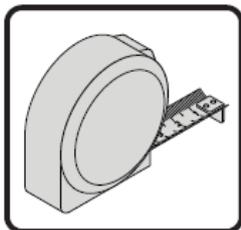
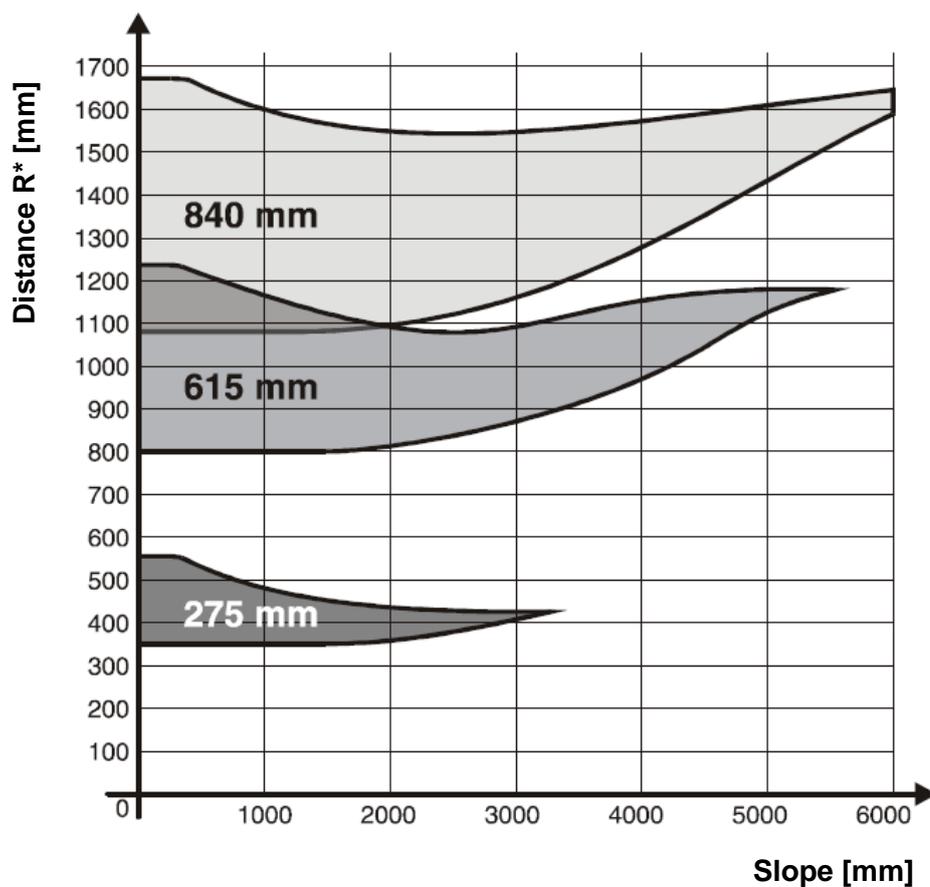
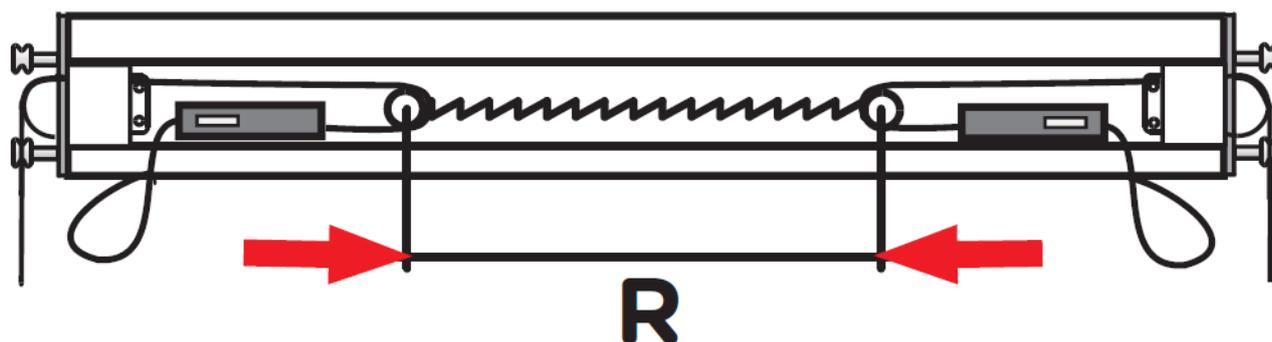
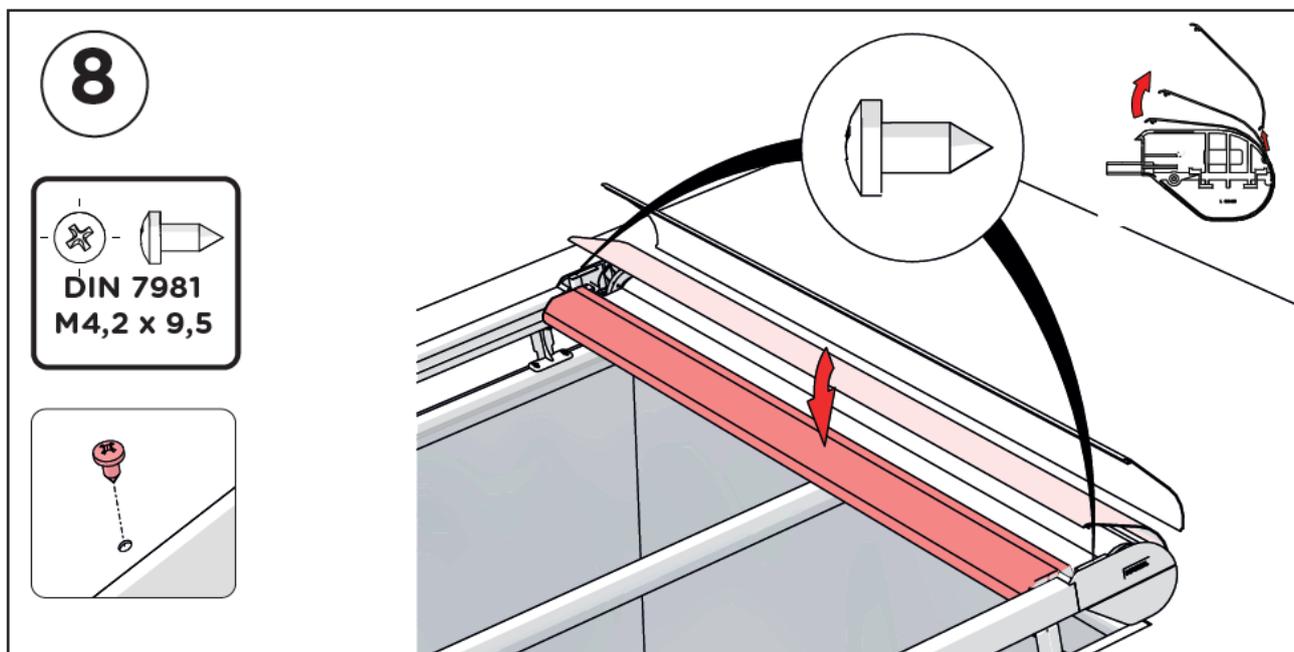
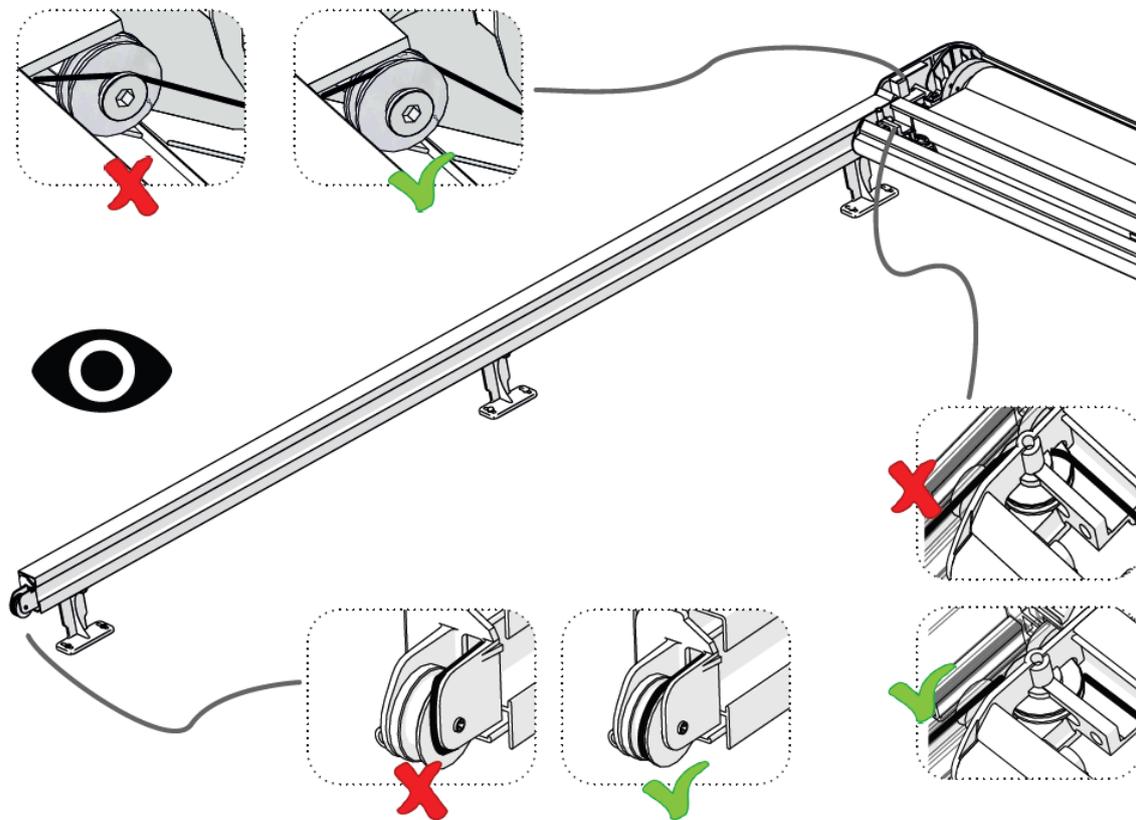
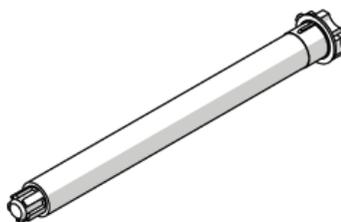
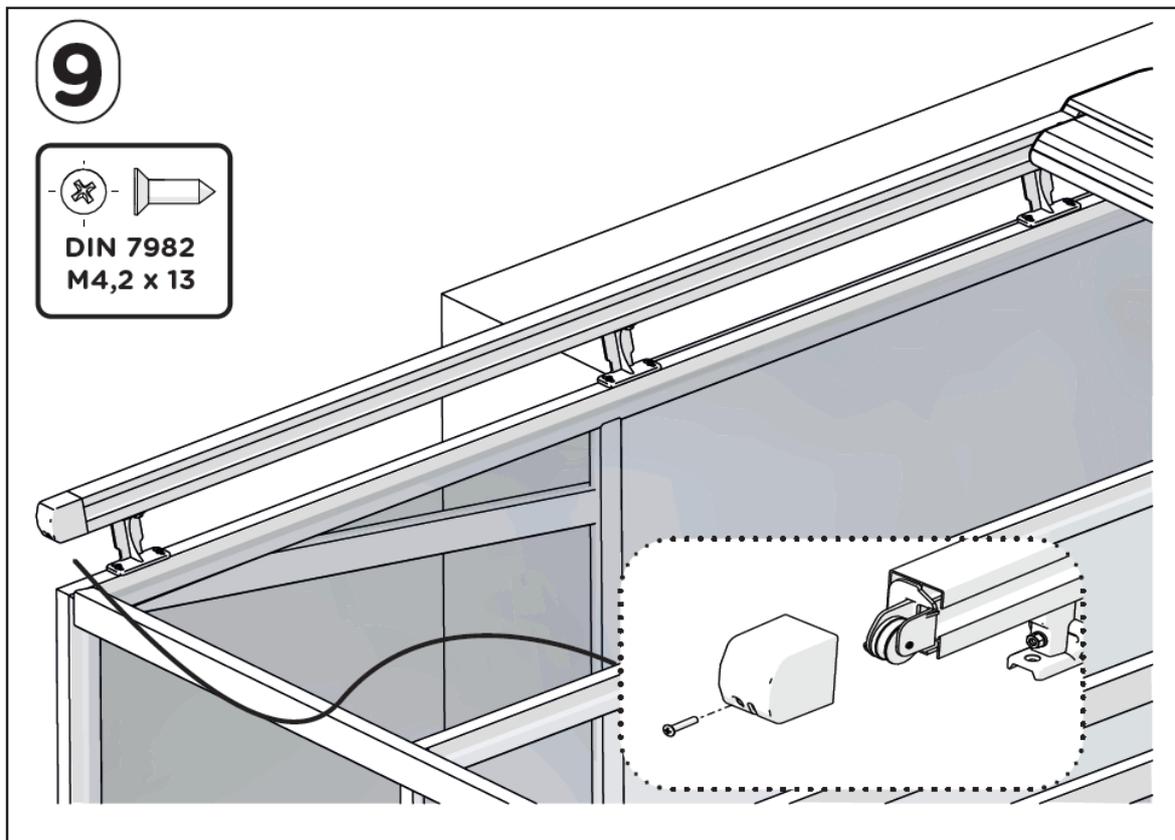


TABLE – SPRING DISTANCE R [MM]

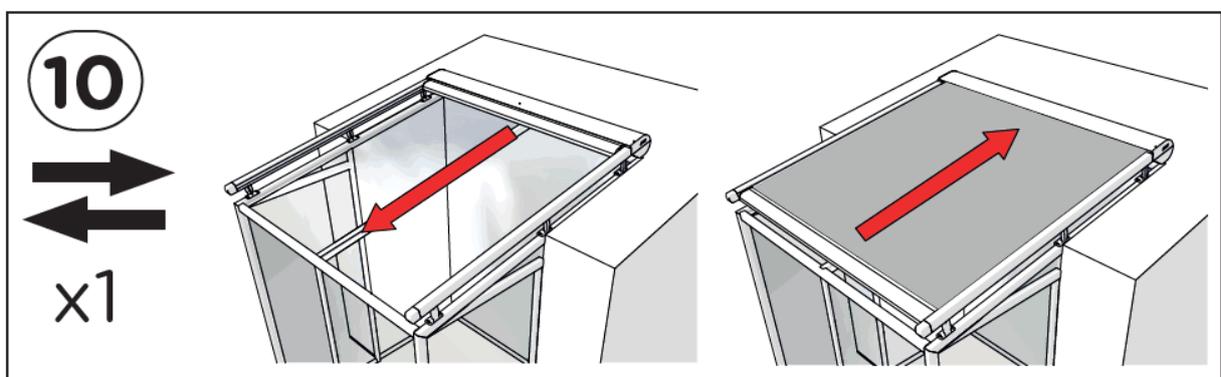


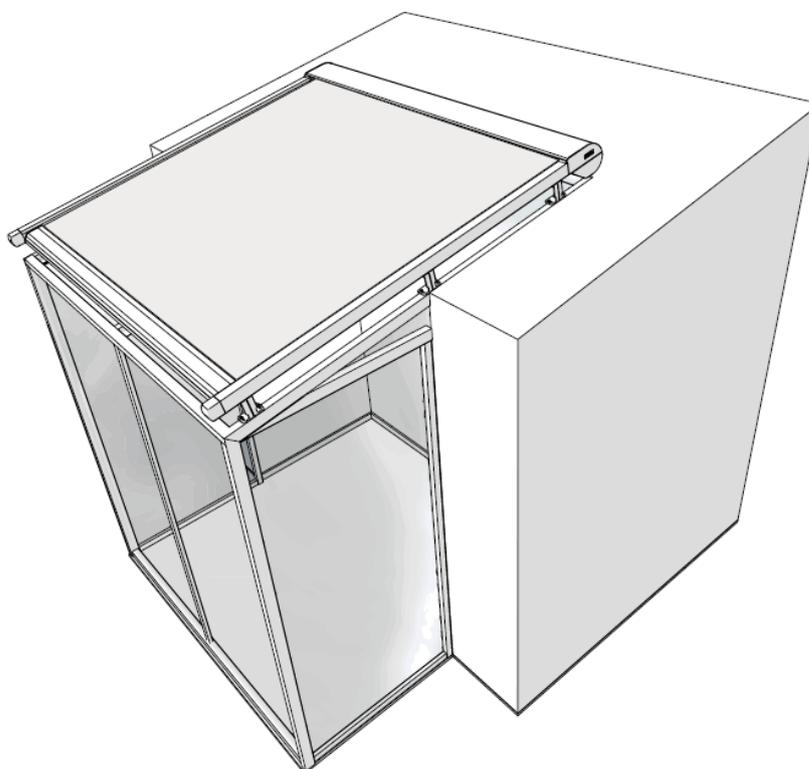
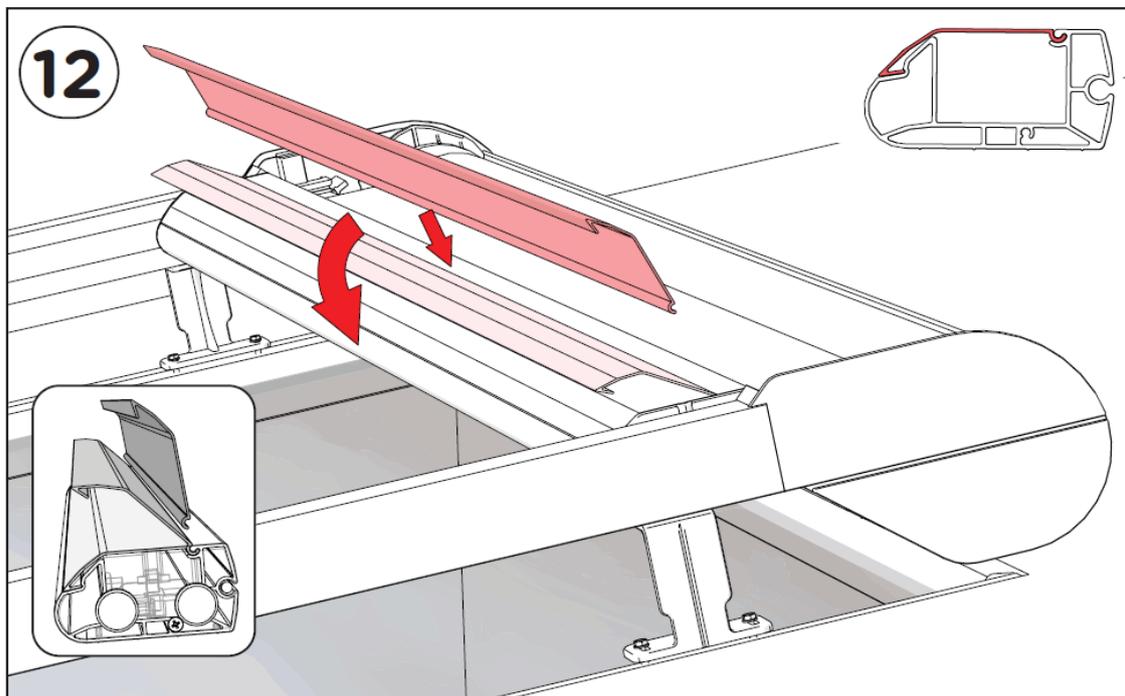
\* Read off the distance “R” in the highlighted zone depending on the spring type (650 mm / 850 mm).



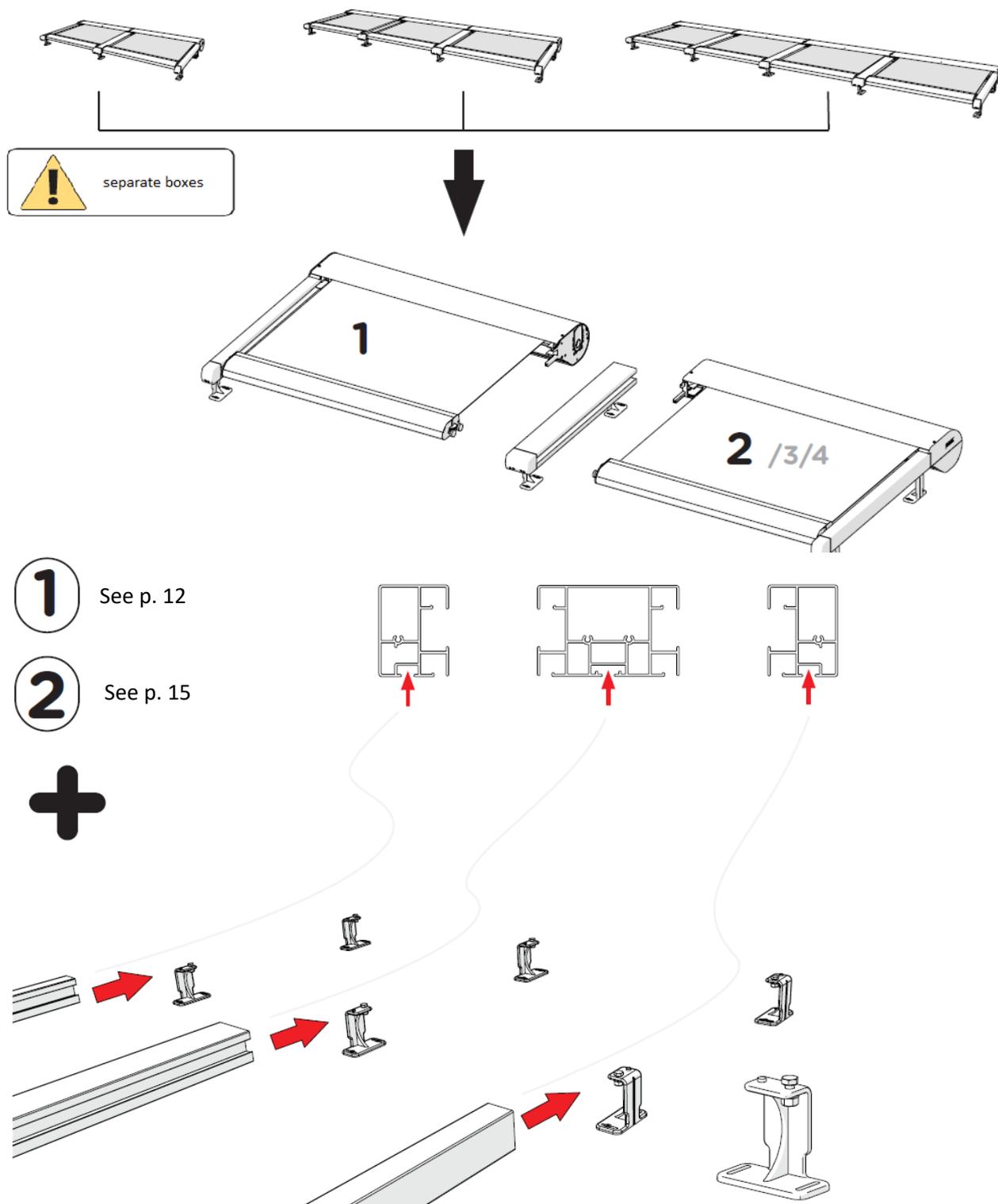


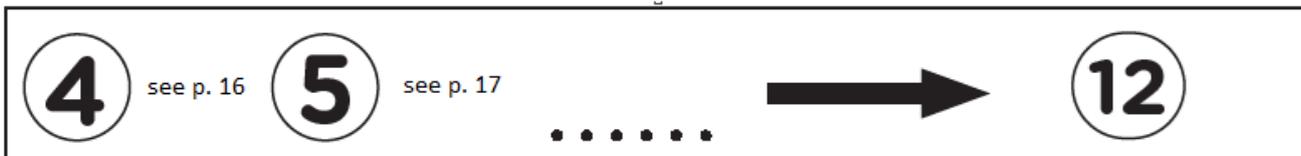
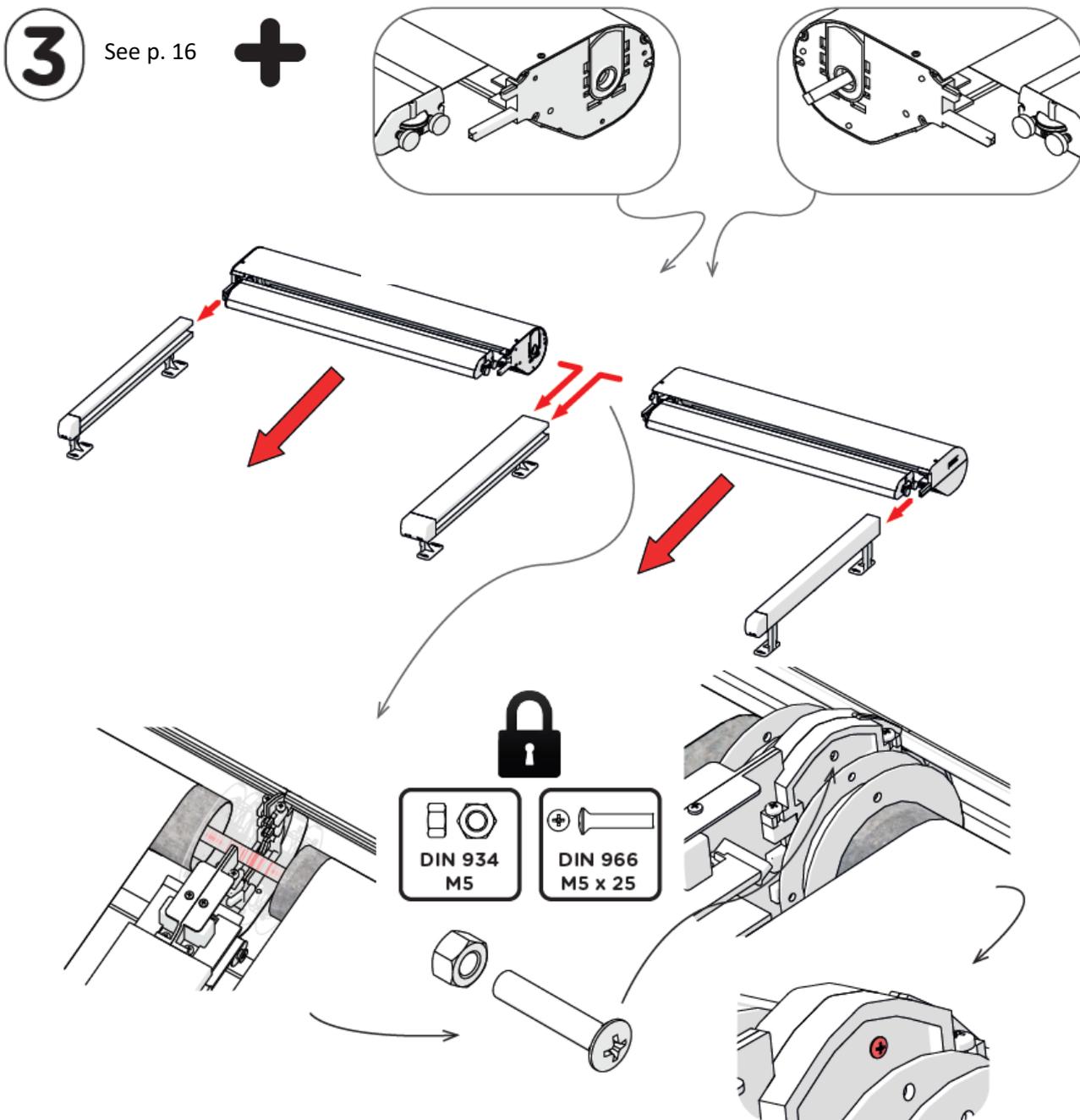
More about the motor and its adjustment can be found in a separate document.





**COUPLING THE VERANDAS**





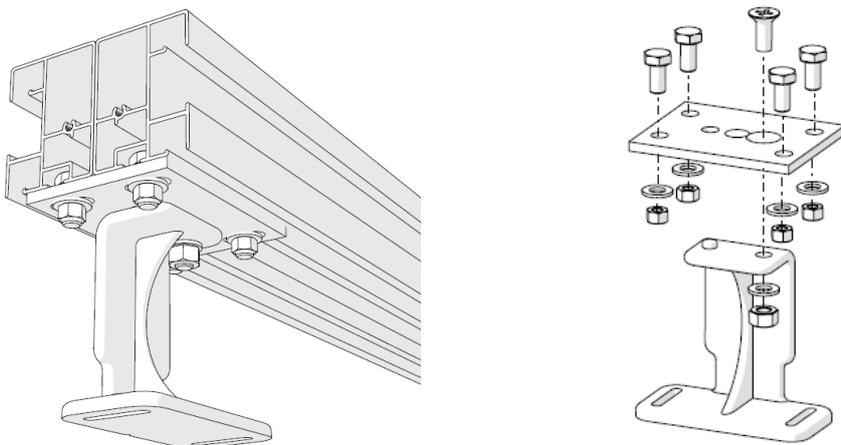
## COUPLING 2 GUIDE RAILS

In some cases, it is necessary to couple 2 guide rails (when 2 or more systems are installed side by side). This may be done in several ways.

### 1) FASTENING THE LOWER ATTACHMENT POINT IN THE MIDDLE

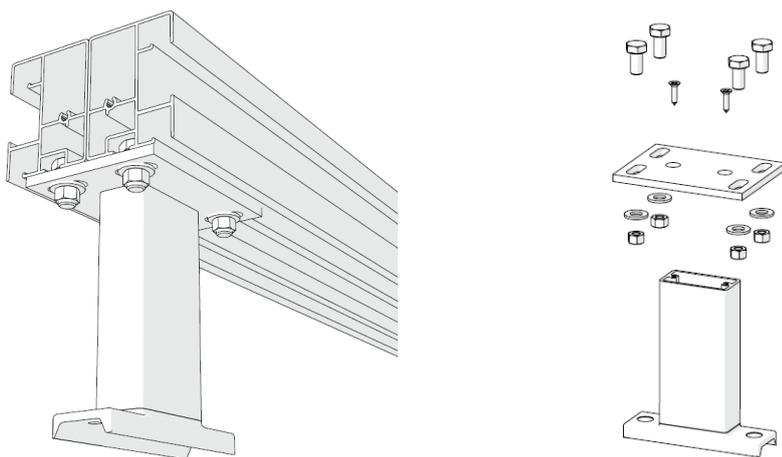
The fastener is attached directly under the two guide rails.

The standard attachment point is fixed to the fastener.



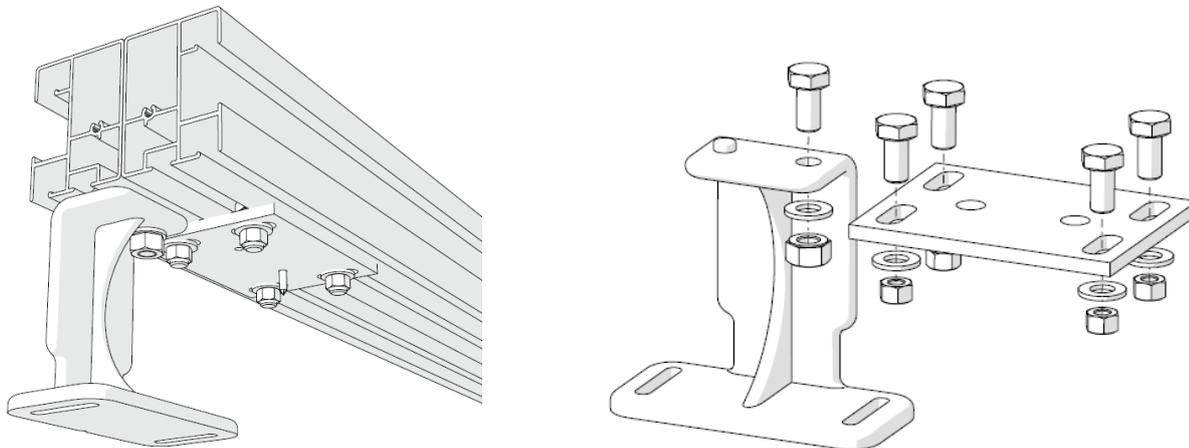
### 2) FASTENING THE ATTACHMENT POINT OF THE TALL PROFILE IN THE MIDDLE

The upper part of the attachment point of the tall profile is replaced by a fastener. The fastener is fixed directly under both guide rails.



### 3) FASTENING THE ATTACHMENT POINT UNDER THE LEFT OR RIGHT GUIDE RAIL

The fastener is fixed before or after the attachment point used.



## **TROUBLESHOOTING**

### **The motor does not roll up or unroll the fabric**

- The internal end switch in the motor was not activated in either direction. Press both adjusting buttons of the motor and set the end positions.
- Poor contact of the motor cable. Check the connection.
- Motor has overheated. Leave it to cool down for 1 hour.
- Poor adjustment of the end switches.
- No current in the button. Check using a voltmeter.
- Poor connection of the motor. Check according to the wiring diagram.

### **Excessive noise of the motor**

- Check if all components can freely rotate in both directions. Does anything keep sticking (e.g., the cord)?
- A condenser in the motor burnt (due to poor motor wiring).
- Poor connection of the motor: check correct connection of the motor cables according to the wiring diagram. The phase conductor (brown or black) was confused with the neutral conductor (blue). The motor rotates in one direction, but hums in the opposite direction.

### **The motor does not stop in time**

- Poor adjustment of the end switches.

### **The inner insert is not even or is not aligned with the box when rolled up**

- The guide rails are parallel, but not perpendicular to the cover. Check by measuring the diagonals.

### **The inner insert falls off the rails**

- The guide rails are too distant from each other. Adjust them.

### **The fabric falters during movement**

- The inner insert is improperly inserted in the guide rail.
- The cord does not travel properly over all the rollers.
- The spring is blocked.

### **The fabric is not taut on the lower side**

- The guide rails are not perpendicular to the box. (The sunroom rails are not perpendicular to the wall or box.)
- The cord keeps sticking elsewhere.
- Insufficient spring tension.
- Poor adjustment of the end switches.
- The end profile touches the rollers in the guide rails.

### **The Veranda is not flush when unrolled**

- Poor installation of the winding drums. Rotate one of the drums by  $\frac{1}{4}$  to  $\frac{1}{2}$  revolution.

**The Veranda is not flush when rolled up**

- The springs are not adjusted to the same tension.
- The spring for the panel which is rolled up the most must be tensioned more (or it is necessary to loosen the other spring).

**The direction of rotation of the motor does not correspond to the arrows on the switch**

- Swap the brown and black conductors in the switch.

**The Veranda rolls up without stopping**

- Use the relay box (R12).

**For Type 3 or 4: on motor rolls the fabric up, while the other unrolls it**

- Swap the brown and black conductors to one of the motors in the RELAY BOX.

**Automatic operation does not work**

- See the installation instructions for the wind/sun automatic system.