



INSTRUCTIONS FOR INSTALLATION AND SERVICE OF **ZF3000**[®] EXTERNAL BLIND



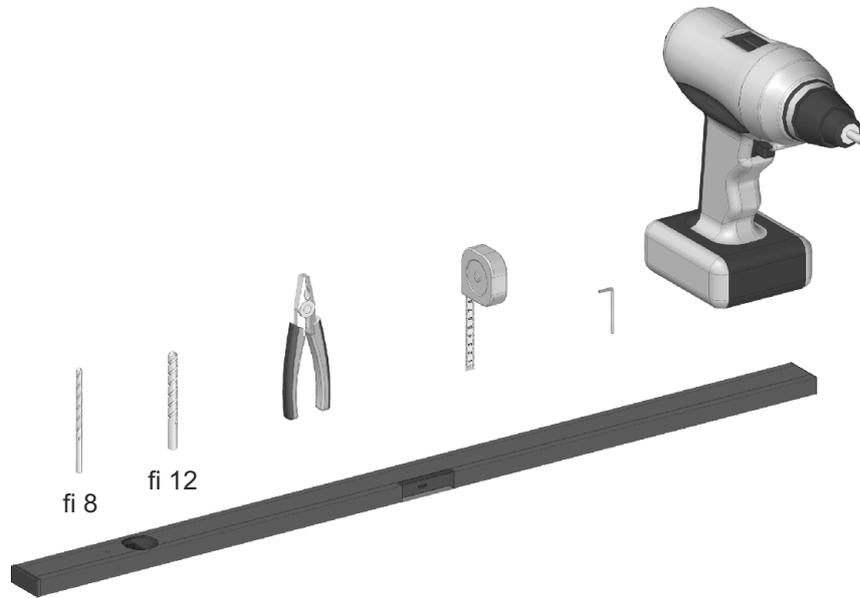
Before starting installation of the external blind, please read the following instructions.

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 mounted 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.

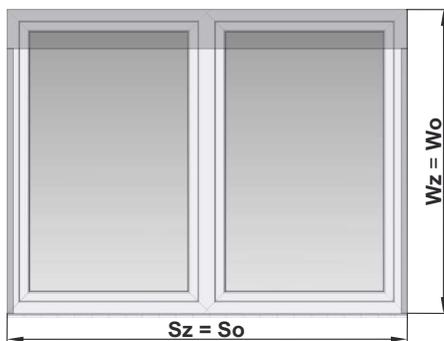


1. Tools needed to install the external blind. The PORTOS company does not provide screws, dowels, cables for placing the electrical installation.

INSTALLATION WITH GUIDES

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

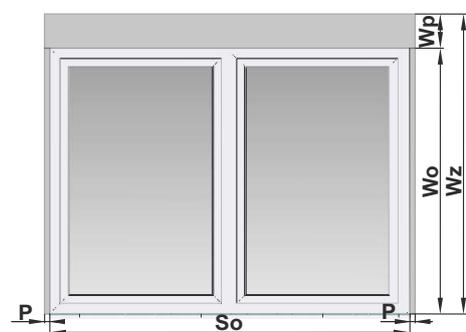
Dimensioning - ZF3000 external blind, aluminium guides, installation in the window



EXPLANATIONS TO DIMENSIONING:

Sz - blind width, **So** - hole width
Wz - blind height, **Wo** - hole height
Sz = So, Wz = Wo

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

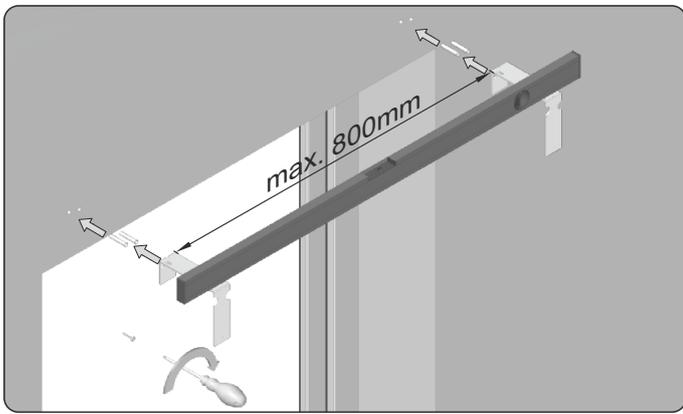


EXPLANATIONS TO DIMENSIONING:

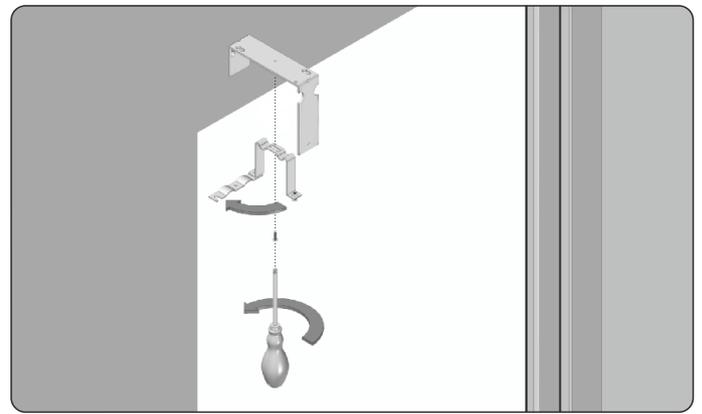
Sz - blind width (slat width), **So** - hole width
Wz - blind height, **Wo** - hole height, **Wp** - package height
P - guide width (20mm), **Wbo** - height of the safety plate
Wz = Wo + Wp* or Wbo
INSTALLATION ON THE FACADE: **Sz = So + 2 x P**
FLUSH-MOUNTED: **Sz = window width****

* - When adding the package height and subsequent adding a higher safety plate - the plate may enter the frame opening/hole.

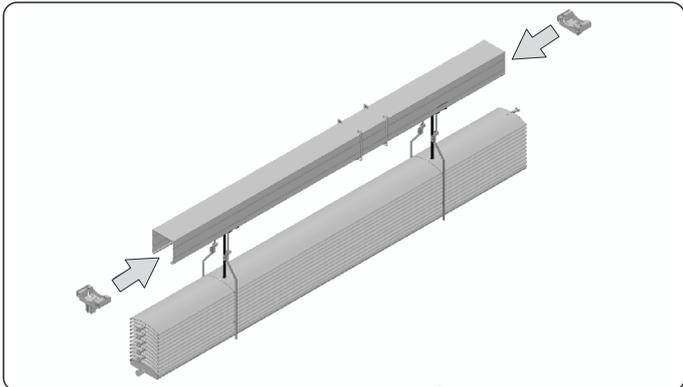
** - It is recommended to take into account the installation clearance for free processing of wood elements.



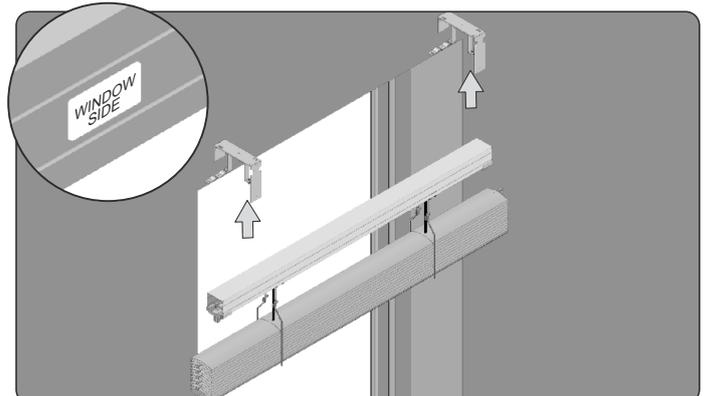
3. The installation place of wall handles should not interfere with the proper functioning of the blind lifting and lowering mechanisms (crank, motor). The maximum distance between the handles should not exceed 800mm.



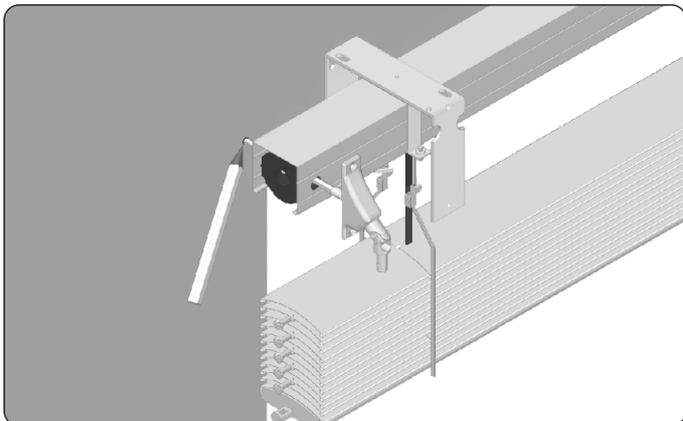
4. Screw the top rail handle to the mounted wall handle.



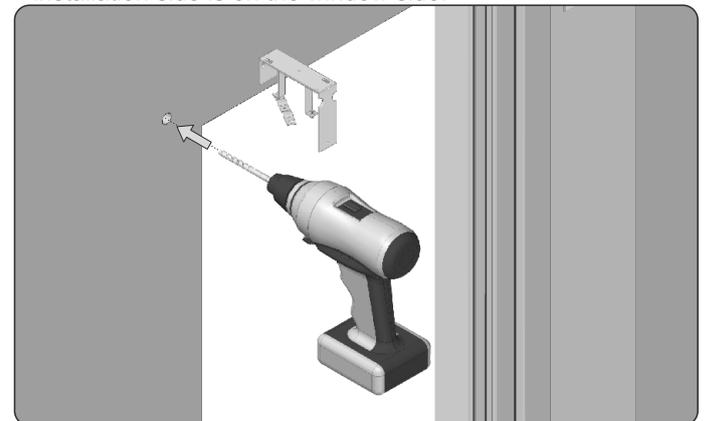
5. Install the top guide handles on the extreme edges of the top rail.



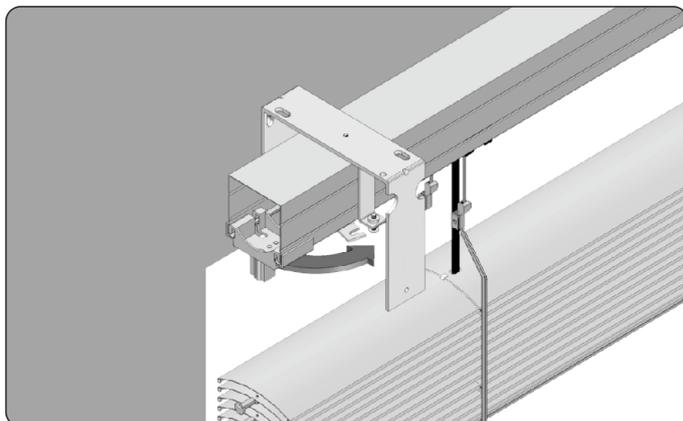
6. Install the blind package into the open handles in such a way that the "WINDOW SIDE" label with information about the installation side is on the window side.



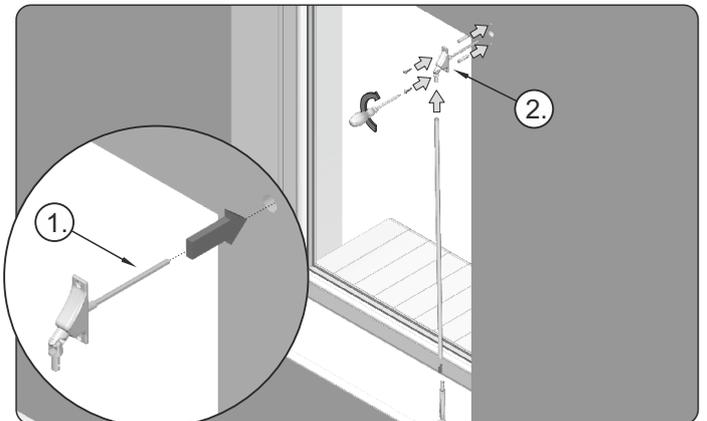
7. In the case of external blinds with manual drive, mark the place for the opening for the control wire after the installation of the package.



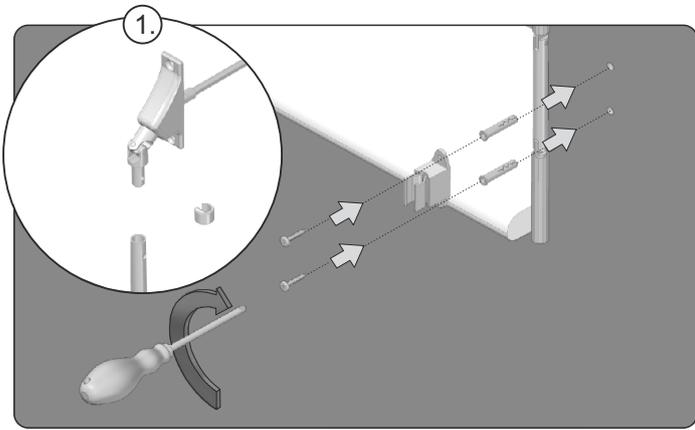
8. Uninstall the package, drill a hole with $\phi 12$ drill in the window frame or in the wall (depending on the installation type) for the control wire and re-install the package into the top rail handle.



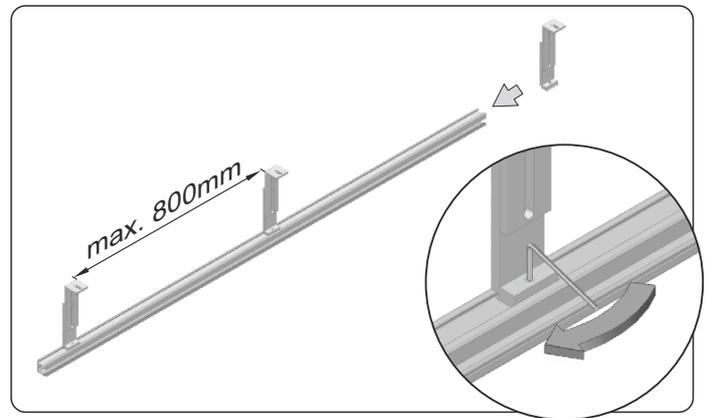
9. Close the top rail handles and tighten the screws.



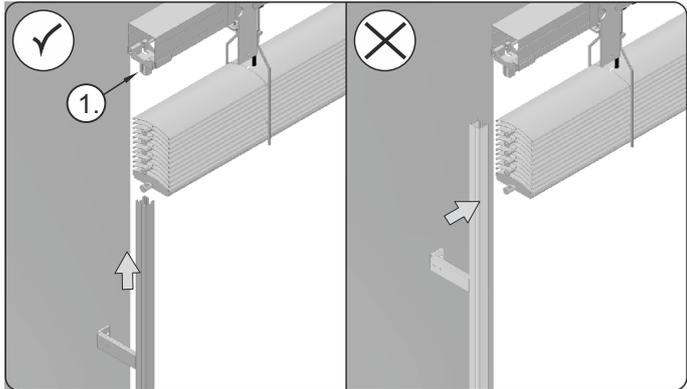
10. In the case of external blinds with manual drive, after installing the blind package, put the crank pin (1.) in the manual drive gear by placing it from the inside of the room through the previously prepared hole in the wall or window depending on the installation method. Screw the manual drive guide (2.) to the wall ...



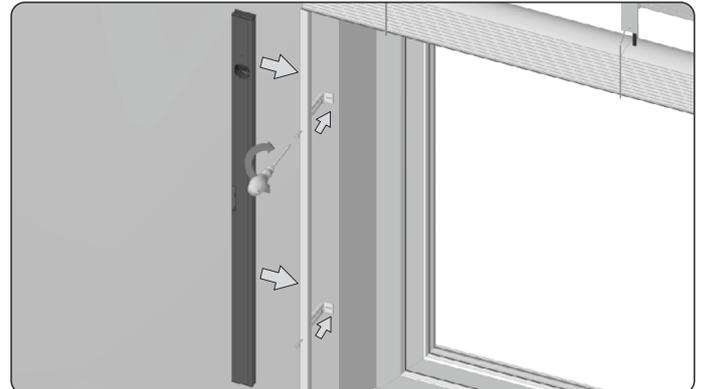
11. Join the guide with the supplied crank by means of connecting elements (provided by the PORTOS company) as in Figure 1. Install the crank clip to the wall with screws (dowels).



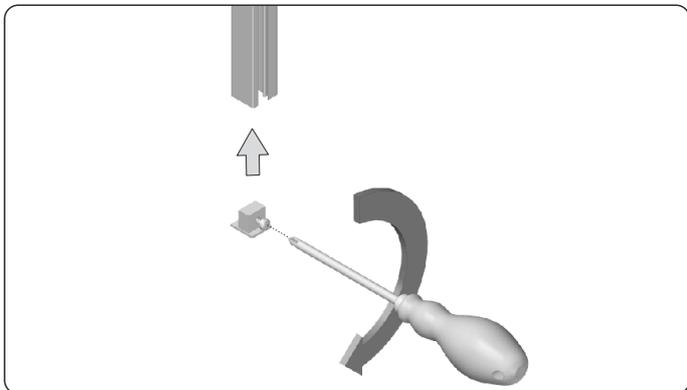
12. Slide the guide handle into the rear wall of the guide and block the handle by tightening the grub screw. The maximum distance between the handles should not exceed 800mm.



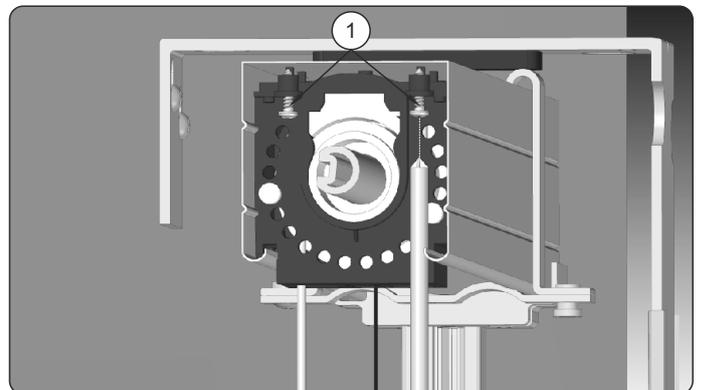
13. Slide the guide with the handles onto the slat pins upwards from the bottom of the blind. Insert the handle pins (1.) carefully into the upper part of the guides. Check if the elements are installed correctly. Do not push the blind guides onto the pins which may damage the guides.



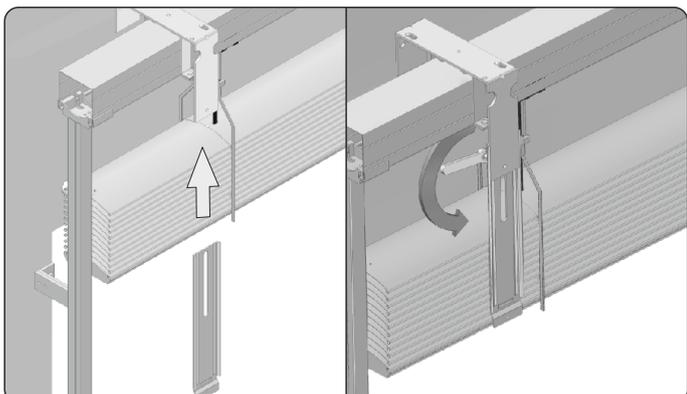
14. Measure the position of the guide axis carefully, then screw the guides to the ground.



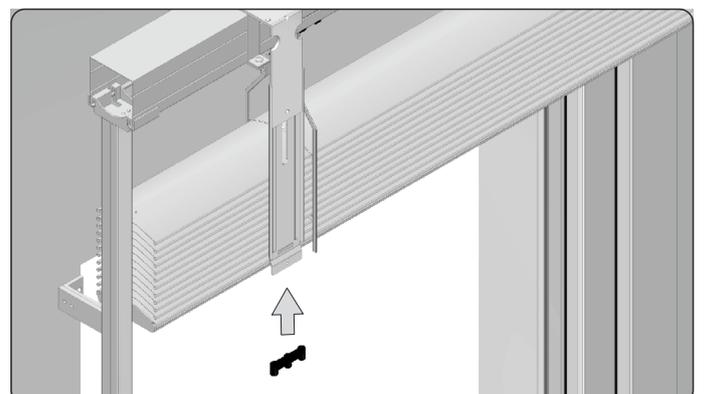
15. Install the guide end caps.



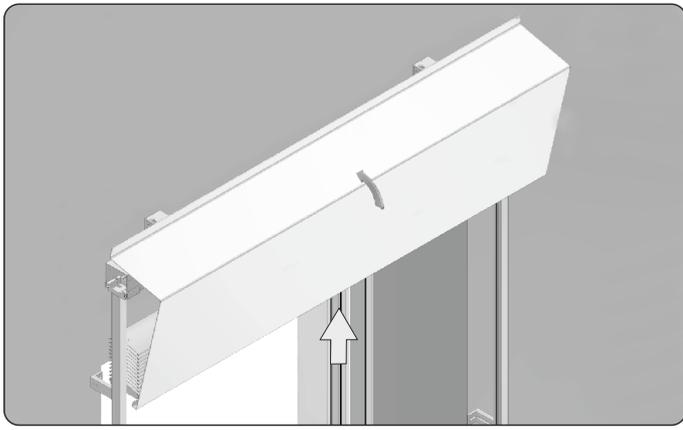
16. After checking the correctness of the external blind operation, set the roller mechanism in a vertical axis with the winding tape, and then tighten the counter screws (1).



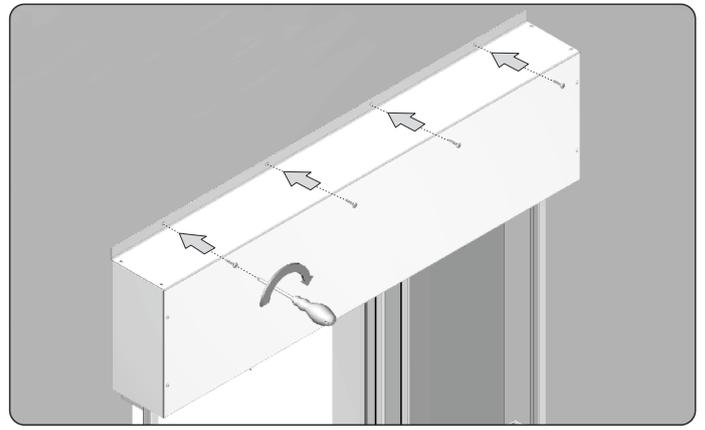
17. Insert safety plate extensions into previously installed wall handles and screw them.



18. Place the extension silencing element onto the lower parts of the extensions.



19. Put the safety plate against the assembled structure in order to fit the elements precisely.



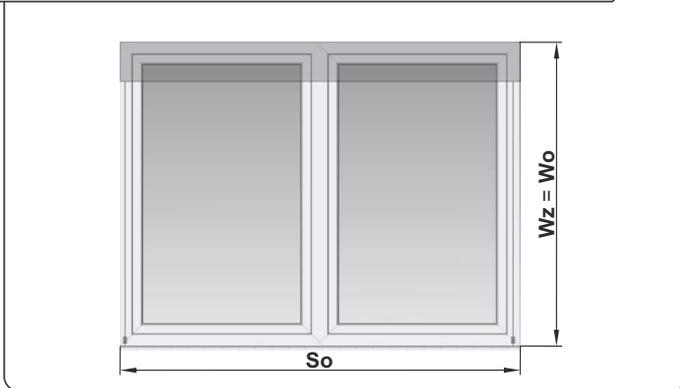
20. Screw/ rivet the safety plate with the assembled sides to the pre-assembled wall handles with extensions.

Machining of the installed blind and guides must allow subsequent service access requiring the removal of the guides.

INSTALLATION WITH A GUIDING CORD

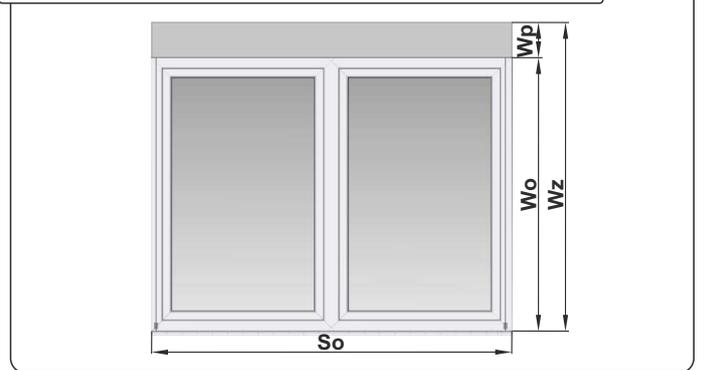
2. In the case of dimensioning, the dimension smallest from the measurements taken is the right dimension.

Dimensioning - ZF3000 external blind cord leading, installation in the window recess



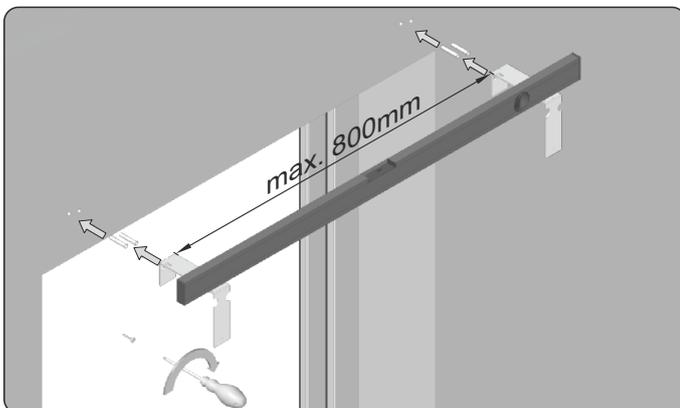
EXPLANATIONS TO DIMENSIONING:
Sz - blind width (slat width), **So** - hole width
Wz - blind height, **Wo** - hole height
Sz = So - installation clearance (1 cm per side), **Wz = Wo**

Dimensioning - ZF3000 external blind cord leading, installation on the facade/flush-mounted

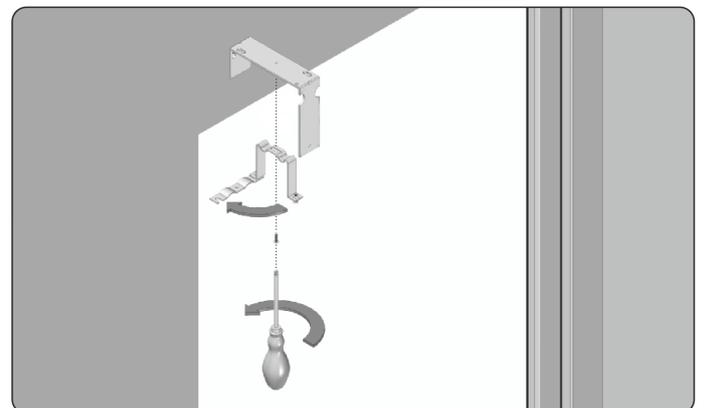


EXPLANATIONS TO DIMENSIONING:
Sz - blind width (slat width), **So** - hole width
Wz - blind height, **Wo** - hole height, **Wp** - package height
Sz = So + slat overlap on the facade, **Wbo** - height of the safety plate
Wz = Wo + Wp* or **Wbo**
INSTALLATION ON THE FACADE: Sz = So + slat overlap on the facade
FLUSH-MOUNTED: Sz = window width**

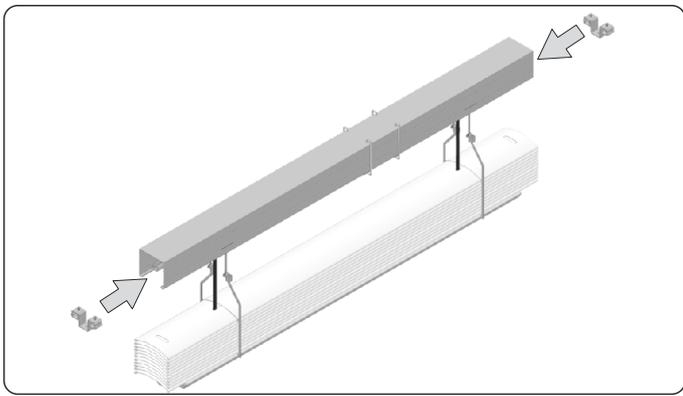
* - When adding the package height and subsequent adding a higher safety plate - the plate may enter the frame opening/hole.
 ** - It is recommended to take into account the installation clearance for free operation of the blind.



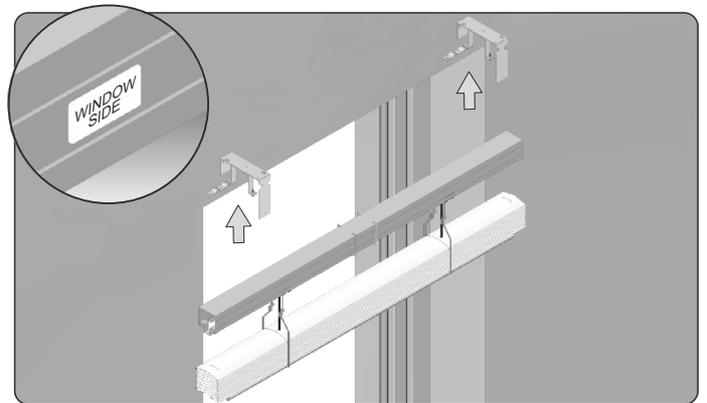
3. The installation place of wall handles should not interfere with the proper functioning of the blind lifting and lowering mechanisms (crank, motor). The maximum distance between the handles should not exceed 800mm.



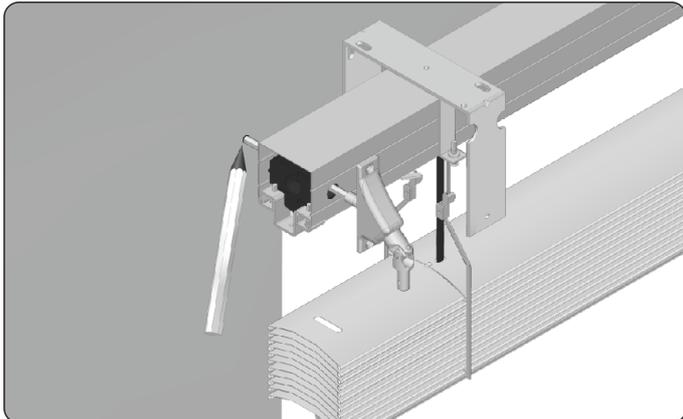
4. Screw the top rail handle to the mounted wall handle.



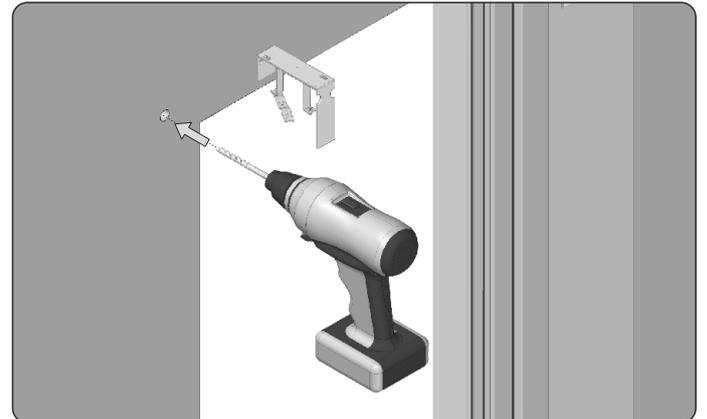
5. Install the top cord handles on the extreme edges of the top rail.



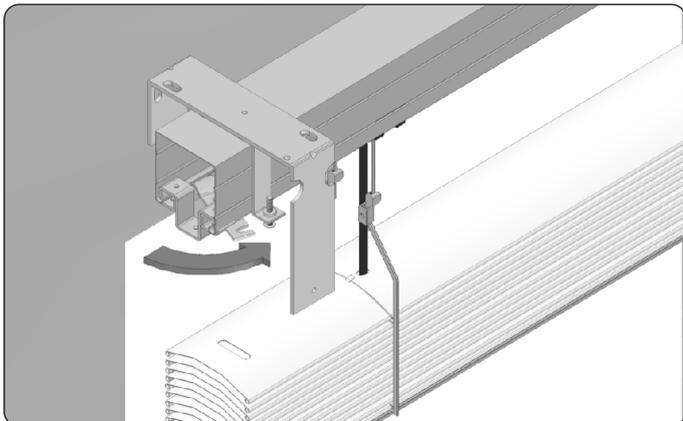
6. Install the blind package into the open handles in such a way that the "WINDOW SIDE" label with information about the installation side is on the window side.



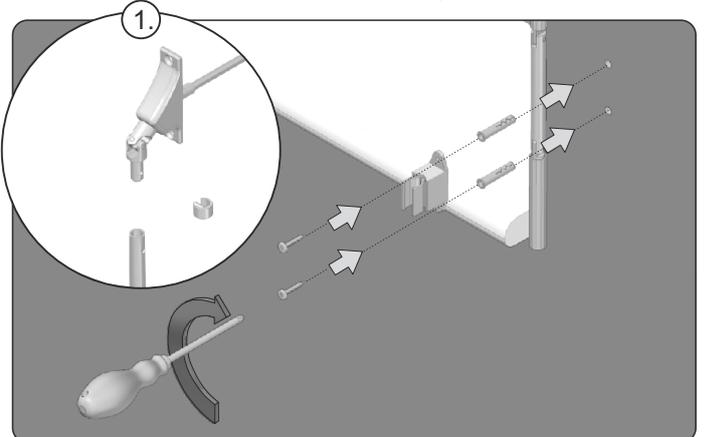
7. In the case of external blinds with manual drive, mark the place for the opening for the control wire after the installation of the package.



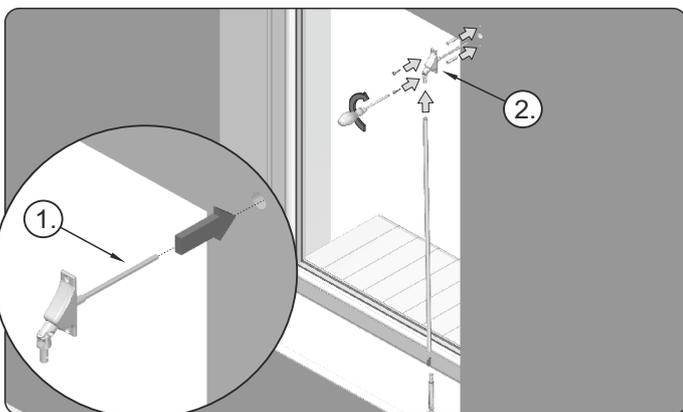
8. Uninstall the package, drill a hole with fi 12 drill in the window frame or in the wall (depending on the installation type) for the control wire and re-install the package into the top rail handle.



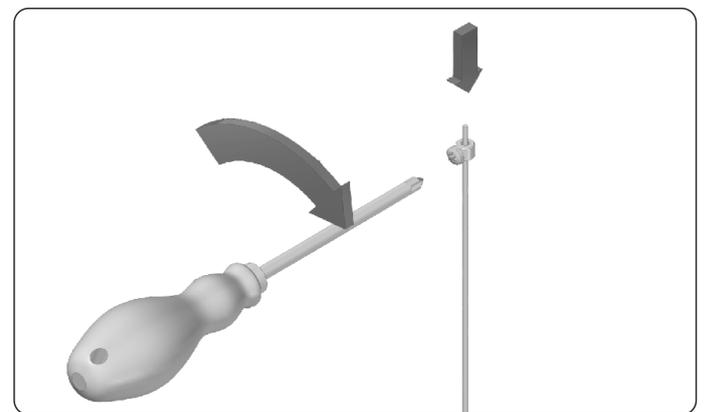
9. Close the top rail handles and tighten the screws.



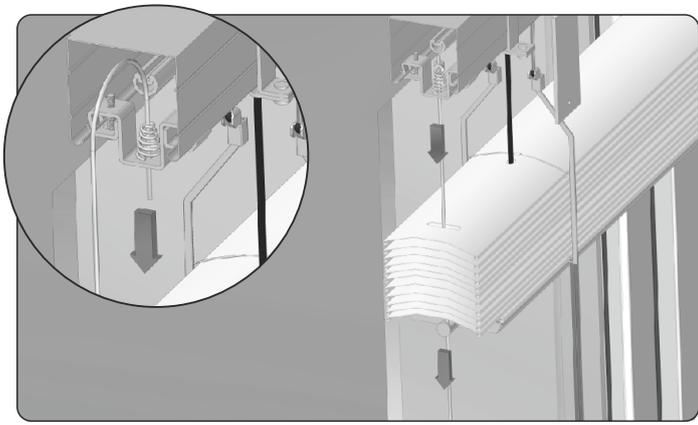
10. Join the guide with the supplied crank by means of connecting elements (provided by the PORTOS company) as in Figure 1. Install the crank clip to the wall with screws (dowels).



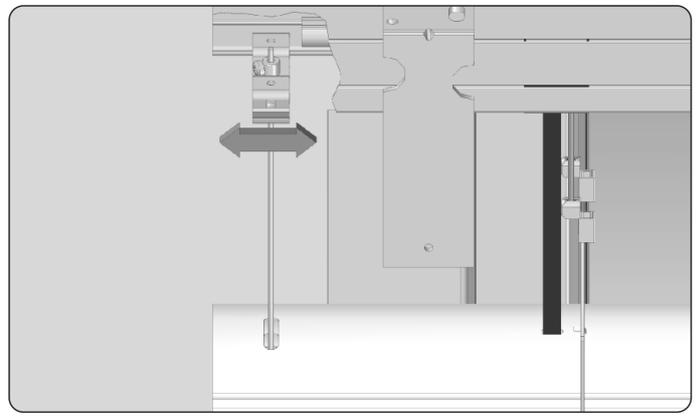
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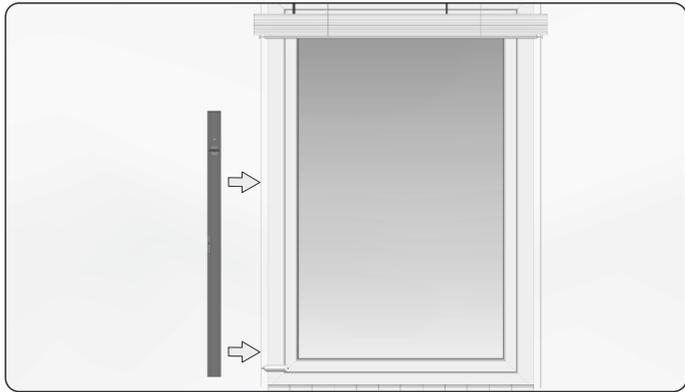
12. Put the stop ring onto one of the cord guide ends and then block the ring against sliding down by tightening the adjustment screw.



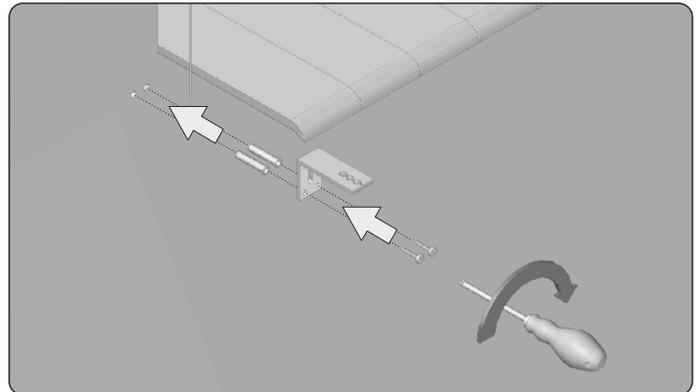
13. The cord with the stop ring should be run through the spring and the hole in the cord guide handle installed in the top rail and then through all holes in the slats and the bottom lath pin. The maximum extra length of the cord remaining in the top rail should not be longer than 1 cm.



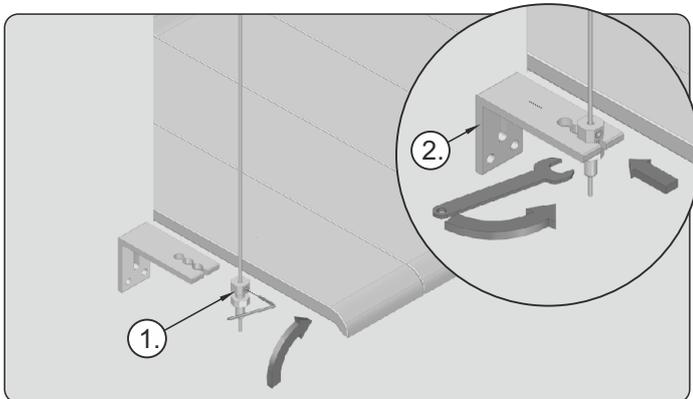
14. Adjust the position of the cord guide handle on the top rail in such a way that the guiding cord does not touch the edge of the holes in the slats.



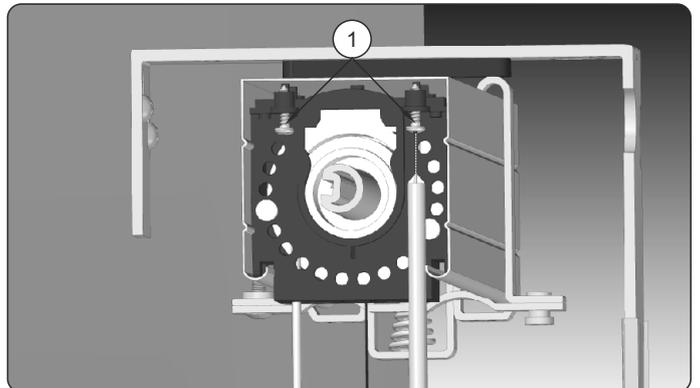
15. Determine the cord axis using a spirit level, then establish places for the hole to install lower handles of the cord guide.



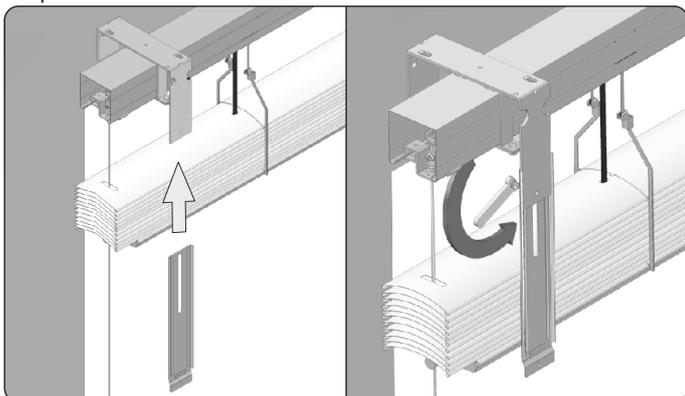
16. Screw the guiding cord lower handles to the window frame or façade (depending on the installation method). Remember that the lower handles on each side must be installed at the same height.



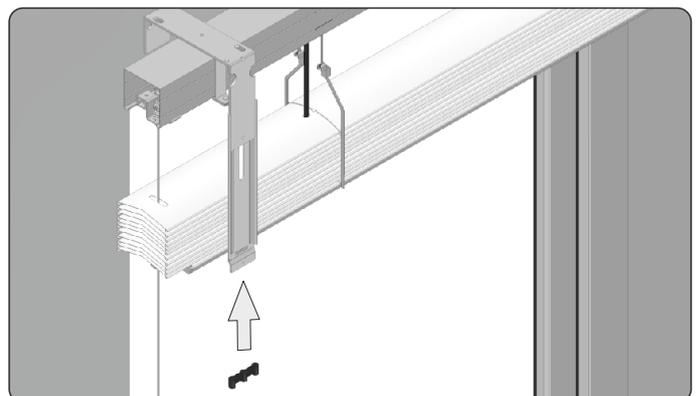
17. Run the cord through the adjustment screw (1) and lock it using an Allen key. Mount the adjustment screw in the lower handle (2). Tighten the nut on the adjustment screw with the key, thus tightening the cord. Leave some clearance for the proper operation of the mechanism.



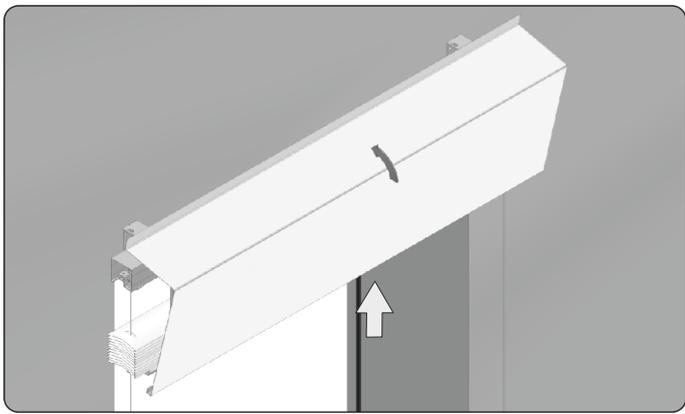
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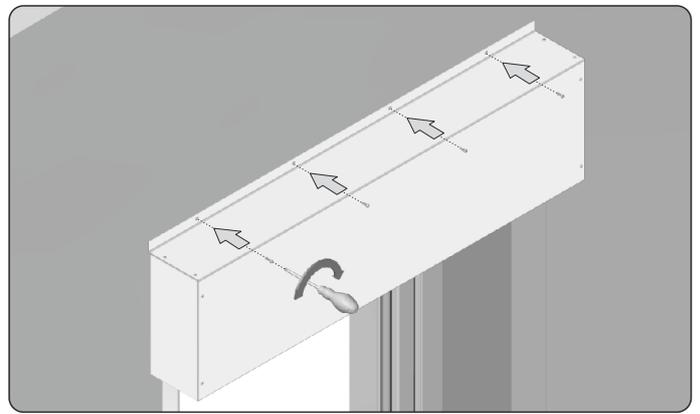
19. Insert safety plate extensions into previously installed wall handles and screw them.



20. Place the extension silencing element onto the lower parts of the extensions.



21. Put the safety plate against the assembled structure in order to fit the elements precisely.



22. Screw/ rivet the safety plate with the assembled sides to the pre-assembled wall handles with extensions.

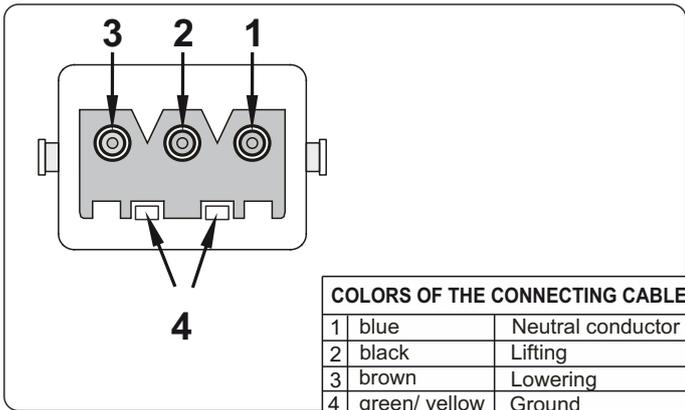
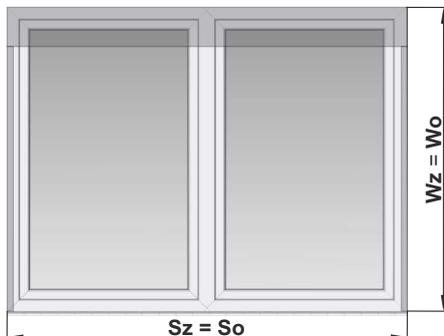


DIAGRAM OF HIRSCHMANN FEMALE PLUG CONNECTION.

INSTALLATION WITH SPACER ADAPTERS

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

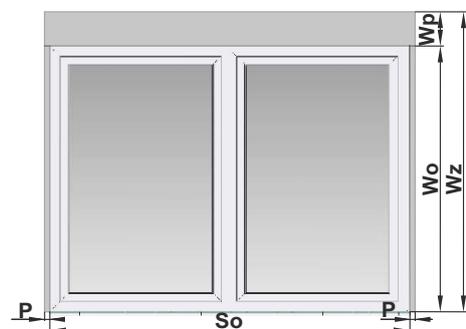
Dimensioning - ZF3000 external blind, aluminium guides, installation in the window



EXPLANATIONS TO DIMENSIONING:

Sz - blind width, **So** - hole width
Wz - blind height, **Wo** - hole height
Sz = So, Wz = Wo

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

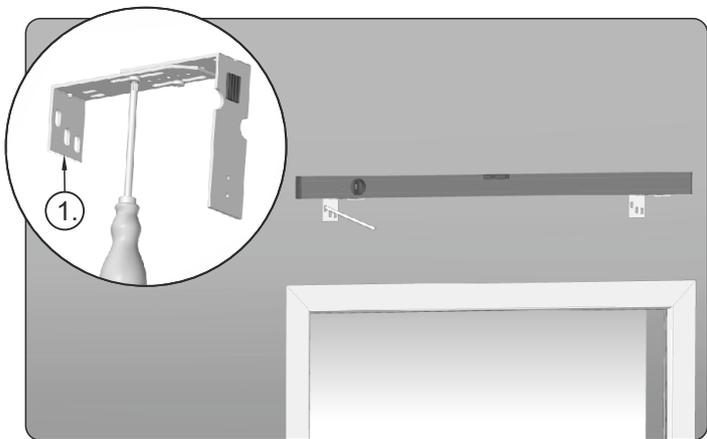


EXPLANATIONS TO DIMENSIONING:

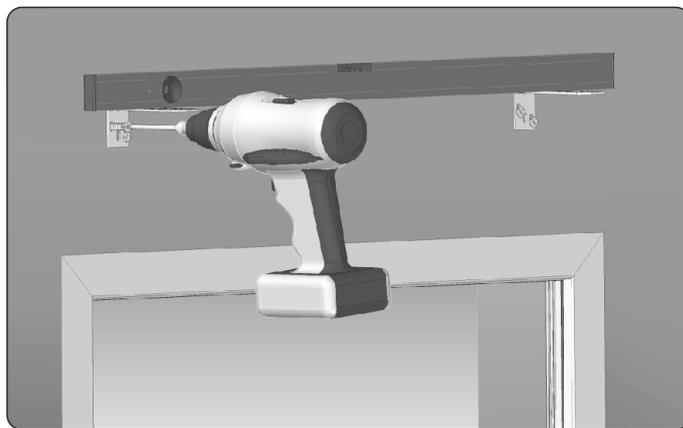
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Wz - blind height, **Wo** - hole height, **Wp** - package height
P - guide width (20mm), **Wbo** - height of the safety plate
Wz = Wo + Wp* or Wbo
INSTALLATION ON THE FACADE: Sz = So + 2 x P
FLUSH-MOUNTED: Sz = window width**

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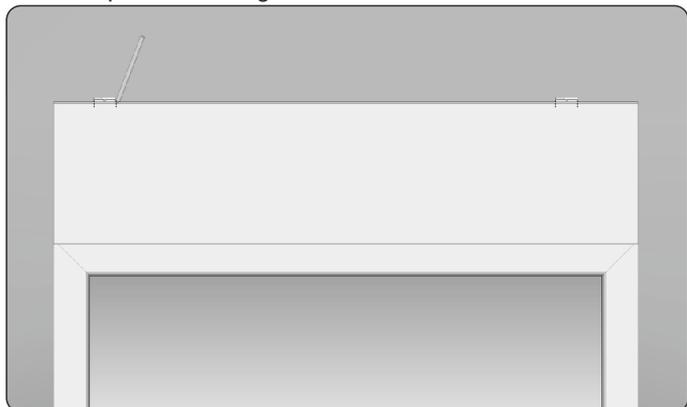
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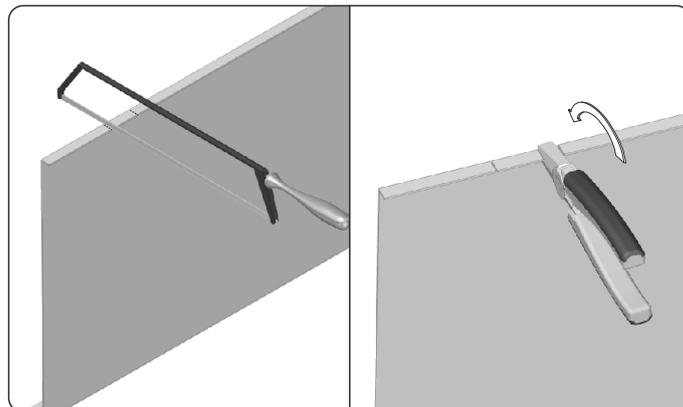
3. Unscrew the wall handle before installation. Part 1 of the handle should be placed against the facade at a height equal to the height of the external blind measured from the bottom edge of the window frame. The handles should be levelled to each other and the place for drilling marked.



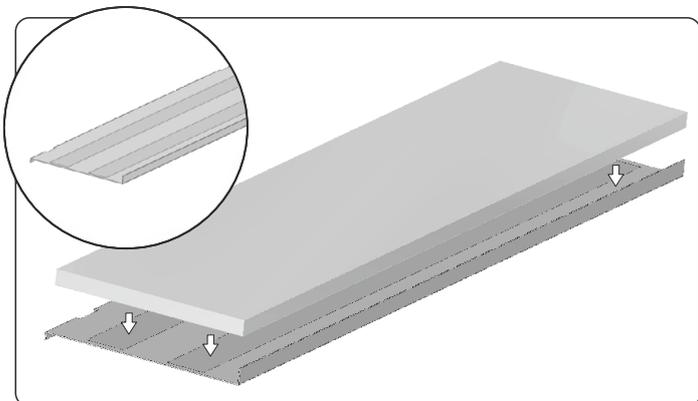
4. Screw the wall handles and keep the level.



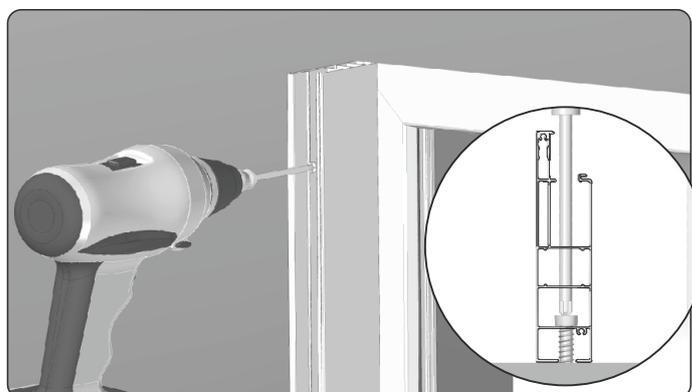
5. Put the safety plate E to the handles as shown and mark the places to make cutouts for the handles.



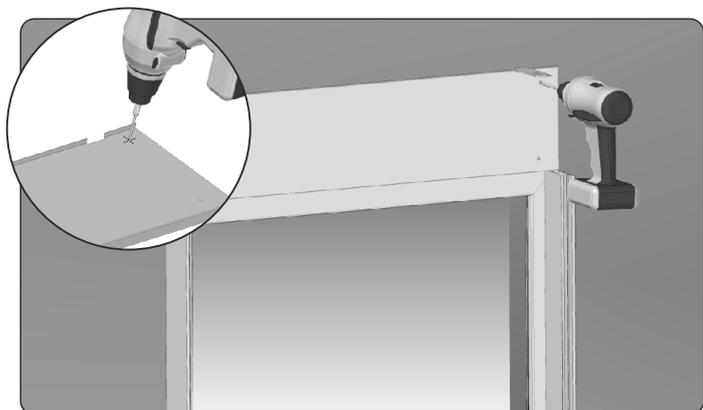
6. Make a cut for the wall handle hole in the marked places in the safety plate. Then cut or break off a piece of metal sheet in the places of mounting handles as shown above.



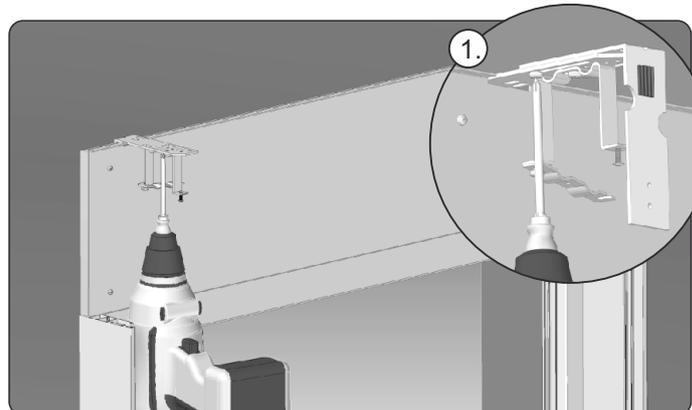
7. Attach the insulation component on the back side of the safety plate E with double-sided tape or appropriate adhesive.



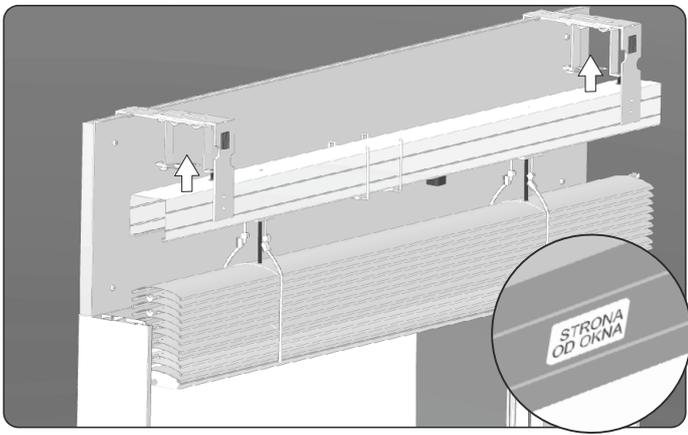
8. Fasten the guides with the appropriate screws to the window frame.



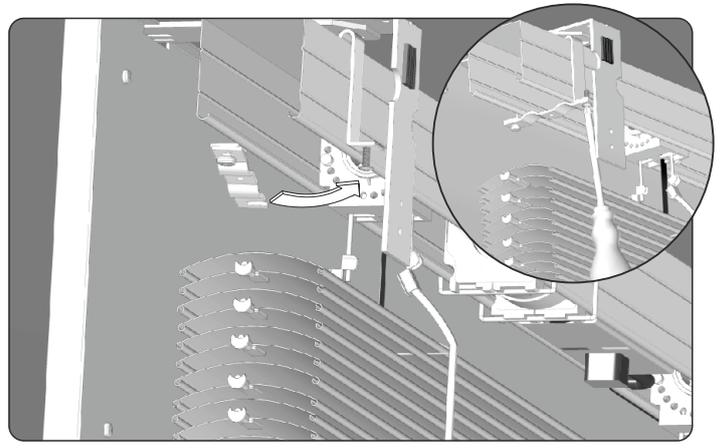
9. Place the safety plate E, drill it with a $\varnothing 6$ mm drill and then screw the safety plate to the lintel with appropriately selected screws.



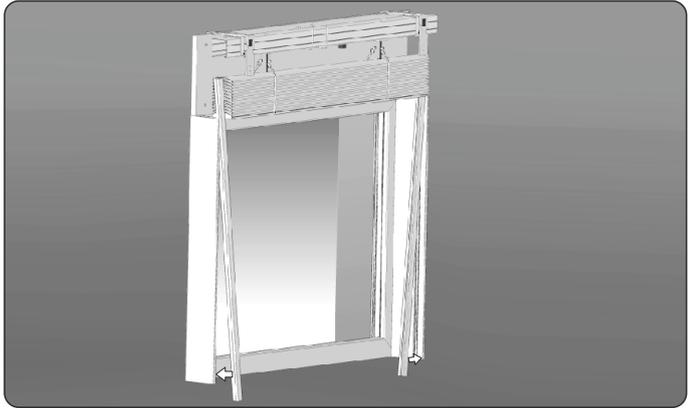
10. Screw the top rail handle (middle hole) to the mounted wall handle.



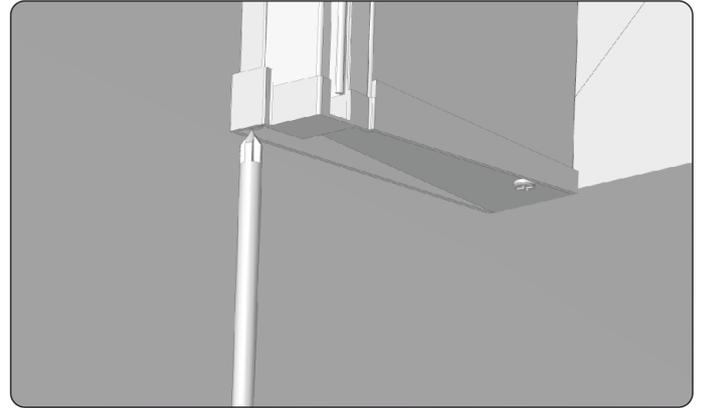
11. Install the blind package into the open handles in such a way that the "WINDOW SIDE" label with information about the installation side, is on the window side.



12. Close the top rail handles and tighten the screws.



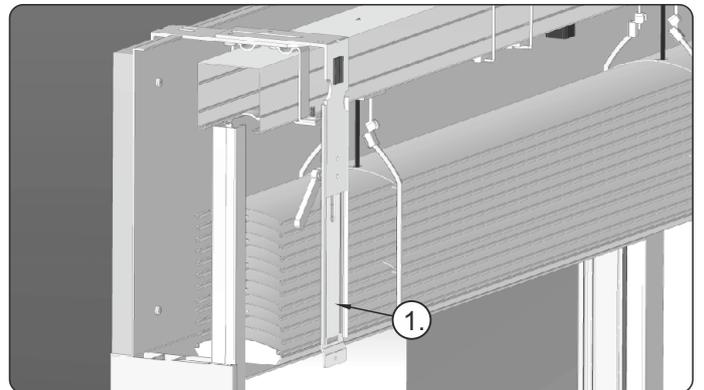
13. Slide the guides into the package, then slide the guides into the adapter from the side.



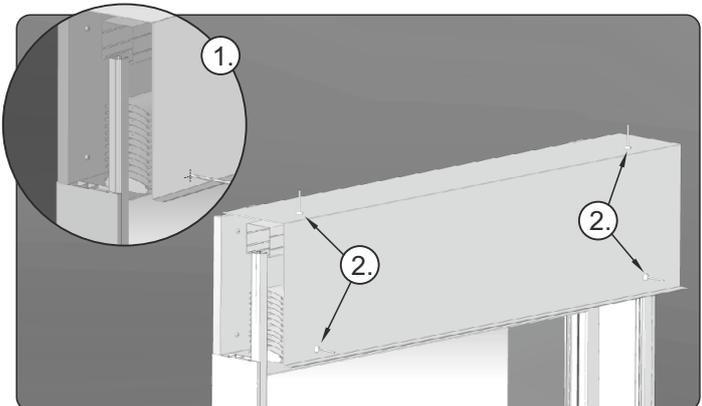
14. Screw the bottom end caps to the guide with the 3x16 mm screws included in the set.



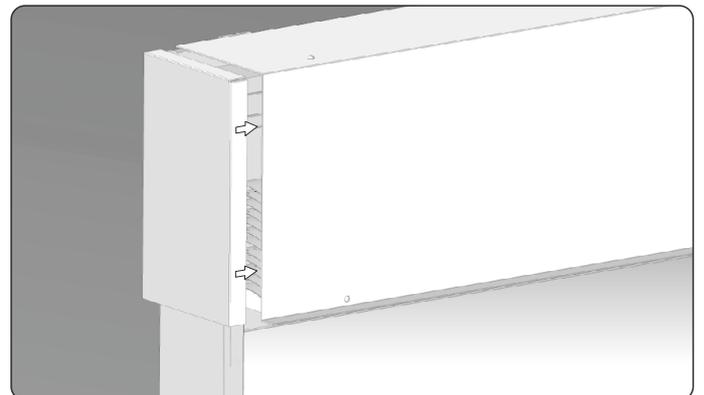
15. Check the correct installation of the blind, adjust if necessary.



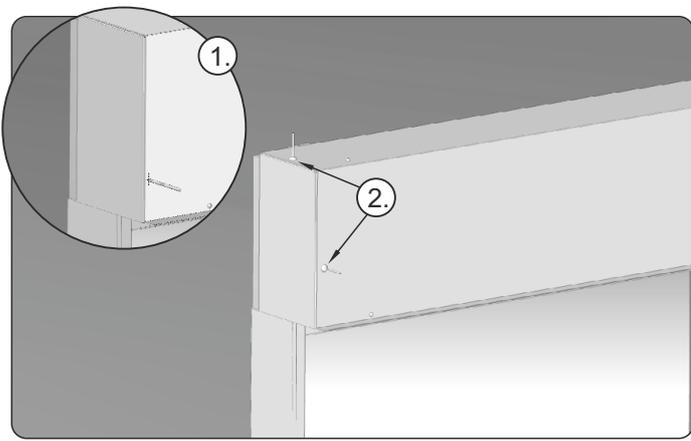
16. Depending on the height of the safety plate, set the safety plate extensions (1) to the correct height and fasten them to the handles using the screws, from the inside of the box as shown above.



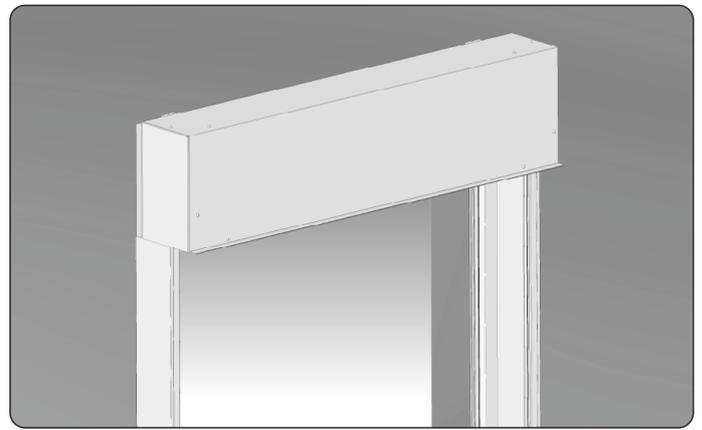
17. Drill holes (1) in the safety plate where the plate is mounted to the handles and extensions, then use 4x8 rivets (2).



18. Insert the sides into the box.



19. Drill holes (1) in the safety plate and sides in places where the plate is mounted to the sides, then use 4x8 rivets (2).

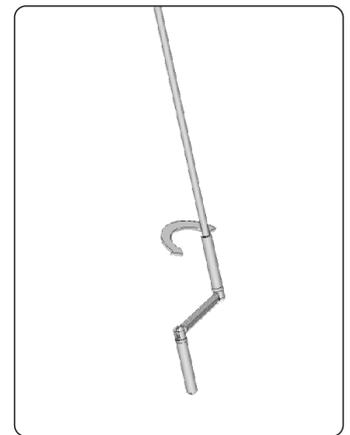
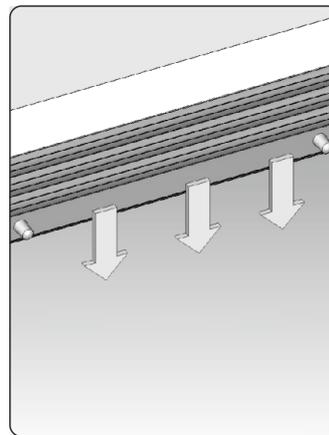
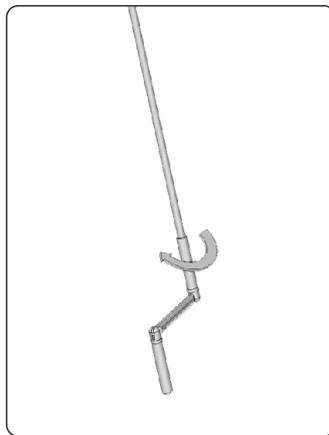
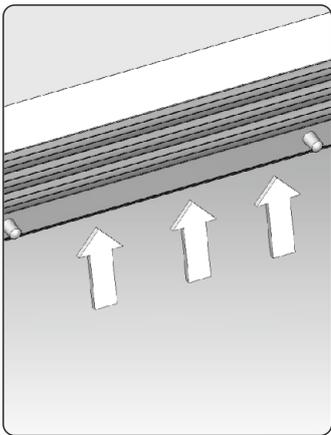


20. View of the correctly installed blind.

INSTRUCTION MANUAL FOR 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 lifted completely up.
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 of 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.



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



PORTOS TR7

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