



# INSTRUCTIONS FOR INSTALLATION AND OPERATION OF THE EXTERNAL BLIND **ZF3000<sup>®</sup>-BX** - CORNER VERSION -



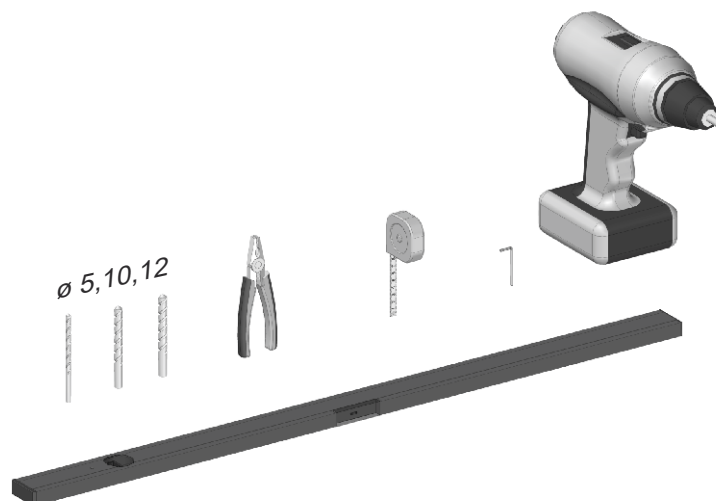
**Before starting installation of the external blind, please read the following instructions.**

During transportation and storage, the blind should lie horizontally in a place protected from damage to the entire structure. The blind should not be placed on the side wall. Any modifications or changes to the design of the external blind can only be made after consultation with the manufacturer.

Blinds should be installed on an even surface.

Installation of external blinds should be conducted by persons competent in the area of compliance with health and safety rules and applicable building regulations. In the case of external blinds operated with an electric drive, the installation can only be carried out by a person with appropriate permissions (SEP rights up to 1 kV).

**Directly before installation, unpack the blind and check if there are all elements necessary for its installation.**

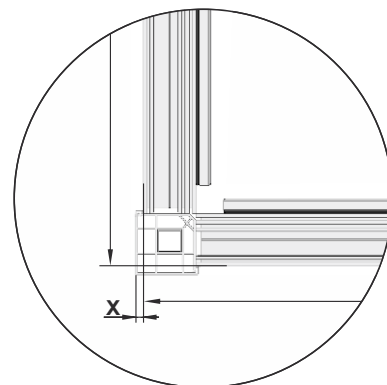
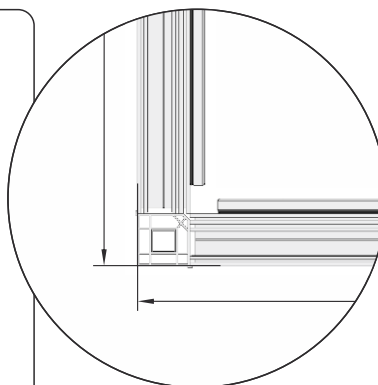
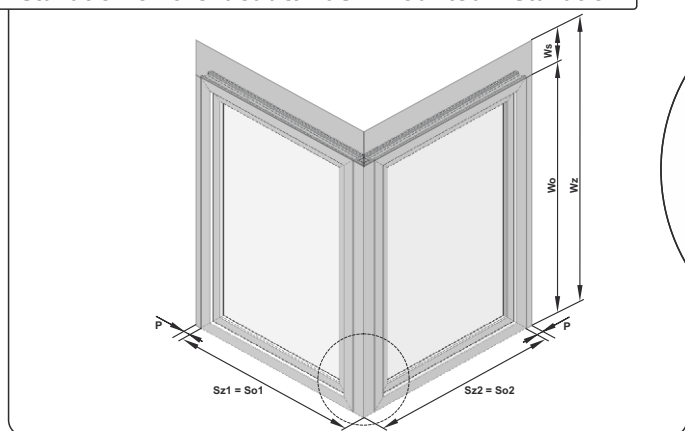


1. Tools needed to install the external blind. The PORTOS company does not provide screws, dowels, cables for placing the electrical installation.

## INSTALLATION WITH THE CORNER GUIDE/ WITH A GUIDING CORD

2. In the case of dimensioning, the smallest dimension taken, is the right dimension.

**Dimensioning – ZF3000 external blind aluminium guides, installation on the facade/ flush-mounted installation**



**EXPLANATIONS TO DIMENSIONING:**

**Sz** - blind width, **So** - hole/window frame width with the connector (do not measure the part of the connector sticking out of the window frame),

**Wz** - blind height, **Wo** - hole height, **Ws** - box height

**P** - guide width (27mm),

**Wz = Wo + Ws (- 2cm in order to avoid clearance between the window frame and the box)**

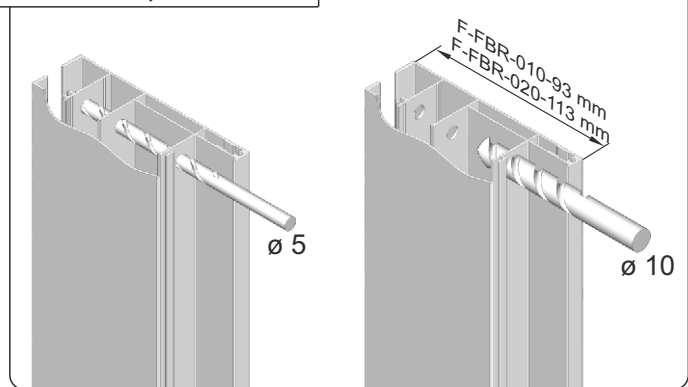
Installation on the facade: **Sz = So + P**

Flush-mounted installation: **Sz = window width\***

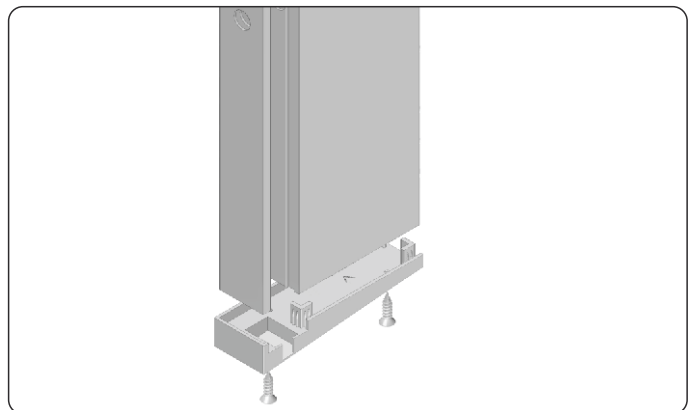
\* - It is recommended to take into account the installation clearance for free processing of wood elements.

NOTE - In the case of installation with a corner guide additionally enter the value (**X**) by which the corner connector extends beyond the window frame.

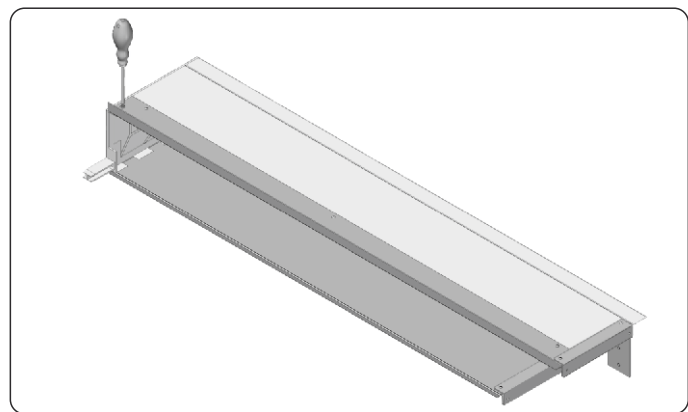
**F-FBR-010, F-FBR-020**



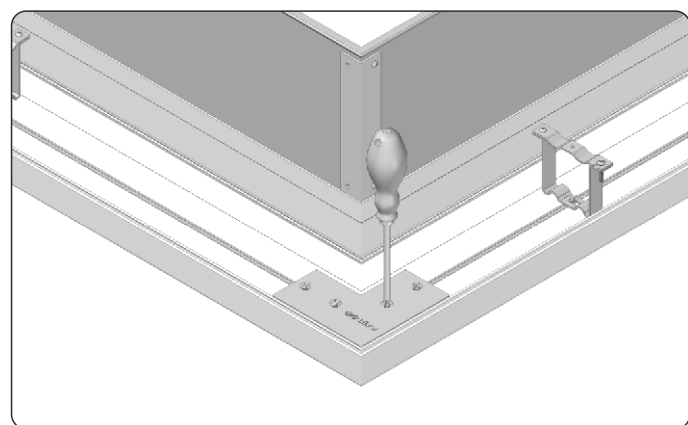
3. Drill holes in the guides. Using a drill of  $\varnothing 5$  mm make a hole through all chambers of the guide, and using a drill of  $\varnothing 10$  mm increase the hole in first wall on the outer side of the guide.



4. Prepare the guides - screw the bottom plugs to the guides using 3x16 screws.

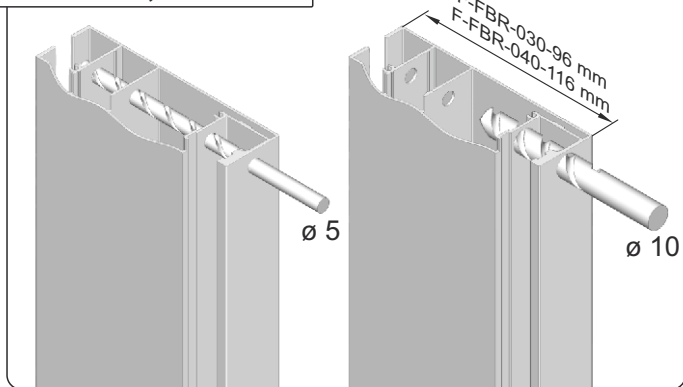


6. Before installation of the box, the inspection covers need to be unscrewed.

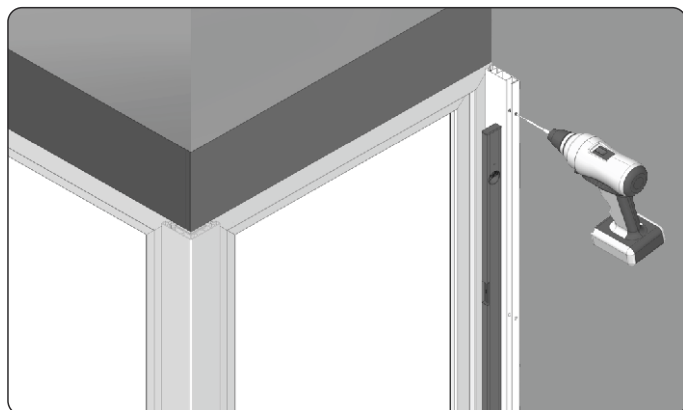


8. Position the boxes at 90 degrees and screw together with four screws.

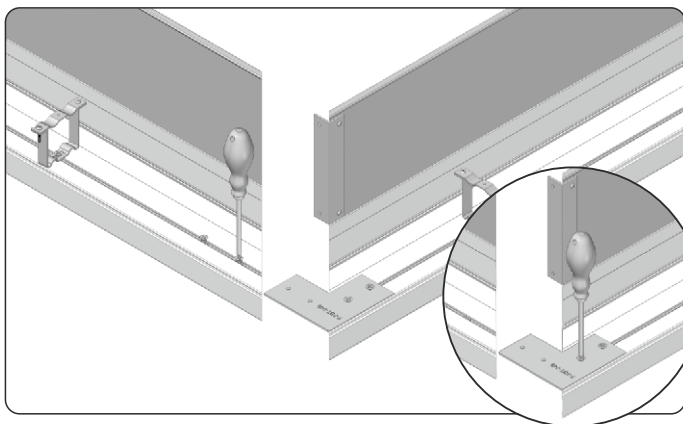
**F-FBR-030, F-FBR-040**



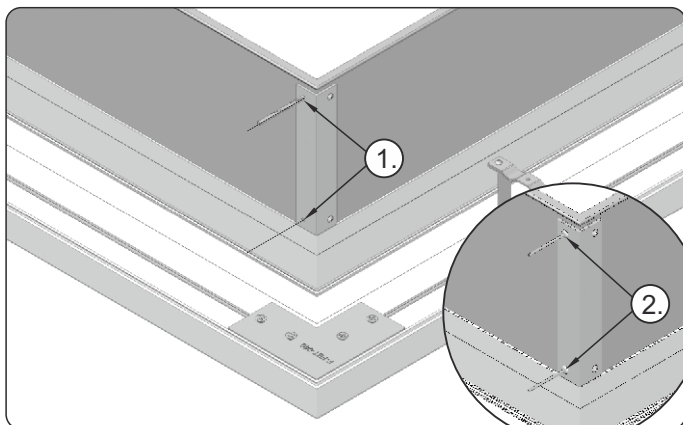
3a. Drill holes in the guides. Using a drill of  $\varnothing 5$  mm make a hole through all chambers of the guide, and using a drill of  $\varnothing 10$  mm increase the hole in first two walls on the outer side of the guide.



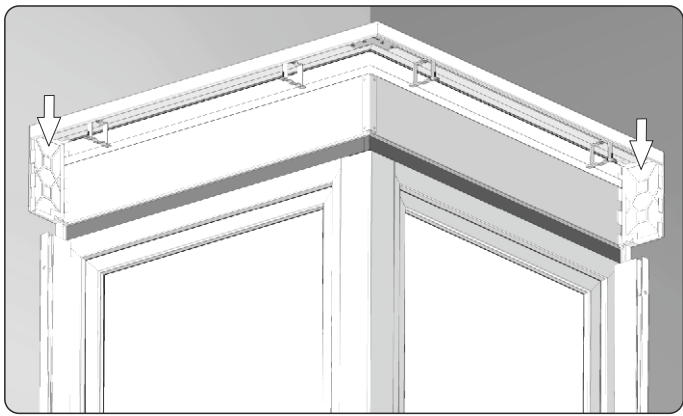
5. Fasten the guides to the window frame with appropriate screws - minimum three per side. (The PORTOS company offers guide drilling free of charge).



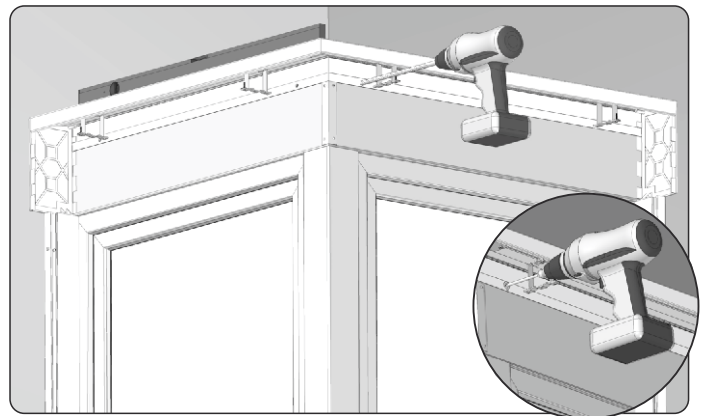
7. Loosen the 4 bolts of the angular connector.



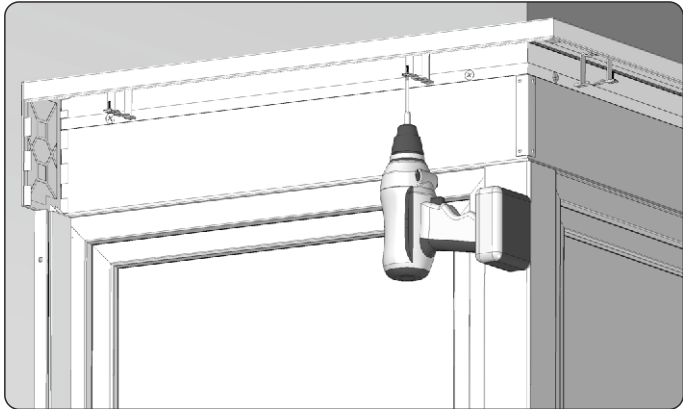
9. Rear blind window should be placed against the riveted corner and make holes  $\varnothing 4$  mm (1). Rivet the corner with rear blind window (2).



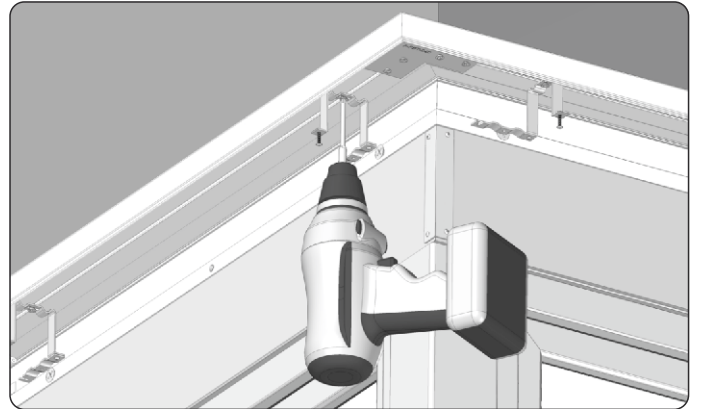
10. Install the assembled box on the guides.



11. Drill the holes for anchoring in the top part of the box, then screw it to the lintel with appropriately selected screws.

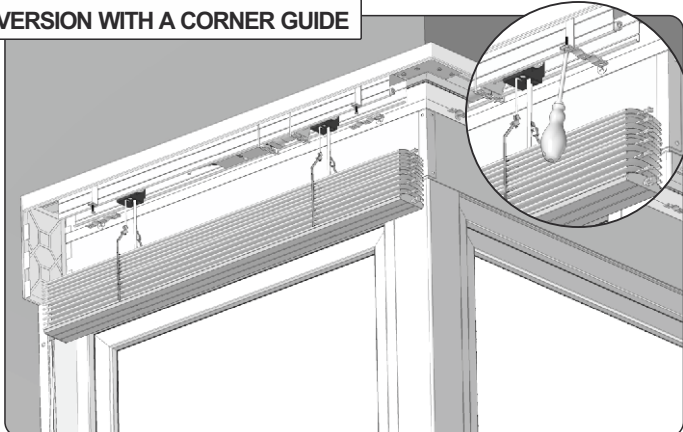


12. Loosen the handle screws.



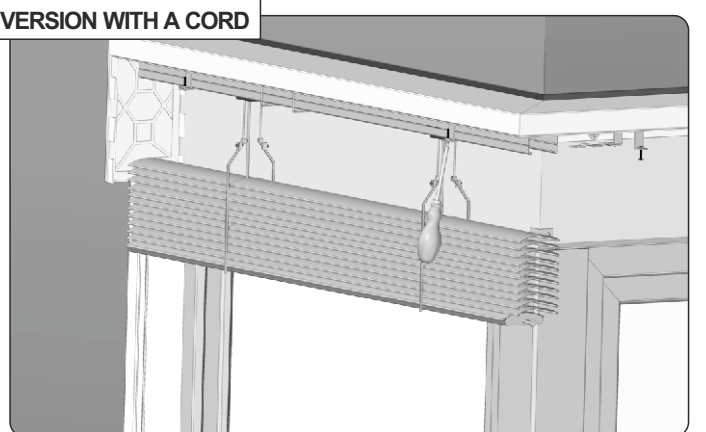
13. Set the top rail handles so that they do not collide with the bearing or the motor.

**VERSION WITH A CORNER GUIDE**



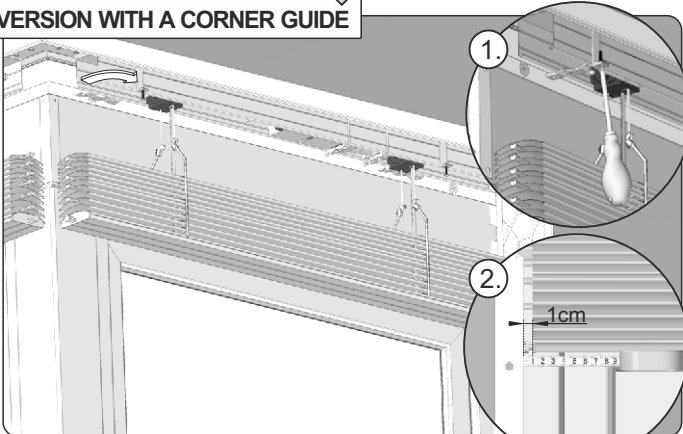
14. Install the blind package into the open handles in such a way that the "WINDOW SIDE" label with information about the installation side, is on the window side.

**VERSION WITH A CORD**



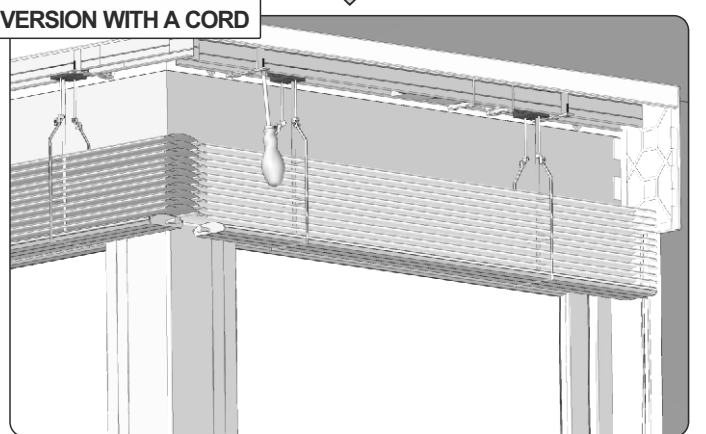
14a. Install the blind package into the open handles in such a way that the "WINDOW SIDE" label with information about the installation side, is on the window side.

**VERSION WITH A CORNER GUIDE**



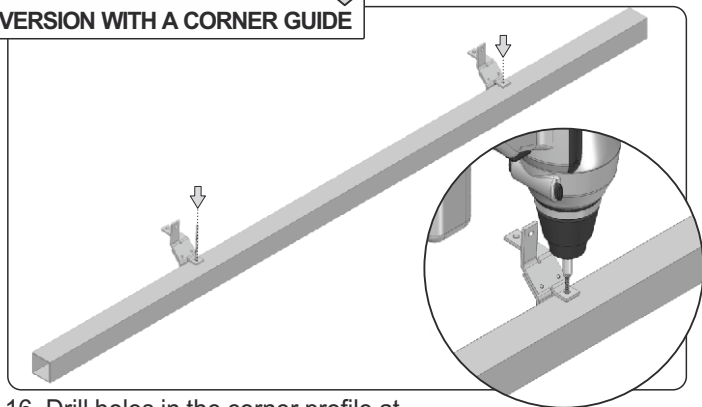
15. Close the top rail handles and tighten the screws (1), the gap between the end of the slat and F-FBR-030, F-FBR-040 guide should be 1 cm (2).

**VERSION WITH A CORD**



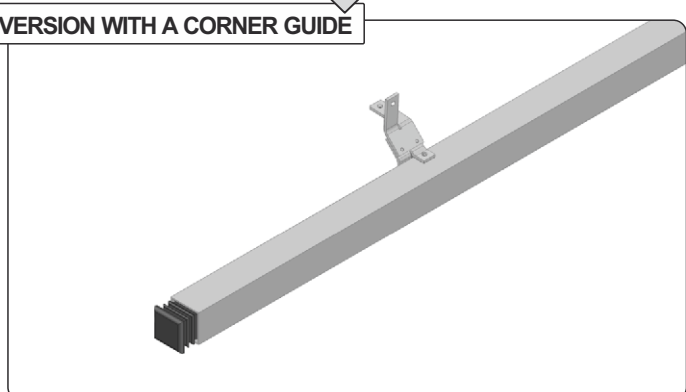
15a. Close the top rail handles and tighten the screws.

**VERSION WITH A CORNER GUIDE**



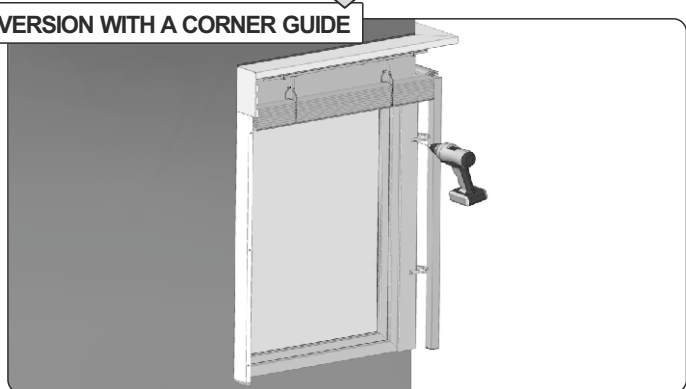
16. Drill holes in the corner profile at a distance of 30-40 cm from the top and bottom for the guide handles with a  $\varnothing$  2.5 mm drill. Then screw the handles to the guide with a 3.5x30 screws.

**VERSION WITH A CORNER GUIDE**



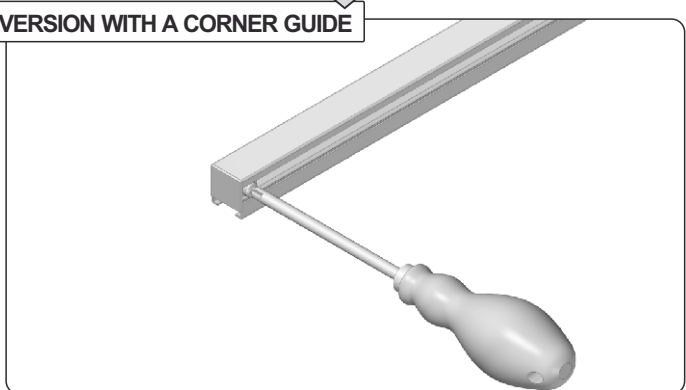
17. Put the bottom plug from the bottom of the corner profile.

**VERSION WITH A CORNER GUIDE**



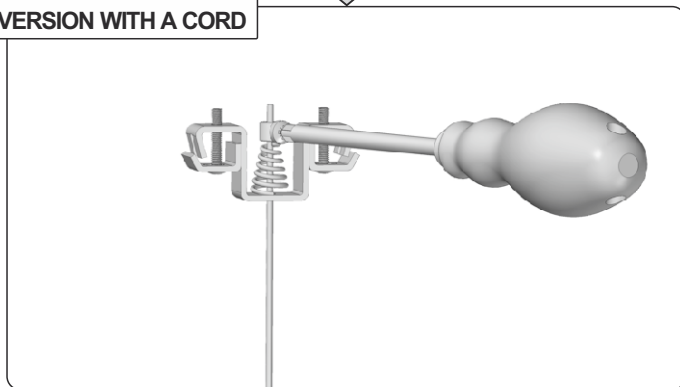
18. Screw the corner profile with appropriate screws.

**VERSION WITH A CORNER GUIDE**



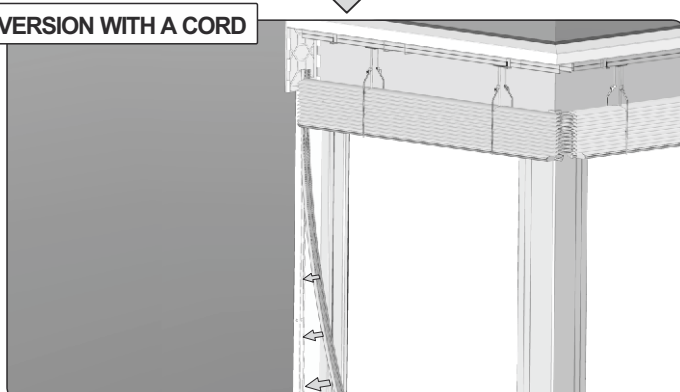
19. Prepare the guides screwing the guide end caps in their bottom part.

**VERSION WITH A CORD**



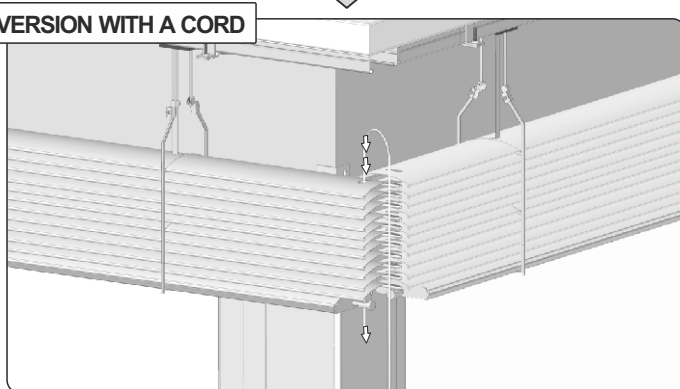
16a. Screw the top part of the cord handle as in Figure above.

**VERSION WITH A CORD**



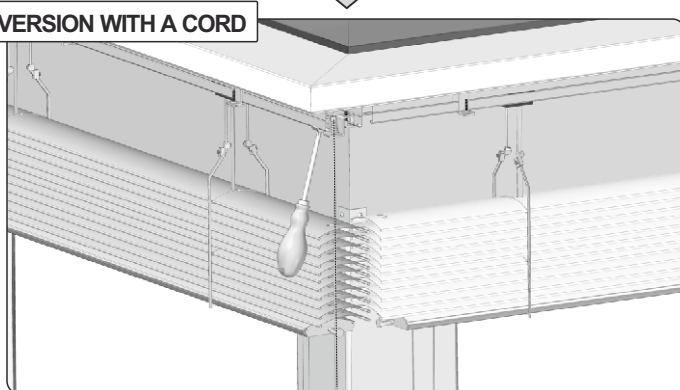
17a. Put the F-RSC-340 guide insert into the side guides.

**VERSION WITH A CORD**



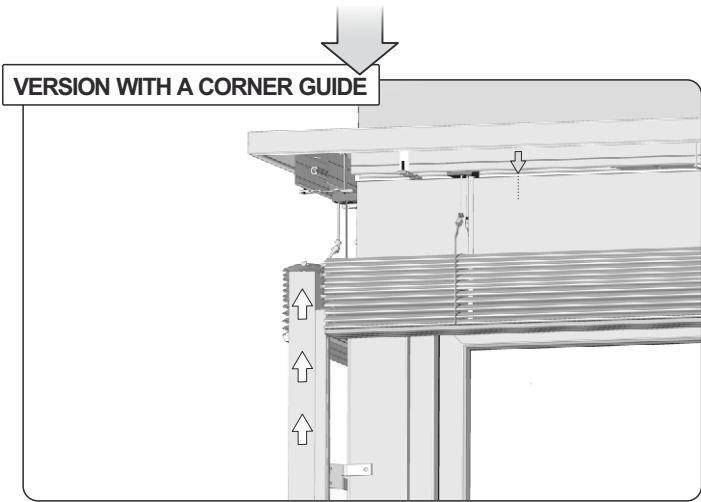
18a. Run the cord through all holes in the slats.

**VERSION WITH A CORD**



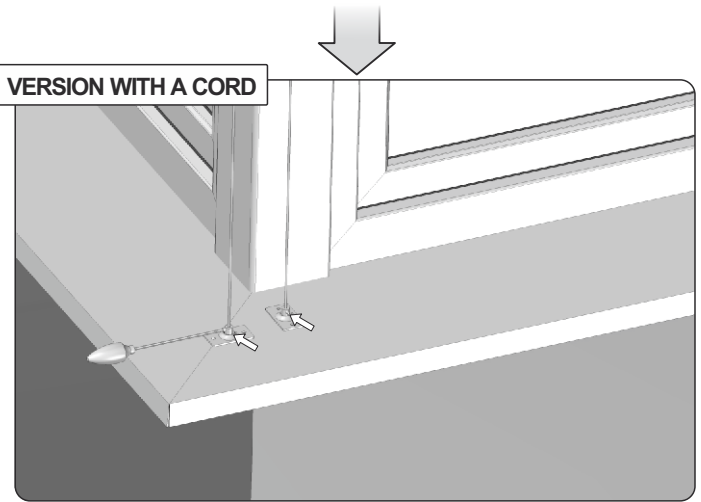
19a. Screw the previously prepared top part of the cord handle so that it is in one vertical line with the holes in the slat.





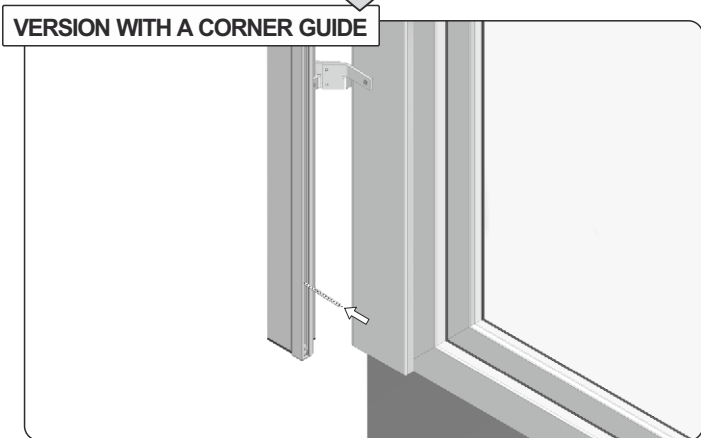
VERSION WITH A CORNER GUIDE

20. Slide slat pins into the guides as in figure above.



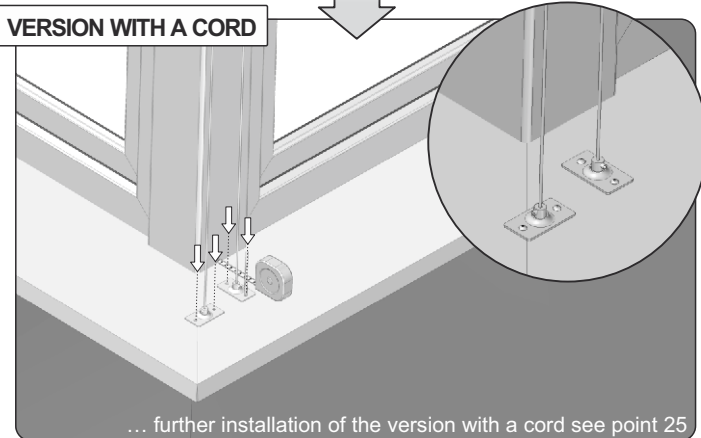
VERSION WITH A CORD

20a. Measure appropriate length of the cord from the bottom, then cut it and screw into the bottom handle.



VERSION WITH A CORNER GUIDE

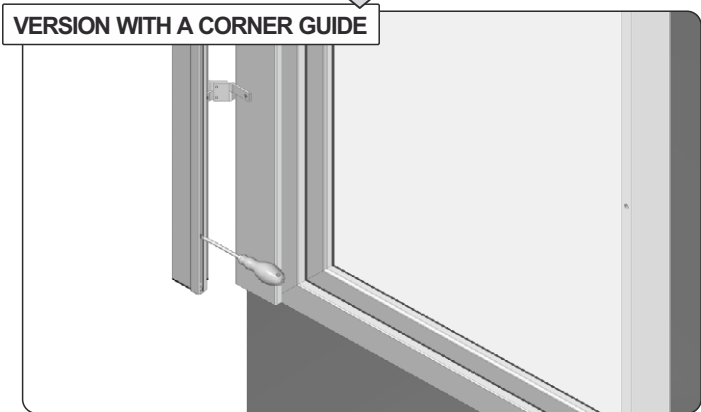
21. Drill holes in the guide and one side of the corner profile with a drill of  $\varnothing$  2 mm (flush PP20 guides with the corner profile).



VERSION WITH A CORD

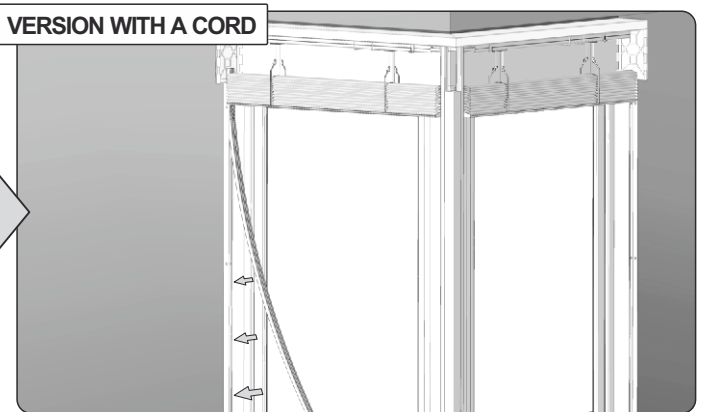
... further installation of the version with a cord see point 25

21a. Measure the appropriate distance between the handle and a window frame, set accordingly to the blind width. Make holes with a drill, then install cord handles to the ground.



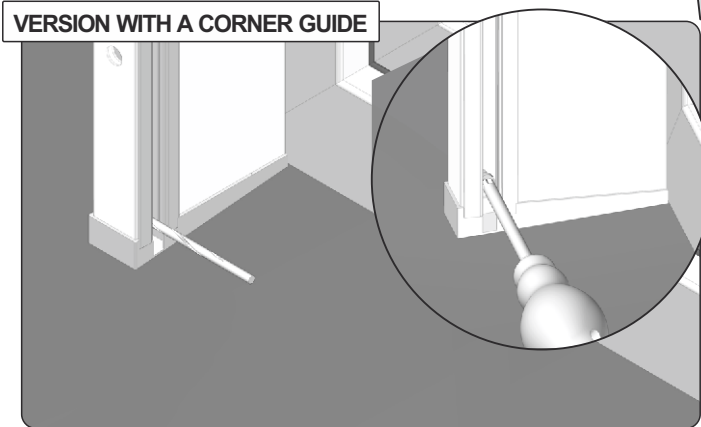
VERSION WITH A CORNER GUIDE

21. Screw PP20 guides to the corner profile with a 2.5x6 mm screw every 50 cm.



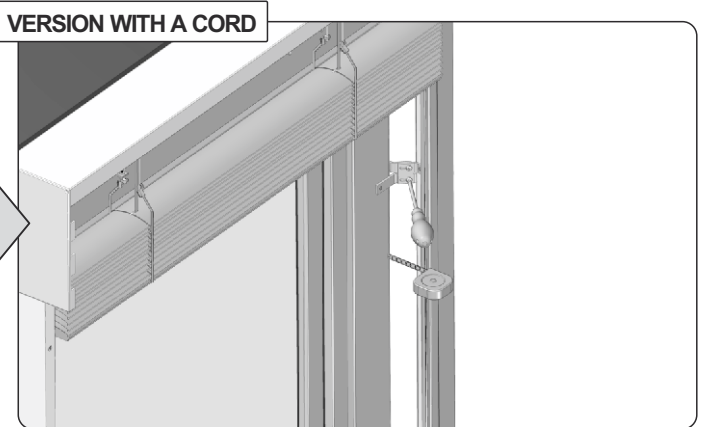
VERSION WITH A CORD

22. Put the F-RSC-340 guide insert into the side guides.



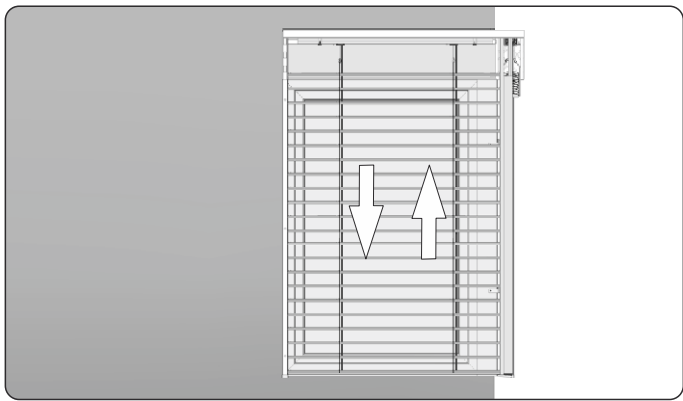
VERSION WITH A CORNER GUIDE

23. Drill one hole at the bottom of the guide insert with a  $\varnothing$  2 drill, then screw the insert to the guide with a 2.5x6 mm screw.

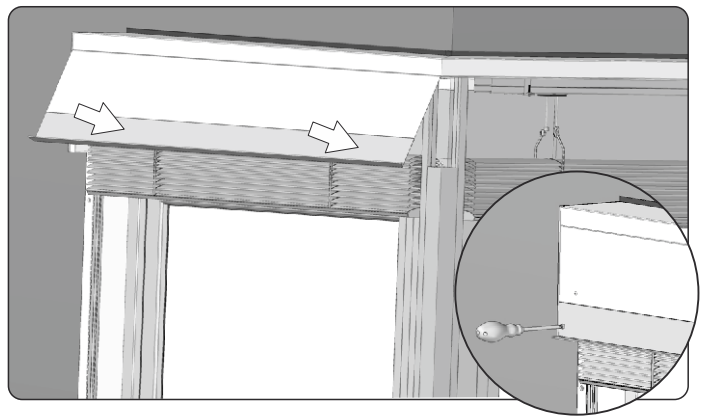


VERSION WITH A CORD

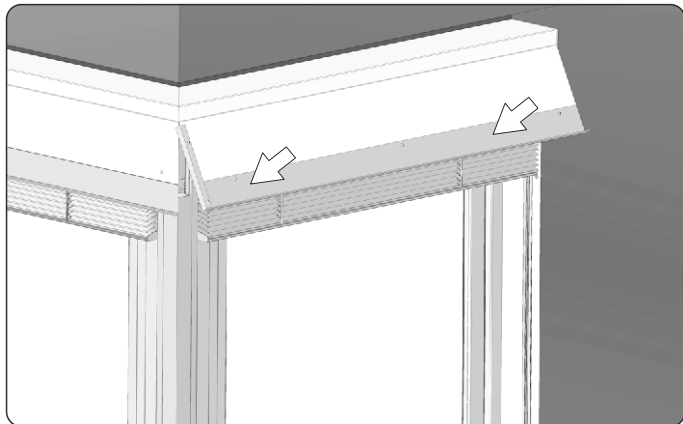
24. Position the handles of the corner guide so that the value between the window profile (the thickness of the corner profile must be subtracted) and the centre of the guide channel F-FBR-030 is 83 mm, F-FBR-040 - 103 mm.



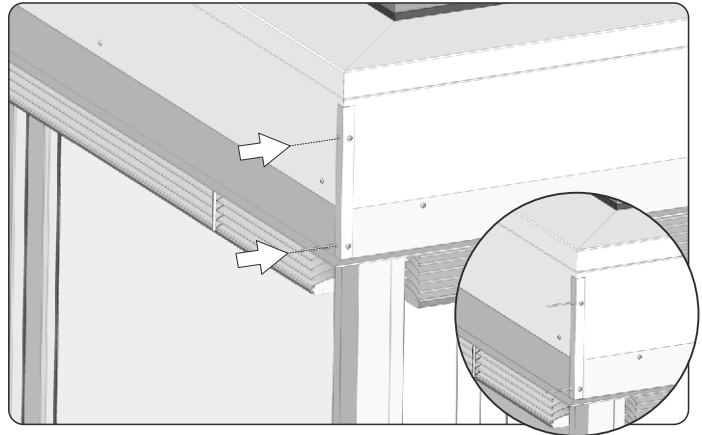
25. Check the correct operation of the blind by lowering and lifting it several times.



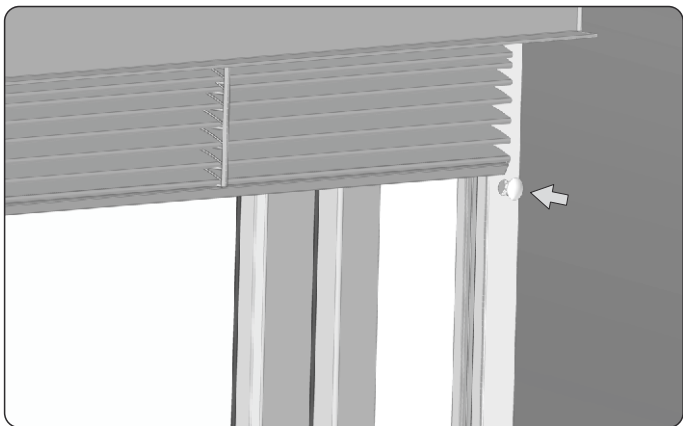
26. Insert the first inspection cover, then screw it with the screws.



27. Insert the second inspection cover.



28. Drill holes in the corner with a  $\varnothing$  4mm drill, then use 4x8 rivets.

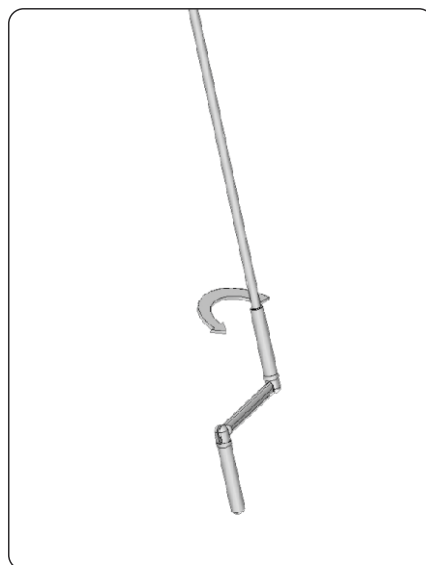
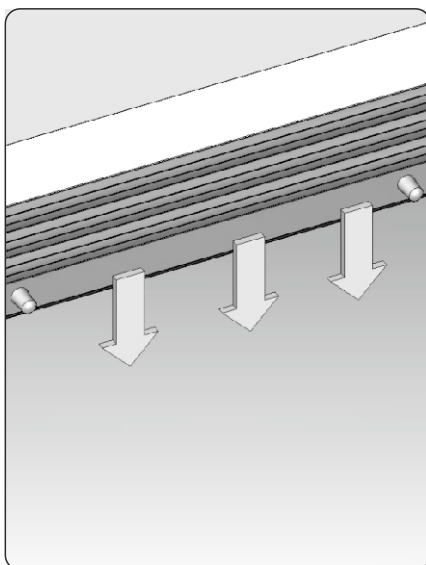
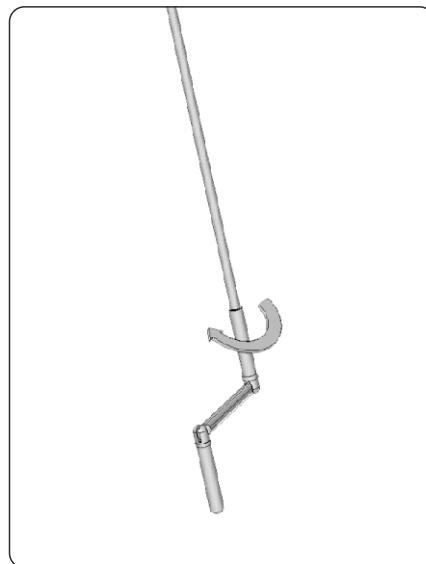
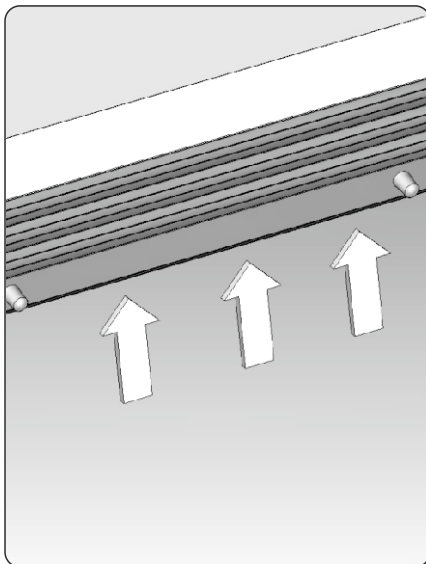


29. After screwing the guides, insert the covering end caps into the holes.

# INSTRUCTIONS FOR OPERATION OF THE EXTERNAL BLIND

## 1. Drive for cardan crank.

The operation of the crank lifting mechanism requires special caution and skills because the gear used allows for obtaining large forces that may damage the elements of the external blind. Therefore, stop turning the crank when you feel resistance or notice that the blind curtain has stopped during lifting or lowering. In external blinds, turning the crank clockwise causes lifting the blind curtain, while turning the crank counter-clockwise causes lowering the blind curtain.





## **2. Drive for the motor.**

Press the key of the remote/ switch with the appropriate marking of the blind movement direction (up/ down). At this moment the blind will start lifting or lowering. To stop the motor operation, press the MY button on the remote (in the case of a switch, release the key or press the key with the opposite direction). When the blind is fully open or closed, the motor will be automatically stopped by the limit switch. Use the scroll wheel on the remote for precise setting the position of the external blind slats.

In case of noticing that the blind curtain has stopped and the motor is still running, stop the motor immediately by pressing the MY button on the remote (in the case of a switch with non-support mode release the key or in the case of a switch with support mode press the key with the opposite direction). The motor has a thermal switch that stops the operation after reaching a certain temperature. The time of continuous motor operation is about 4 minutes. Then, the motor can be turned off until it cools down, i.e. for about 4 to 5 minutes, while the total time needed for cooling the drive is 30 minutes.

### **Emergency situations:**

1. It should be noted that in winter during strong frosts, do not leave the blind partially lifted when opening the window. The difference in temperatures causes the water vapor to deposit on the blind and consequently its subsequent freezing. Therefore, before opening the window, the blind slats should be fully lifted.
2. In winter, slats may be covered with ice and frozen to the ground. An attempt to open a blind in such a situation may lead to breaking of the curtain (especially with the electric drive). In the period of snowfalls or heavy frosts, before activating the blind, check that there is no ice or snow on the window sill or in the guides. If the blind is icy, crush the ice gently or wait for it to melt.
3. During the expected snowfalls or strong frosts it is recommended to turn off the timer control and operate the blinds manually, controlling their opening and closing.
4. In the event of possible strong gusts of wind, it is recommended to leave the blinds with the slats fully lifted.

### **Maintenance:**

The basic rules for the product maintenance consist of cyclical monitoring of the correctness of coiling and uncoiling the blinds, precise positioning of the end positions and cleaning of accessible elements of the product. The blind should be cleaned with a soft cloth using generally available cleaning agents. The use of pressure washers, strong cleaning agents and solvents is forbidden. When cleaning the product, it is absolutely not advisable to use sharp tools and cleaning agents that cause scratches. In the case of cleaning the product, it is unconditionally necessary to prevent the possibility of water getting into the top rail of the product.

## **Safety regulations:**

1. Do not stay in the blind operation area during lifting and lowering.
2. When using the blind, attention should be paid to the condition of the tape and ladder. Their damage may cause the slats to fall automatically and damage to the blind elements.
3. In case of finding any part of the blind damaged or irregularities in its operation, cease its operation and call the service. Using a damaged or a defective blind may result in a risk to the user's health and life.
4. In the case of replacement of damaged elements, use only original spare parts.
5. In the event of a breakdown, it is forbidden to make any temporary repairs.
6. Any work related to the repair or replacement of damaged parts of the external blind may only be performed by a trained person. Self-repair attempts may result in the loss of the warranty.
7. The remote control elements should be stored in places that are difficult to reach for children.
8. Do not use the product with visible signs of damage or wear of the electrical wiring.

## **Zalecenia:**

Żaluzja zewnętrzna PORTOS jest budowlanym elementem otworowym stanowiącym dodatkowe zabezpieczenie zamkniętego otworu okiennego lub drzwiowego. W przypadku montażu w innym otworze żaluzja nie podlega gwarancji.

Folię ochronną należy usunąć w ciągu 3 tygodni od daty montażu, nie później jednak niż 2 miesiące od daty odbioru towaru od producenta rolet.

Dokonanie wszelkich czynności w zakresie programowania sterowników, przełączników lub silników z uwzględnieniem regulacji pozycji krańcowych powinno odbyć się po montażu rolet lub bram przez monterów.

Podczas mrozów żaluzje mogą przymarzać. Należy wtedy stronić od gwałtownychciągnięć i zrezygnować przy mocno zamarzniętych żaluzjach z otwierania czy zamykania.

Uszkodzenia powstałe w wyniku nie dostosowania się do wyżej wymienionych zaleceń nie będą uznawane.



**WARNING - FOLLOWING THESE INSTRUCTIONS  
IS IMPORTANT FOR THE SAFETY OF PERSONS.  
KEEP THESE INSTRUCTIONS**



**PORTOS TR7**

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