



SET OF INSTRUCTIONS:
door unit installation, installation of a transom and
adjustment of hinges

Instructions for installing the door unit

1. Preparation for installation

Carefully remove packaging, styrofoam, cardboard. After unpacking, check the door unit and its completeness (Fig. 1).

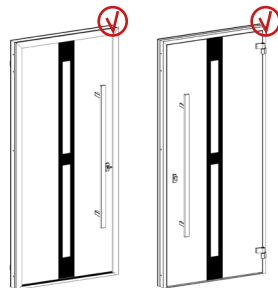
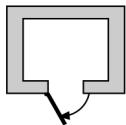


Fig. 1.
Checking the door unit.

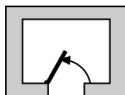
2. Dismantling the old door and preparing the opening

2.1. Before installing the door unit, ensure that the size, handing, and opening direction of the new door match the opening (Fig. 2).

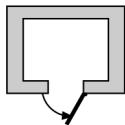
Left hand reverse



Right hand



Right hand reverse



Left hand

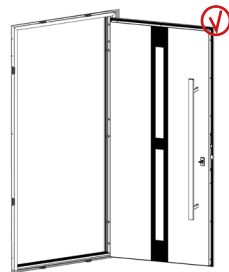
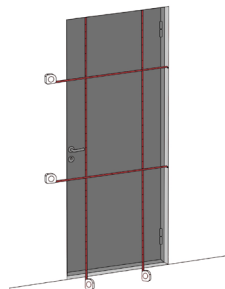


Fig. 2.
Schematic for checking the direction and handing of opening.

2.2. Use a tape measure to determine the size of the opening in several locations by width and height. The recommended size of the door opening along the entire perimeter should be no more than 30 mm larger than the installation size of the door frame per side (Fig. 3).

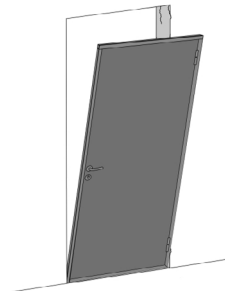
ATTENTION! DO NOT dismantle the old door before ensuring that the new door is in good order and matches the size of the opening!

Fig. 3.
Measuring the door opening.



2.3. Dismantle the old door (Fig. 4).

Fig. 4.
Dismantling the old door.



2.4. Prepare the door opening (Fig. 5), level it with a perforator and hammer if necessary, clean the installation site of debris. Remove any protruding unevenness from the surface of the opening. Fill defective areas with water-resistant putty. Sags and damages with a height (depth) of more than 10 mm are not allowed on the surface of the opening. The surfaces of the opening with oil contamination should be degreased. Treat crumbling areas with mastic.

2.5. Clean all surfaces of the door opening from dust, dirt and oil stains, and from snow, ice and frost in winter conditions with subsequent heating of the surface.

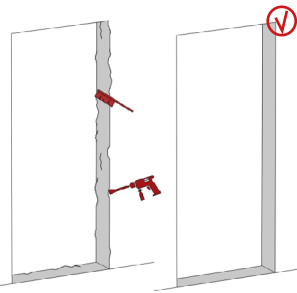


Fig. 5.
Cleaning the door opening.

2.6. It is necessary to waterproof the door opening along the perimeter using waterproofing tape (Fig. 6).

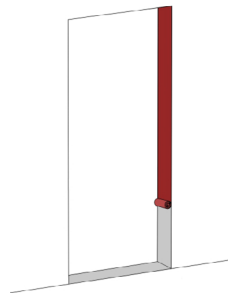


Fig. 6.
Waterproofing the door opening.

3. Mounting the door unit

3.1. Remove the door leaf from the frame (Fig. 7).

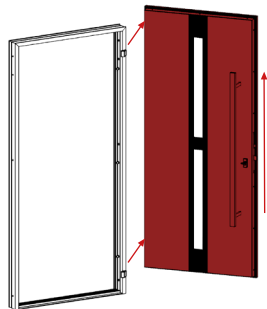


Fig. 7.
Removal of the door leaf.

3.2.1. For the door unit without trim

To prevent the penetration of cold through the floor screed, a gap should be made in it under the door to be installed. The gap should be at least 50 mm wide and as deep as the thickness of the screed (or a minimum of 100 mm) and filled with extruded polystyrene foam (hereinafter referred to as EPS). Concrete has a high thermal conductivity value and helps cold temperatures to penetrate into premises behind the door unit.

1. Glue waterproofing tape along the outer contour of the frame on 3 sides, excluding the threshold (Fig. 8) (hinge side — for reverse opening, stop side — for right/left hand opening).

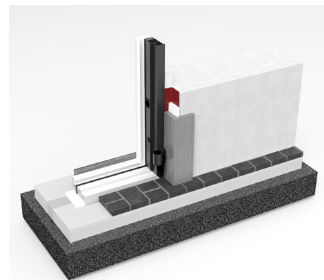


Fig. 8.

Glue on the waterproofing tape.

2. Glue vapour barrier tape along the inner contour of the frame on 3 sides, excluding the threshold (Fig. 9) (stop side — for reverse opening, hinge side — for right/left hand opening).
3. The threshold of the door unit should be isolated from the concrete screed. This can be done with a polystyrene foam insulation board (hereinafter referred to as PIB) with a thickness of not less than 10 mm over the entire depth of the threshold. Or fill it in with assembly foam as a continuous layer. After filling in the contour of the door unit with a foam, the waterproofing and vapour barrier tapes cover the installation gap and are glued to the wall.

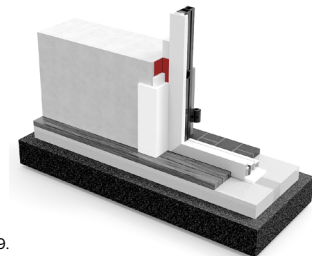


Fig. 9.

Glue on the vapour barrier tape.

3.2.2. For the door unit with trim

The door opening is prepared as for standard installation, except for the threshold part. To prevent the penetration of cold through the floor screed, a gap should be made in it under the door to be installed. The gap should be at least 50 mm wide and as deep as the thickness of the screed (or a minimum of 100 mm) and filled with extruded polystyrene foam (hereinafter referred to as EPS). Concrete has a high thermal conductivity value and helps cold temperatures to penetrate into premises behind the door unit.

1. Glue pre-compressed sealing tape (hereinafter referred to as PCST) on the inner part of the trim (adjacent to the wall), along the contour (Fig. 10).
2. Glue vapour barrier tape along the inner contour of the frame on

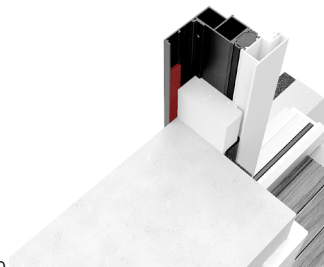


Fig. 10.

Glue on the sealing tape.

3. The threshold of the door unit should be isolated from the concrete screed. This can be done with a polystyrene foam insulation board (hereinafter referred to as PIB) with a thickness of not less than 10 mm over the entire depth of the threshold. Or fill it in with assembly foam as a continuous layer
After filling in the contour of the door unit with a foam, the waterproofing and vapour barrier tapes cover the installation gap and are glued to the wall.

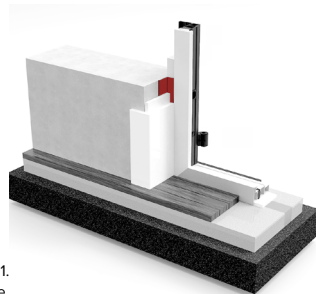


Fig. 11.

Glue on the vapour barrier tape.

3.3. Place the door frame in the opening on the backings (wedges, bars), ensuring an equal distance between the door frame and the opening on both sides.

3.4. Fix the door frame with wedges in the opening, aligning the gaps with them. Wedges should preferably be installed between the door frame and the opening wall at the top and bottom (Fig. 12) in order not to distort the middle part of the door frame.

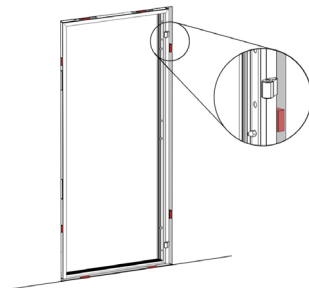


Fig. 12.
Fixing the door frame.

3.5. Level the door frame with a construction level, placing it against the hinge side. To check vertical alignment, apply a construction level to the inner wide plate of the frame (A); to check the tilt apply a construction level to the front face of the frame (B); to check horizontal alignment apply a construction level to the threshold (C) (Fig. 13).

ATTENTION! If it is not possible to install the door frame with anchor bolts through the frame, the installation can be performed with additional brackets, which must be fastened to the door frame with screws.

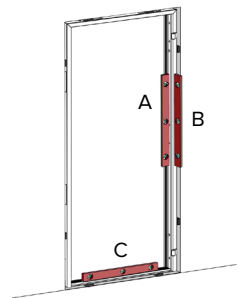


Fig. 13.
Alignment of the door frame.

3.6. Drill a hole of $\varnothing 110$ mm and a depth of 120-130 mm through the upper mounting hole on the hinge side of the frame (A) (Fig. 14).



Fig. 14.
Drilling the hole.

3.7. Clean the hole of chips and sand. Prior to installation, it is recommended to apply a cement-sand or adhesive mortar to the surface of the anchor. Install the anchor for the frame using a hammer and impact screwdriver (A) without tightening it (Fig. 15).

3.8. Check the vertical alignment of the hinge part and the horizontal alignment of the threshold part of the frame with a construction level.



Fig. 15.
Installing the anchor bolt.

3.9. Clamp the anchor (A).

3.10. Install the bottom anchor of the frame on the hinge side (B) following Steps 3.5-3.8 (Fig. 16).

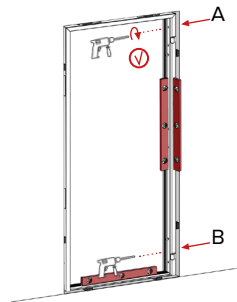


Fig. 16.
Tightening the anchor bolt.

3.11. Hinge the door leaf (Fig. 17).

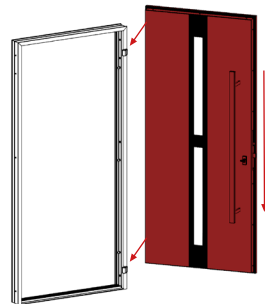
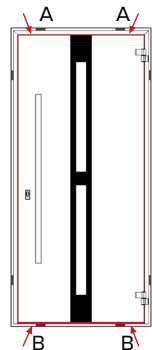


Fig. 17.
Hinging the door leaf.

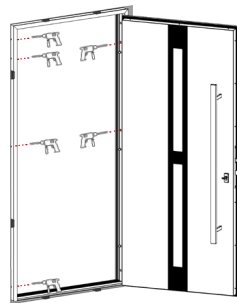
3.12. Align the latch part in plane with the frame. Check the evenness of the gap between the top of the leaf and the top profile of the frame (A). If the gap is uneven, adjust it by placing wooden pads under the frame threshold on the smaller gap side (B) (Fig. 18).

Fig. 18.
Checking the gap for evenness.



3.13. Drill holes in the wall through the remaining openings (on the left/right) (Fig. 19).

Fig. 19.
Installing the anchor bolts.



3.14. Tighten the anchors, but not completely (Fig. 20).

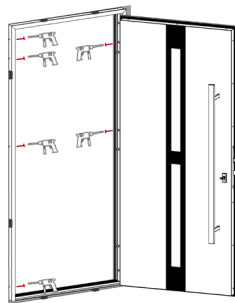


Fig. 20.
Fixing of the anchor bolts.

3.15. Close the door, check vertical and horizontal gaps and whether the door leaf is in plane with the frame (Fig. 21).

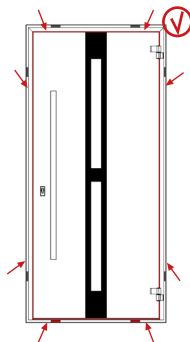


Fig. 21.
Checking the position.

3.16. Tighten all anchors (Fig. 22).

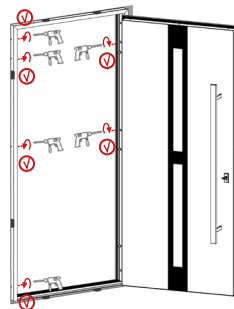


Fig. 22.
Tightening the anchor bolts.

3.17. Adjustment of the leaf fitting to the plane (Fig. 23):

- if the door is fitted with a cam adjuster, see Annex 1 «Adjustment of the cam adjuster»;
- if the door is fitted with a Fuhr electromechanical latch, see Annex 2 «Adjustment and operation of the Fuhr latch».

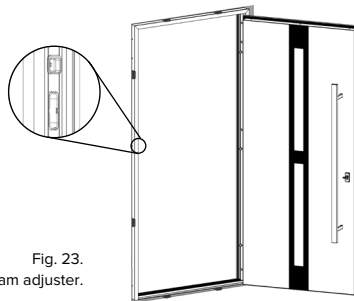


Fig. 23.
Adjustment of the cam adjuster.

3.18. After the final installation and acceptance of the door unit, the openings for the fixing elements must be covered with the supplied plugs (Fig. 24).

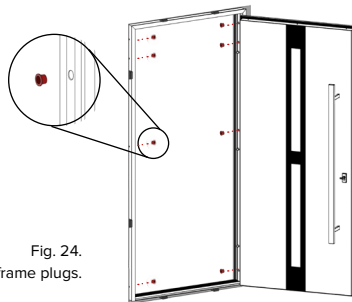


Fig. 24.
Mounting the frame plugs.

3.19. Blow the drilling areas off dust and brick chips. Moisten the wall surface with a spray gun and fill the installation gap with assembly foam (Fig. 25).

*Recommendations for remote mounting, see Annex 8 «Fixing of plates (lugs)».

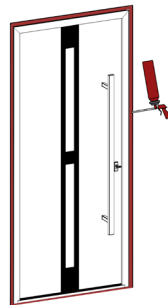


Fig. 25.
Filling the installation gap.

4. Mounting the fittings (Fig. 26)

4.1. Installation and operation of the cylinder mechanism, see Annex 3: «Installation and operation of the cylinder mechanism».

4.2. Install the cover plates, see Annex 4: «Installing the cover plates»;

4.3. Mount the handles:

- if the door is supplied with a lever handle, see Annex 5: «Instructions for installing the lever handle»;
- if the door is supplied with a pull handle with through-hole fixing of the handle, see Annex 6: «Through-hole fixing of the pull handle set»;
- if the door is supplied with a pull handle for single-side fixing, see Annex 7: «Single-side fixing of the pull handle».

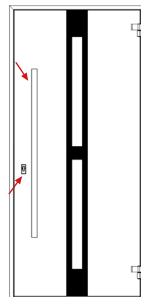


Fig. 26.
Mounting of the fittings.

5. After completing the installation work, remove the protective films from the door (Fig. 27).

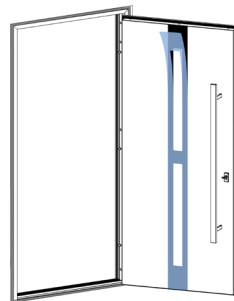


Fig. 27.
Removing the protective film.

Annex 1

«Adjustment of the cam adjuster»

To adjust the door leaf proper adherence, proceed as follows:

1. Unscrew the screw (No. 1, Fig. 28);
2. Turn the cam adjuster (No. 2, Fig. 28) to one of the four positions;
3. Tighten the screw (No. 1, Fig. 28) again.

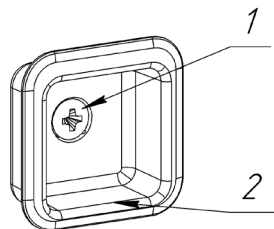


Fig. 28.

Adjustment of the cam adjuster.

Annex 2

«Adjustment and operation of the latch»

Adjusting the door leaf alignment

To adjust the door leaf closure alignment, the screws (A) must be loosened (DO NOT fully loosen).

Shift the latch bolt (B) in the required direction. Then tighten the screws (A) and check the door closure (Fig. 29).

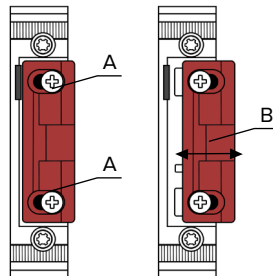


Fig. 29.
Adjusting the closure alignment.

Operation of the latch

Changing the «day» and «night» modes of the latch.

To change the «day» and «night» modes, the switch is used (Fig. 30).

Modes:

- «day» — in this mode, the latch bolt can be pressed, which is required for the operation of doors supplied with pull handles;
- «night» — in this mode, the latch bolt is fixed, which prevents the door from being opened by applying force to the pull handle (by pulling or pushing). For opening the door it is necessary to turn the opening cylinder until the stop, which retracts the mortise latch of the lock and the door opens.

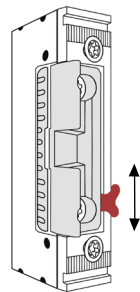


Fig. 30.
Switch of the «day» and «night» modes.

Annex 3

«Installation and operation of the cylinder mechanism»

Installation of the cylinder

The cylinder mechanism must be inserted into the opening and the cylinder must be aligned with the lock so that the mounting hole in the cylinder coincides with the lock axis (Fig. 31.)

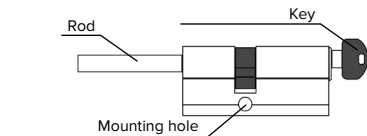


Fig. 31.
Rod cylinder.

Check the lock by extending the deadbolts. After successful check, secure with the supplied screw through the hole in the lock (Fig. 32).

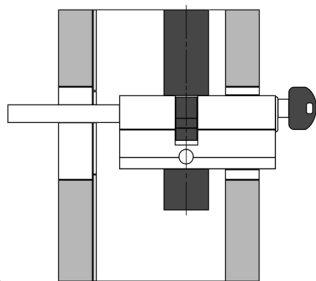


Fig. 32.
Axial alignment of the cylinder.

Annex 4

«Installing the cover plates»

Having previously installed the cylinder in the lock, align the plastic base with it (Fig. 33).

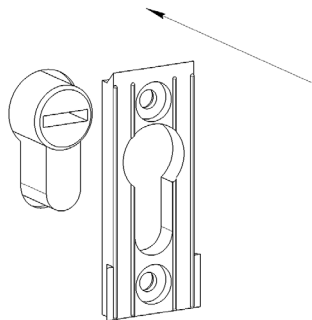


Fig. 33.
Axial alignment of the cylinder.

Screw the centred plastic base onto the supplied self-tapping screws (Fig. 34).

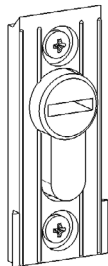


Fig. 34.
Installing the cover plates.

Pull out the cylinder and install the cover plate (Fig. 35).

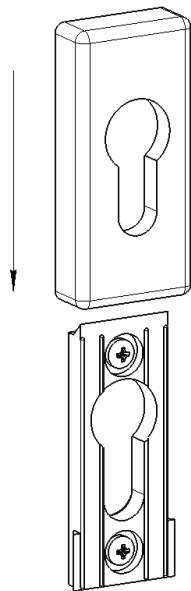


Fig. 35.
Installing the cover plate.

Annex 5

«General instructions for installing the lever handle»

To install the handle, proceed as follows (Fig. 36):

1. The handle square from the set should be inserted into the lock;
2. Remove the handle rose plate from the rose plate base;
3. Mount the handles on the square closely to the door leaf;
4. Use the supplied coupling screws to tighten both bases of the handle rose plates through the holes in the door leaf;
5. Screw on the supplied screws of the handle bases;
6. Secure the handle rose plates back to the base of the handle rose plate.

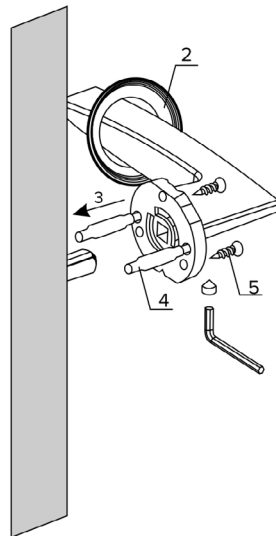
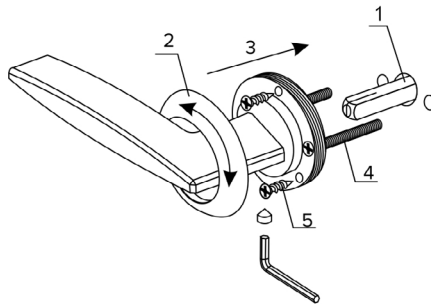


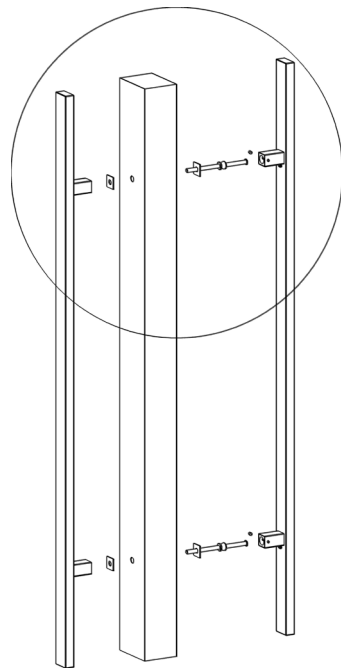
Fig. 36.

Instructions for installing the lever handle.

Annex 6

«Double-side fixing of the pull handle»

1. The exterior handle (No. 4, Fig. 37) and the square plastic cover plate (No. 1, Fig. 37) are located on the outside of the door;
2. The set consisting of a screw (No. 3, Fig. 37), a square plastic cover plate (No. 1, Fig. 37) and a bushing (No. 2, Fig. 37) for each fastening unit must be screwed into the handle (No. 4, Fig. 37) by driving the screw (No. 3, Fig. 37) through the mounting hole in the door leaf;
3. Repeat Step 2 for the second hole
4. Tighten the screws (No. 3, Fig. 37);
5. Place the handle (No. 5, Fig. 37) on the bushings (No. 2, Fig. 37), on the inside of the door, and then use the screws (No. 6, Fig. 37) to secure the handle.



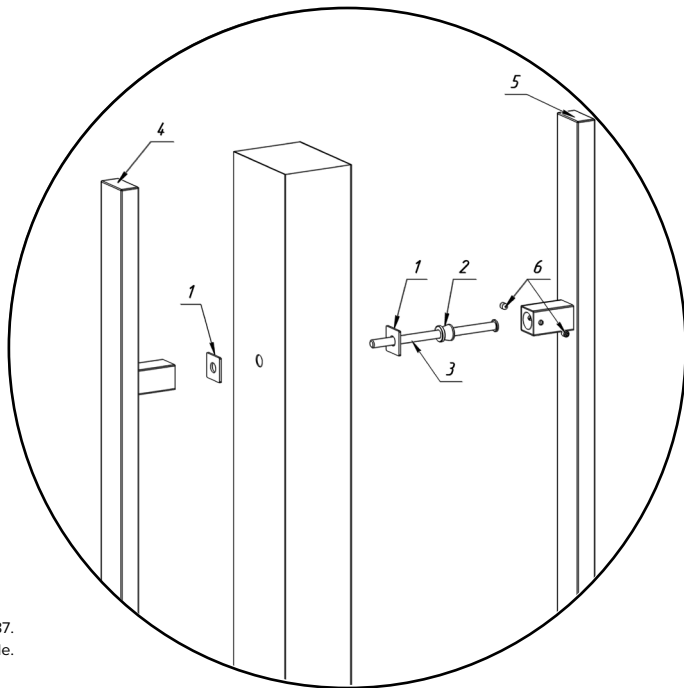
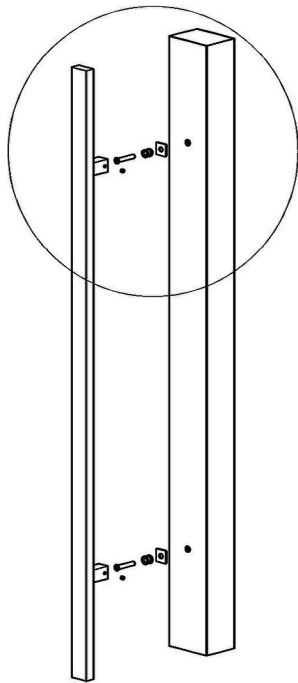


Fig. 37.
Installation of the pull handle.

Annex 7

«Single-side fixing of the pull handle»

1. The set consisting of a screw (No. 3, Fig. 38), a square plastic cover plate (No. 1, Fig. 38) and a bushing (No. 2, Fig. 38) for each fastening unit must be screwed into the rivet (No. 4, Fig. 38) (pre-mounted in the leaf) and the screw (No. 3, Fig. 38) must be tightened. The set consisting of a screw (No. 3, Fig. 38), a square plastic cover plate (No. 1, Fig. 38) and a bushing (No. 2, Fig. 38) for each fastening unit must be screwed into the handle (No. 4, Fig. 38) by driving the screw (No. 3, Fig. 38) through the mounting hole in the door leaf;
2. Repeat Step 1 for the second hole;
3. Place the handle (No. 5, Fig. 38) on the bushings (No. 2, Fig. 38), and then use the screws (No. 6, Fig. 38) to secure the handle.



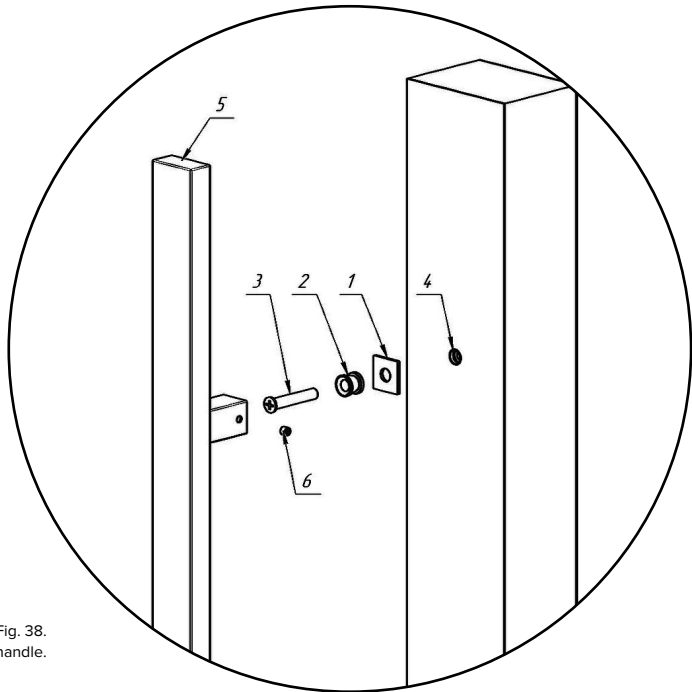


Fig. 38.
Installation of the pull handle.

Annex 8

«Fixing of plates (lugs)»

Use at least 6 plates (lugs) for mounting on the vertical profiles of the door frame. Fasten the plates (lugs) to the door frame profile using 4 self-tapping screws with a 4.2 x 19 mm press washer for metal, to the inner profile of the door frame. Fasten the door frame to the structure opening by 2 anchor bolts in each plate (lug) (Fig. 39, 40).

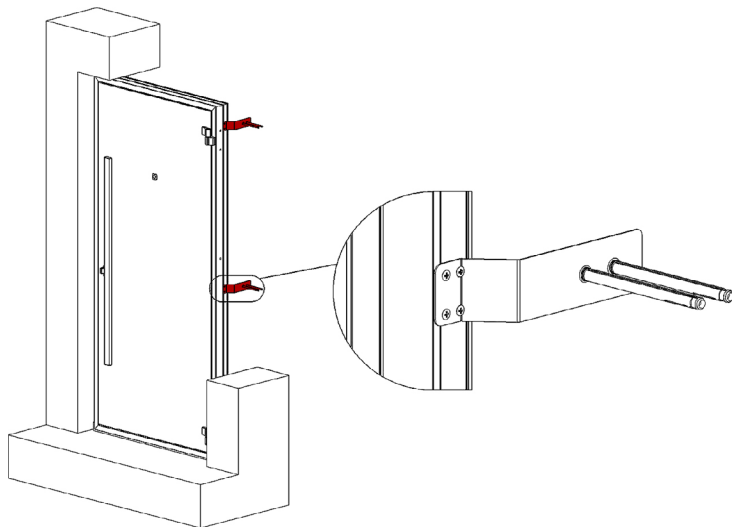


Fig. 39.

Fixing of plates in reverse opening doors.

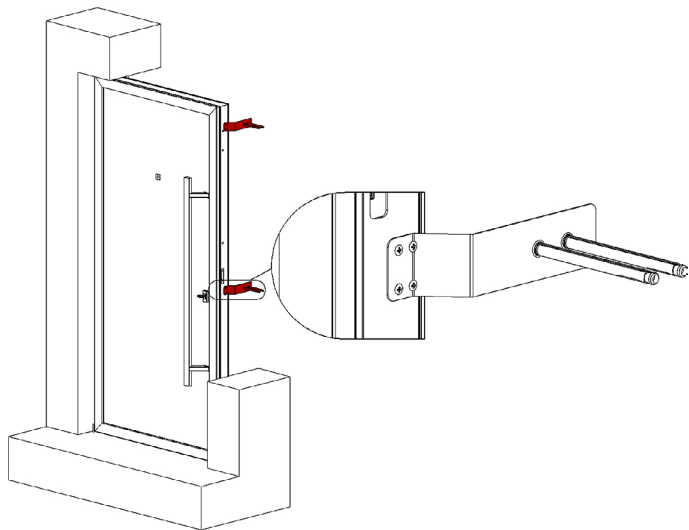


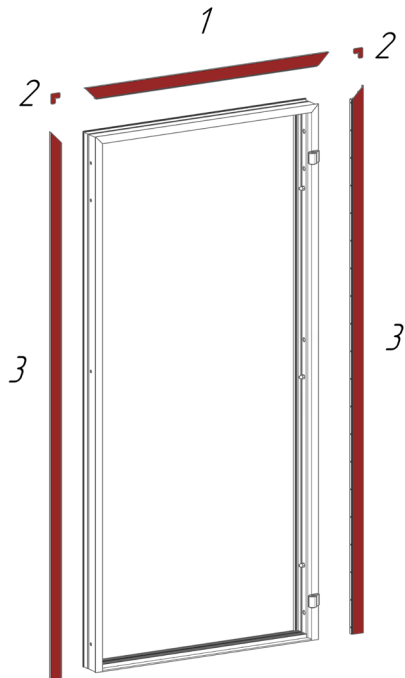
Fig. 40.
Fixing of plates in right/left hand
opening doors.

Annex 9

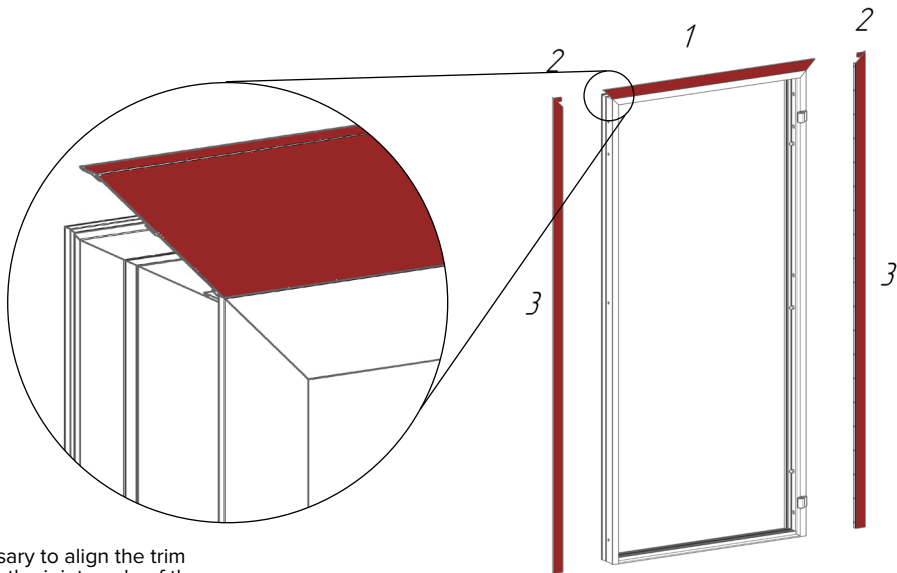
«Instructions for fastening trims (capitals)»

The set of front door trims includes:

1. Frame head trim (1 pc);
2. Corner fastener for trims (2 pcs.);
3. Jamb trim (2 pcs.).

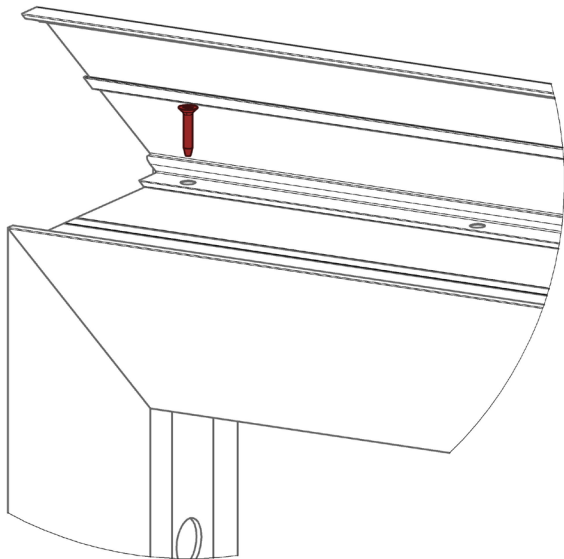


The installation of the trims begins with the frame head trim. By placing it against the frame, check if the dimensions are correct (both sides of the trim should coincide with the joint line of the frame) (see Fig.).

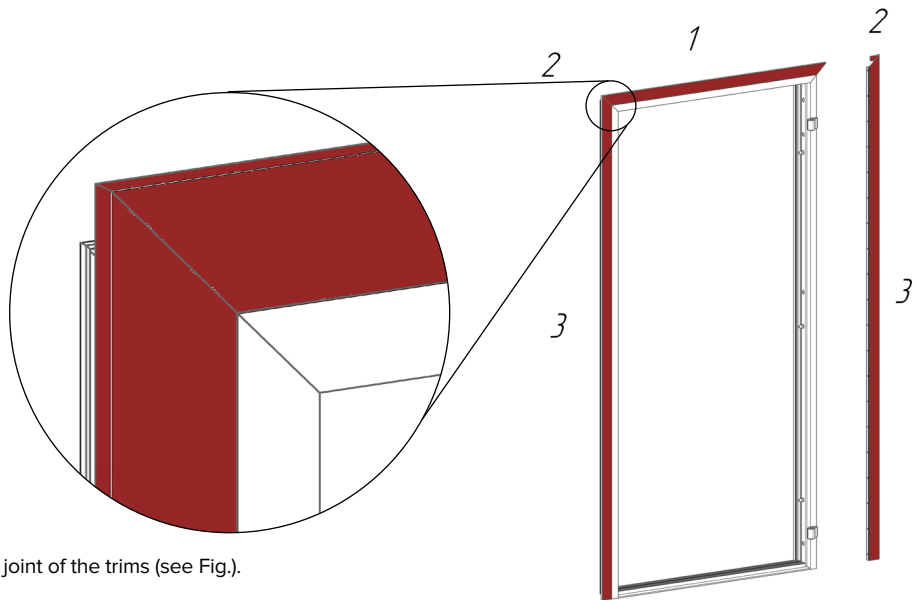


It is necessary to align the trim in line with the joint angle of the frame.

The installation of the trims begins with the frame head trim. By placing it against the frame, check if the dimensions are correct (both sides of the trim should coincide with the joint line of the frame) (see Fig.).

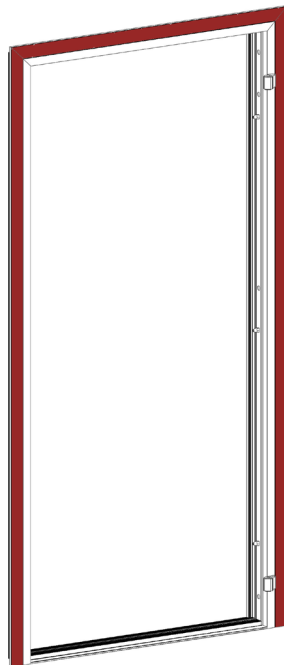


Insert the corner fastener into the post trim, connect it to the upper trim and fix the post trim with 1 self-tapping screw.

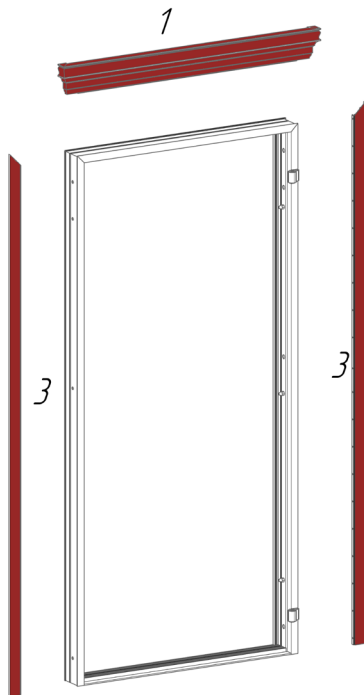


Check the joint of the trims (see Fig.).

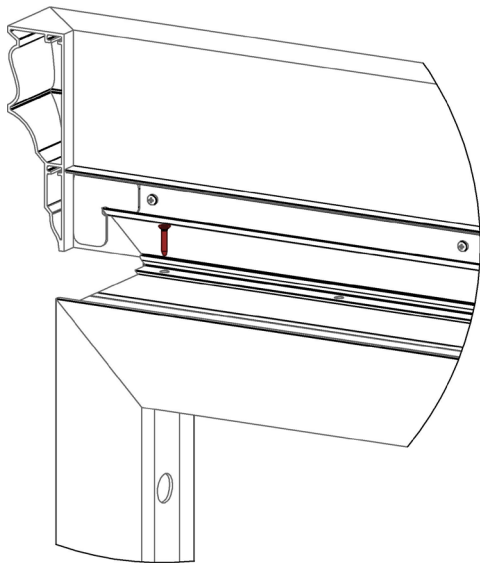
Repeat the operation for the second post trim. After checking, screw the trims through all the mounting holes using the supplied self-tapping screws.



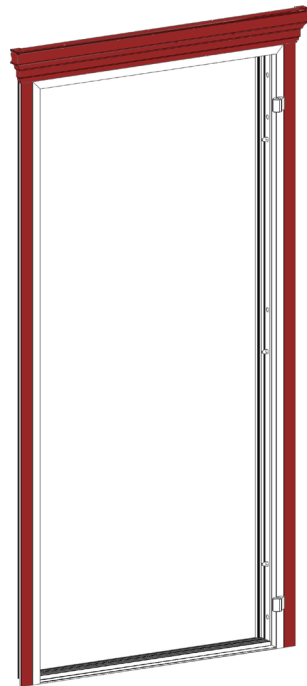
Fastening of the capital is performed in a similar way, with the fastening of the frame head trim. The capital is in a semi-assembled state (it is screwed to the trim and the corner fasteners are inserted).



After checking and aligning the trim with the capital, it must be fastened by screwing it using supplied self-tapping screws through the mounting hole (see Fig.).



After aligning the post trims and screwing them on, in the same way as in the above paragraph, we complete the installation.



Annex 10

«Instructions for installing the transom»

1. Preparation for installation

The transom must be checked immediately after the door unit has been checked, prior to mounting!

Carefully remove packaging, styrofoam, cardboard. Carefully examine the transom for possible cosmetic damage, mismatching shades, and deformations.

Should any of the above issues be detected, do not mount the door, contact the seller.

Carefully check the goods upon receipt!

Before installing the entrance group it is necessary to measure its overall size, check the opening direction and handing (it is necessary to maintain a gap of 10-30 mm along the contour against the opening).

Defining the transom side



Fig. 1.
Outer side of the transom.



Fig. 2.
Inner side of the transom.

Installation of the transom for different types of door opening

This principle is applicable to any positioning of transom/s (top, side and any combinations).

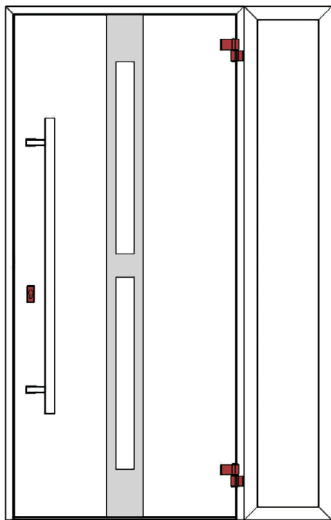


Fig. 3.
The entrance group with reverse opening (transom corner bead is located on the premises side).

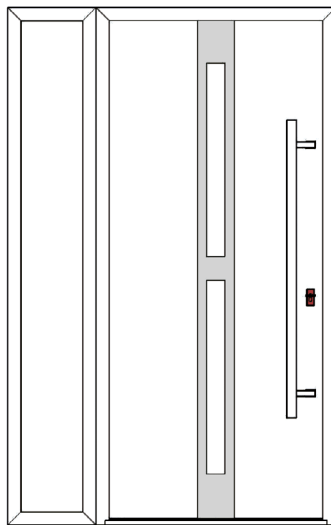


Fig. 4.
The entrance group with right/left hand opening (fanlight glazing bead is located on the premises side).

Defining the mounting side

The mounting side of the transom is the side where the fasteners are screwed on.

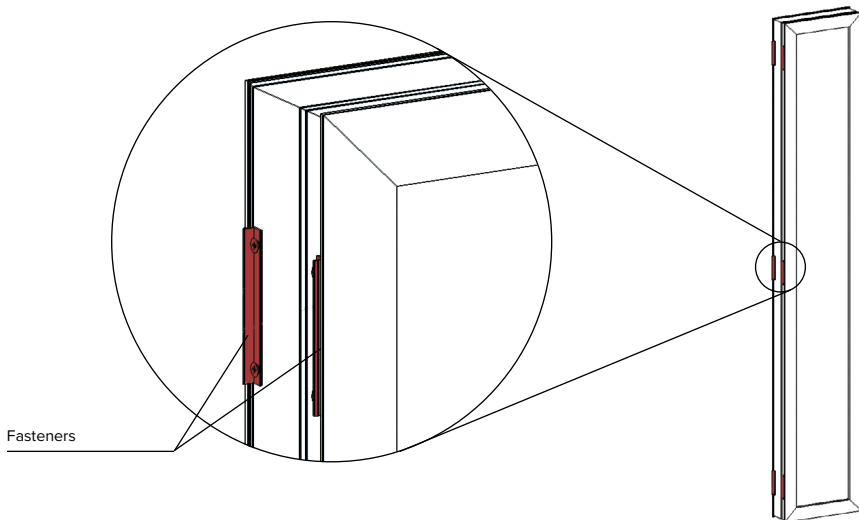


Fig. 5.
Mounting side of the transom.

Insulating the gap

For better protection of the gap between the door unit and the transom against blowing through, 2 PCST tapes should be glued on the mounting side.

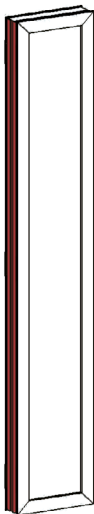


Fig. 6.
The side for gluing the PCST tape.

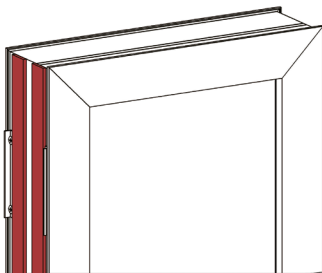


Fig. 7.
Mounting state of the PCST tape.

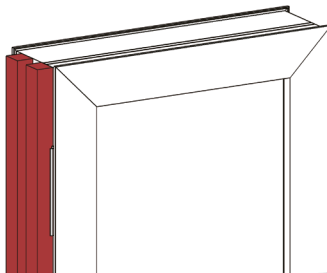


Fig. 8.
Operating state of the PCST tape * The PCST tape expands up to 4 times by thickness (up to 20 mm).

2. Installation of the transom

2.1. Pre-aligning the transom with the door unit

Pre-align the transom as shown in Fig. 9 (the gap should be left on the outside, the side without beads), and then by applying force (Fig. 10) on the side of the gap, snap on the fasteners. The force can be generated not only manually, but also with an impact* method (Fig. 11) or by clamping with the adjustable clamp (Fig. 12) along the length of the adjacent surfaces near the fasteners.

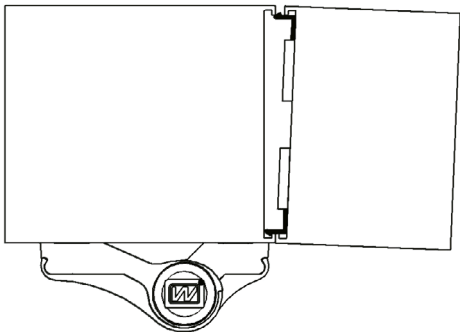


Fig. 9.
Pre-aligning the transom with the door unit.

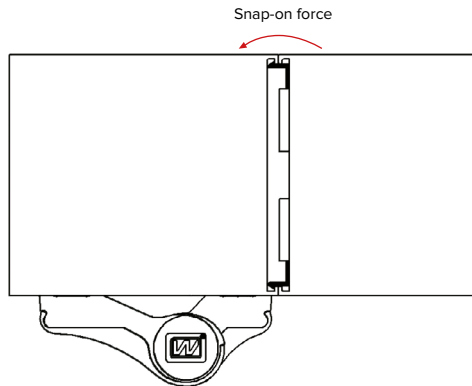


Fig. 10.
Snapping on the fasteners.

ATTENTION! The fastening operations must only be performed on the side without beads or door frame.

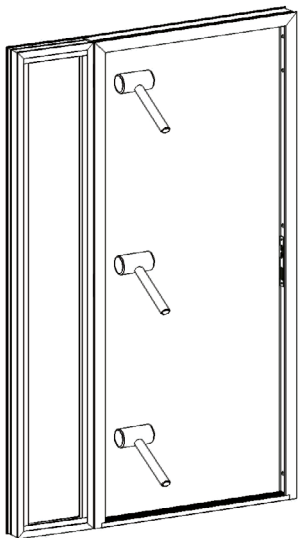


Fig. 11.
Fastening by the impact method.

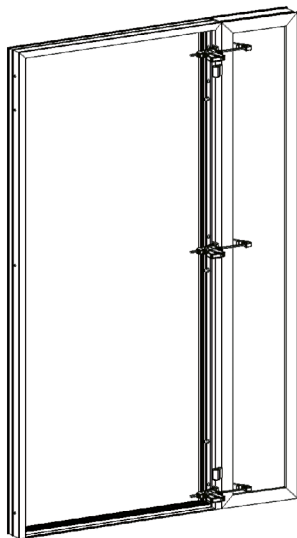


Fig. 12.
Fastening with the adjustable clamp.

2.2. Fastening of the transom and door frame.

Using an electrically driven tool with a socket head (8 mm with an outside diameter less than 15 mm), screw together the door frame and transom using the supplied self-tapping screws (Fig. 13).

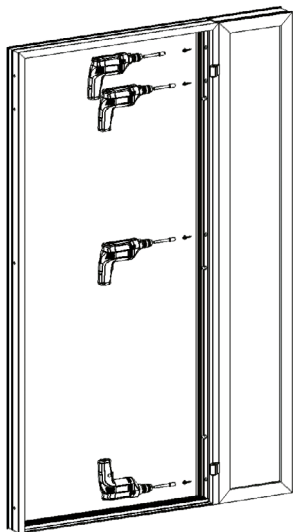


Fig. 13.
Fastening the frame and transom with self-tapping screws.

To reinforce the fastening, the transom bracket must be additionally screwed on with self-tapping screws (Fig. 14). Repeat the operation for the threshold.

The above clauses are applicable to the mounting of transoms of other positions, including both upper and entrance groups.

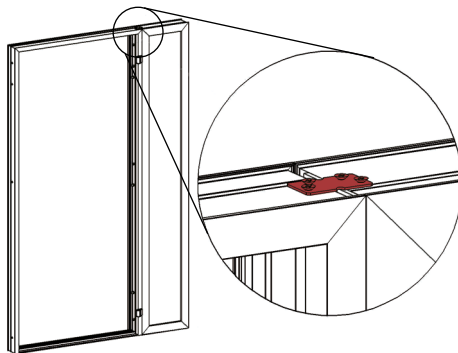
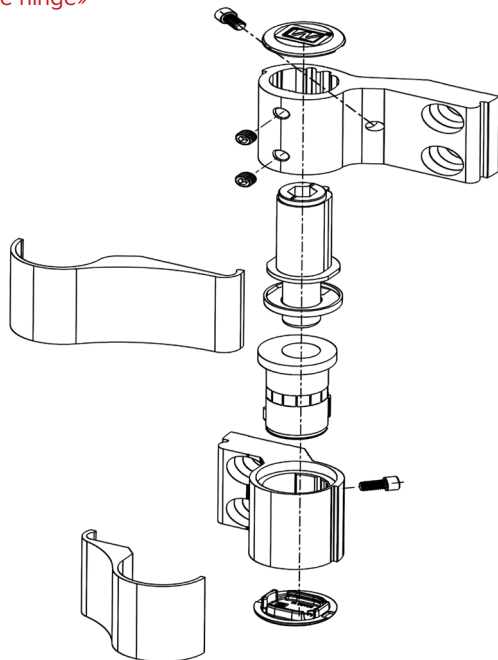
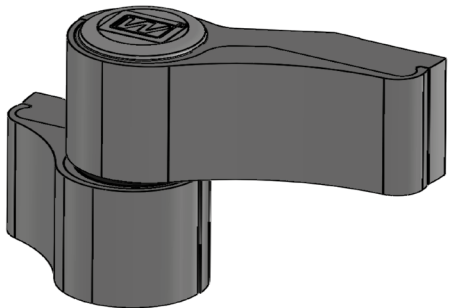


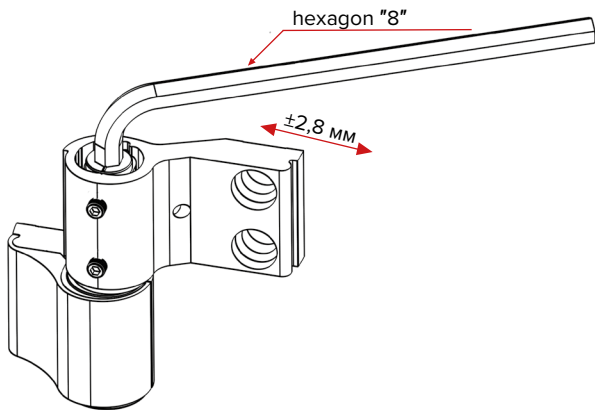
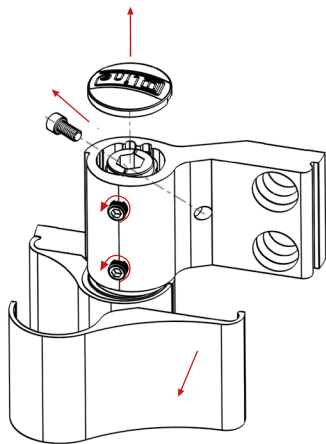
Fig. 14.
Fixing the transom bracket.

Annex 11

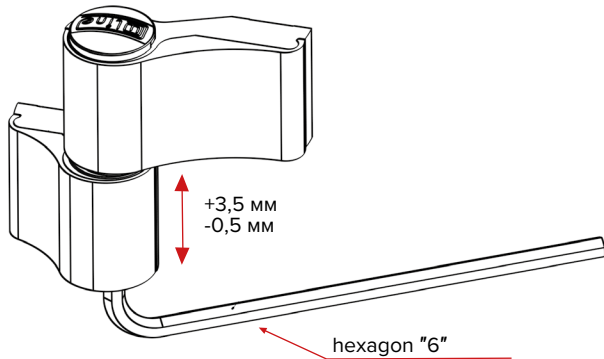
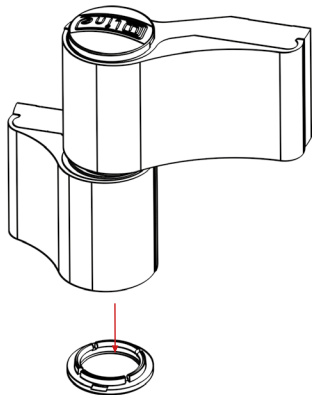
«Instructions for adjusting the Wala MX two-piece hinge»



Horizontal adjustment



Vertical adjustment



Adjustment of the proper adherence

