

Installation instructions

for ALT W62 / ALT W72 window and door
systems with thermal break



2021

www.alutech-group.com

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General

Correct installation of the structure is a necessary condition for ensuring high customer properties of the product. The manual contains the recommended procedure and description of typical process of ALT W72 / W62 windows and doors installation.

All existing standards and regulations applicable for windows and doors must be strictly observed.

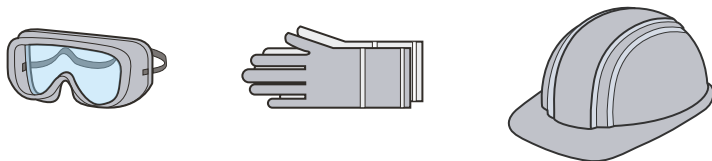
The contents of the manual are not the basis for legal claims. ALUTECH reserves the right to make changes and additions to the window and door design and the manual.

1. Safety measures

- Read and fully understand the installation instructions before starting work.
- Do not work alone. Two or more people are required. Use safe ways to lift large and heavy structures.
- Be careful when handling glass. Broken or cracked glass can cause serious injury.
- Use protective equipment (e.g. safety goggles, gloves, ear protection, etc.).
- Use safe hand/power tools and follow the instructions for their use.
- Be careful when carrying out installation work at height. Follow the safety and health instructions.

Only qualified personnel, well trained and instructed on the safety measures should assemble and install windows. When performing the installation work, it is necessary strictly comply with the current technical regulatory acts (hereafter TRA) of the installation region which are concerning the safety of work.

Personnel protection equipment



2. Opening inspection

- Aperture surfaces must be in the same plane and be flat and smooth without unevenness of plaster and cracks.
- Space required for installation must be free of building structures, heating and ventilation pipes, etc.
- Openings for window and door units must meet the requirements of the current TRA of the installation region and/or project documentation.

3. Rules for installation and securing of window and door frames

- Perform input control of window and door structures (see below ‘Controlled parameters of the finished product’).
- Frame must be positioned symmetrically to the vertical axis of the opening.
- When installing window and door frames, the components must be aligned vertically and horizontally.
- Frame must be securely fastened and not pose a potential danger to life and health.

Limit deviation of finished product controlled parameters, mm

| | |
|-------------------------------------------------------------------------------|------|
| Frame internal dimensions >1000 mm | +1,0 |
| Frame external dimensions >1000 mm | -1,0 |
| Straightness deviation at length and width on 1 m of any frame part | 1,0 |
| Flatness deviation at length and width | |
| on 1 m of any frame part | 1,0 |
| over the entire length | 3,0 |
| on the external surfaces of adjacent elements | 0,3 |
| Diagonal length difference | |
| ≤1000 mm | 1,0 |
| 1000–2000 mm | 2,0 |
| >2000 mm | 3,0 |

Fixing elements selection depends on the material characteristics of the opening.

The screws must be made of corrosion-resistant steel with a minimum thickness of 9 microns and strength class 5.6 or higher.

All fasteners must be corrosion-resistant.

Building products and materials used for filling window and door openings must comply with the requirements of the applicable regulation of the construction region, have manufacturer’s quality documents and, in accordance with current legislation, certificates of conformity. The replacement of products and materials must be carried out in accordance with the established procedure.

4. Window installation

Before installing the window, make a visual inspection of the product for:

- correctness of the ordered product (dimensions, opening scheme, colour, hardware, glazing, etc.);
- integrity of the structural elements and the completeness;
- gaps at window corners, cracks, missing areas and/or other damage.

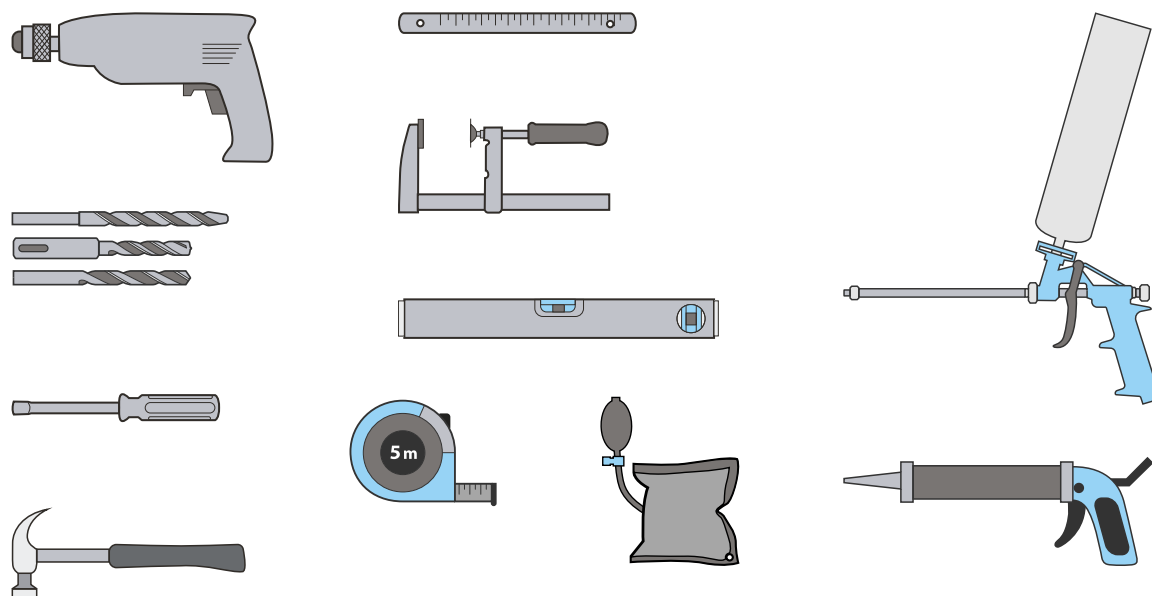
Before installing the structure into the opening, the rough (finishing) floor in the room must be completely ready.

Ensure proper waterproofing, vapor barrier and effective joint insulation according to the project documentation.

If construction work is carried out in the room during installation, the structure must be protected from splashes of mortar, cement, gypsum, aggressive substances (acid and alkali), and painting materials.

General information

Installation tools



5. Adjustment, testing and checking the product

Remove the protective film from inside and outside of the unit within 2 months of installation.

Clean the contaminated areas of the structure with water or non-aggressive cleaning solutions using a sponge or soft cloth.

Do not use abrasive cleaning products or products containing alcohol.

Check the function of the sash by opening and closing it three times. The hardware mechanisms should work without jamming.

For window and door with an electric motor, additionally check the operation of the automatics in all programmed modes.

6. Acceptance of the assembled product

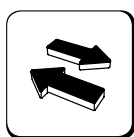
Customer acceptance of the assembled product must be carried out in accordance with the current TRA of the installation region in the following order:

- representative of the organization that installed the product makes a full demonstration of the functional capability of the window and door;
- preparation of operational documentation.

Information icons



Attention



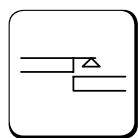
Can be replaced



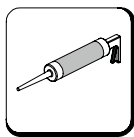
Technical information



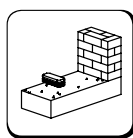
See page



Flatness



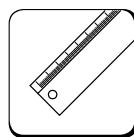
Silicone sealant



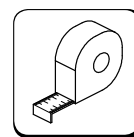
Clean the opening



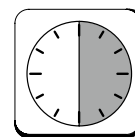
Clean the surface



Measure



Measure



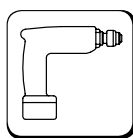
Hold for 30 min



Drill

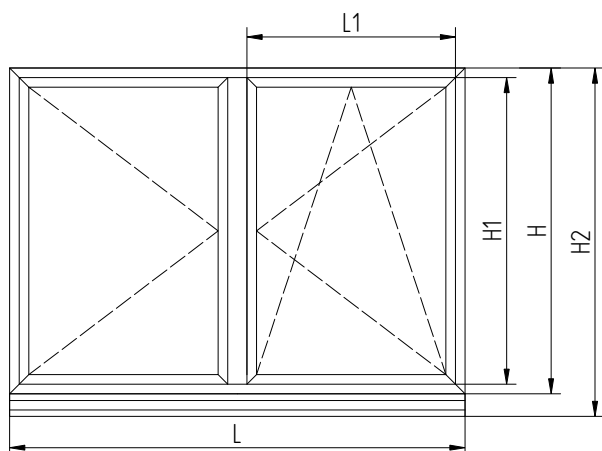


Countersink

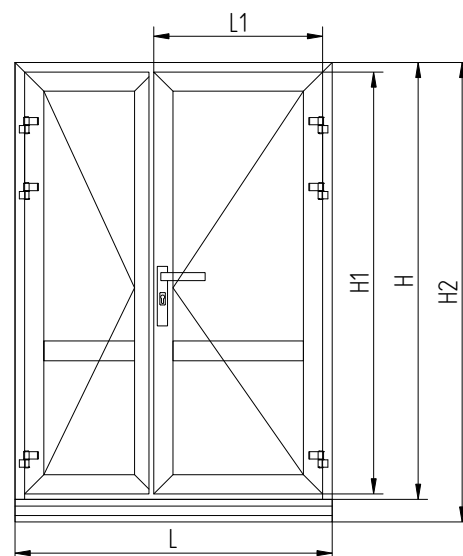


Screw in

Standard window and door drawing



H – frame height;
H1 – sash/leaf height;
H2 – structure height including supporting block;

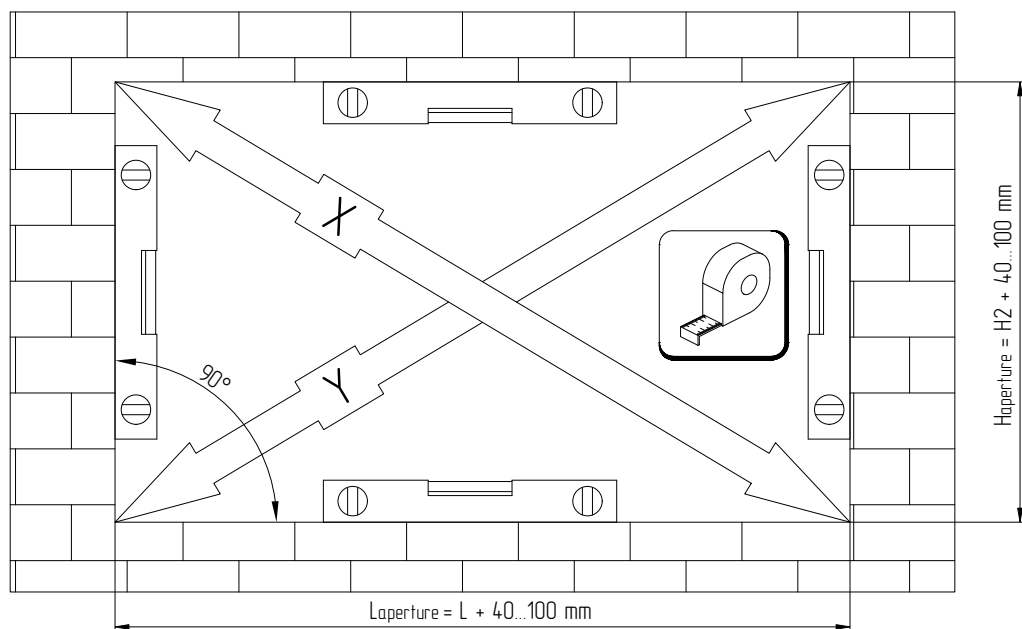
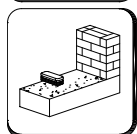


L – structure width;
L1 – sash/leaf width.

ALTW62 / ALTW72 system installation

1

Check the dimensions of the opening for compliance with the project documentation and/or TRA of the installation region

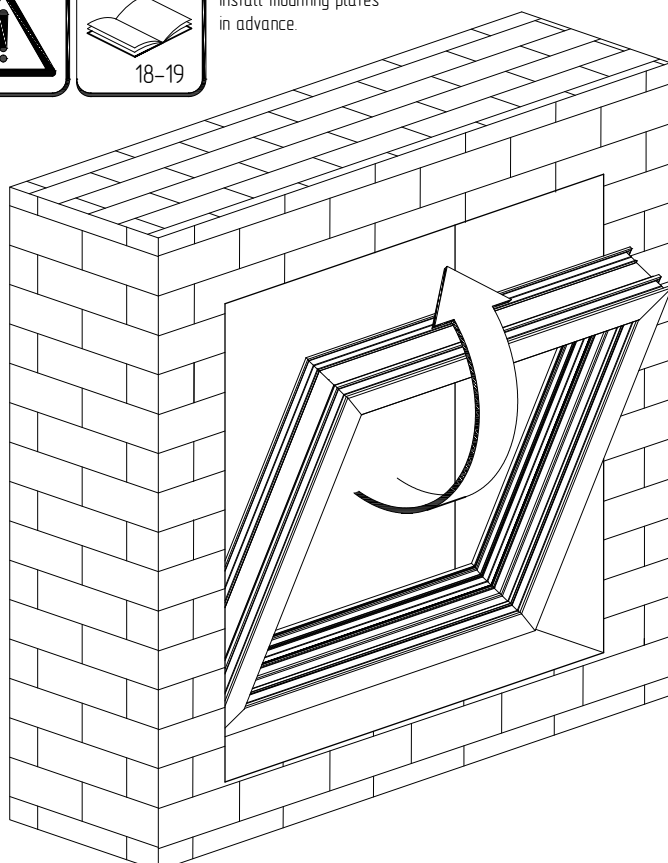


2

Prepare the aperture before frame installation according to the project documentation and/or TRA of the installation region



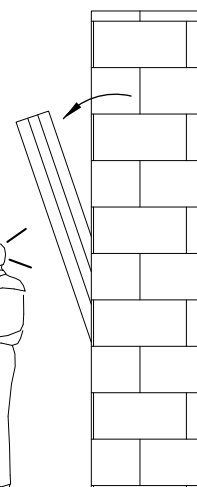
Install mounting plates in advance.



Prepare the frame for installation into the opening
 - remove the opening sash;
 - remove the glass from fixed structures.
 It is recommended to mark the glass beads and glass when removing the elements from fixed structures.



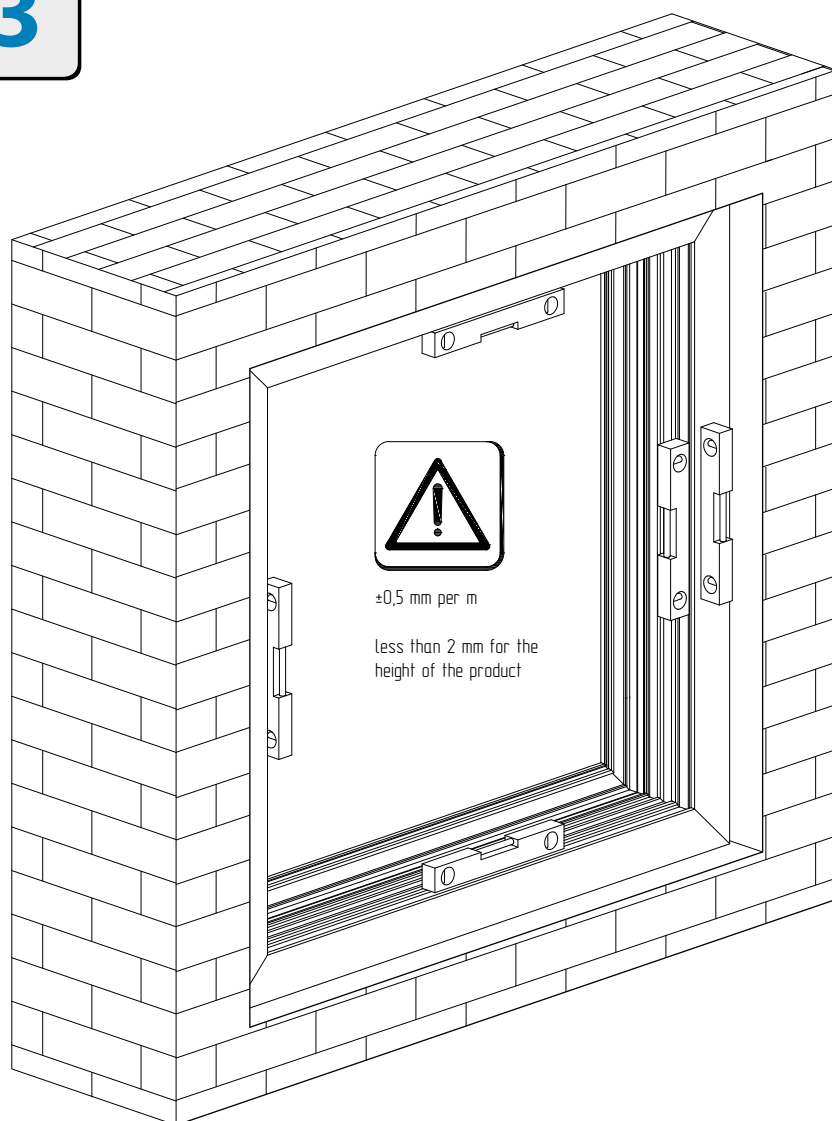
Do not leave the structure unfixed



ALT W62 / ALT W72 system installation

3

Align window/door frame horizontally and vertically using a level



It is possible to use mounting pads for easy adjustment of the window/door in the opening.

Install windows and doors into the opening on bearing supports.

Use the spacer and level to ensure that the window is horizontal and vertical.

Bearing supports and spacers must be installed in such a way that they do not cause deformation of the windows and doors.

Installation of the bearing supports and spacers on the fasteners is not allowed.

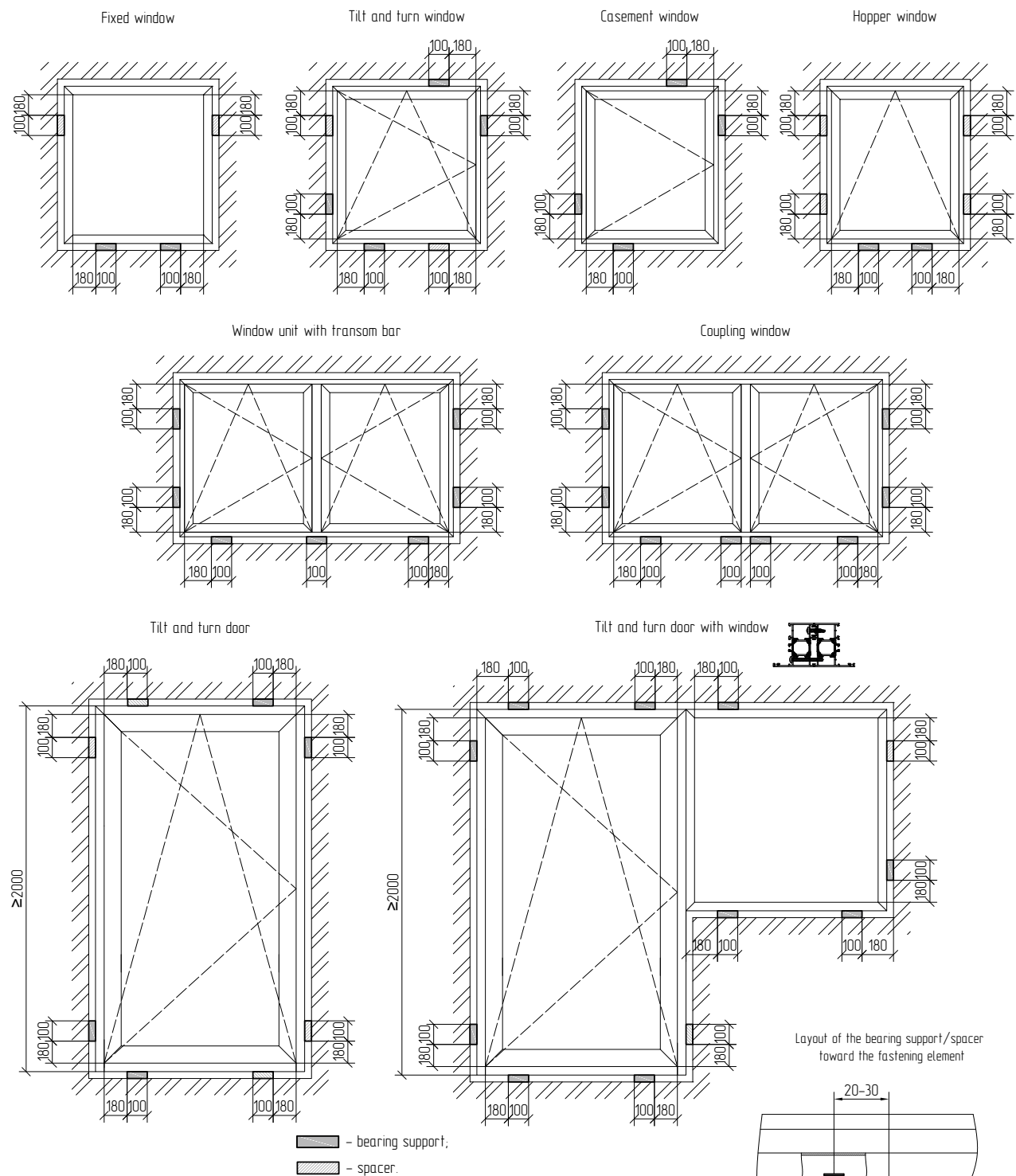
Material: antiseptic wood, plastic, paronite.



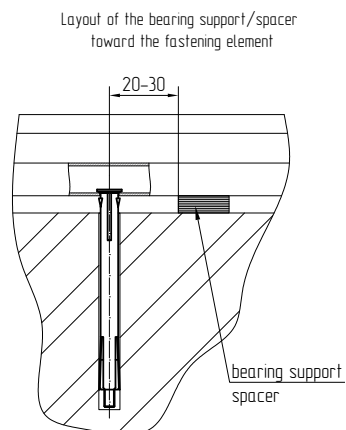
Do not remove the bearing supports once the window/door has been installed and fixed!

ALT W62 / ALT W72 system installation

Layout of supports and spacers

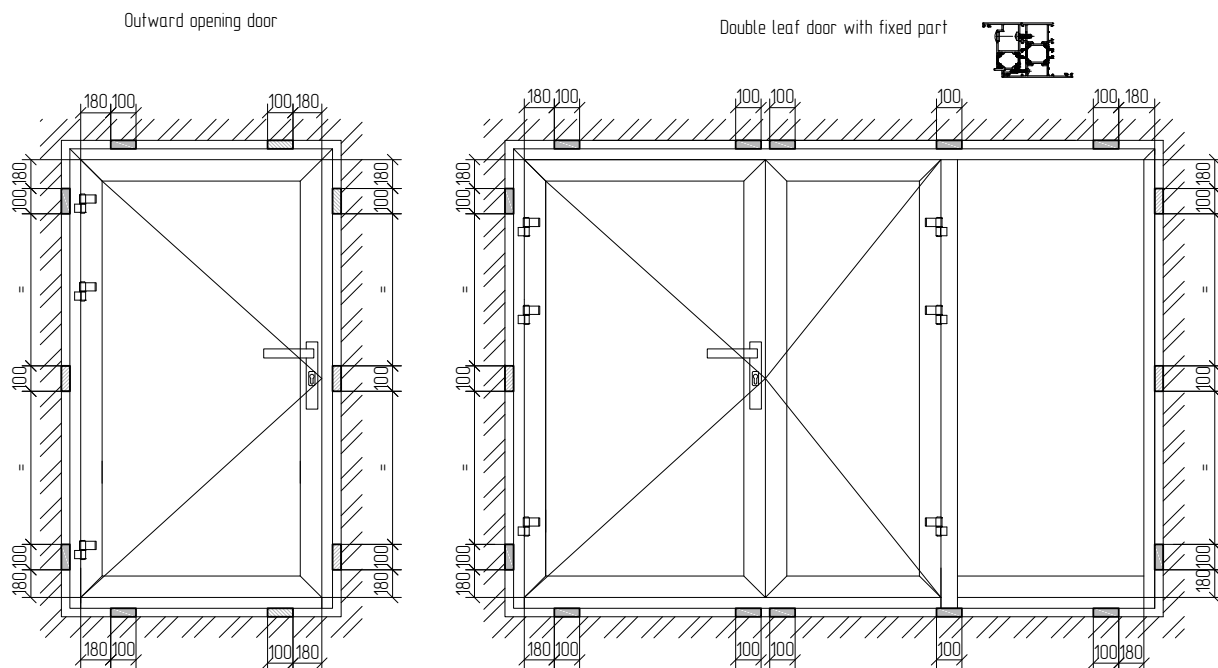


It is not allowed to remove the bearing supports after installing and fixing the window!
Install additional spacers near each fixing element!



ALT W62 / ALT W72 system installation

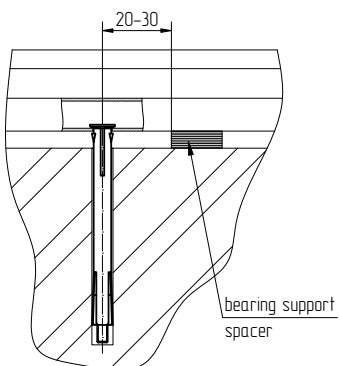
Layout of supports and spacers



Layout of the bearing supports/spacers is the same for inward and outward opening doors.

- bearing support;
- spacer.

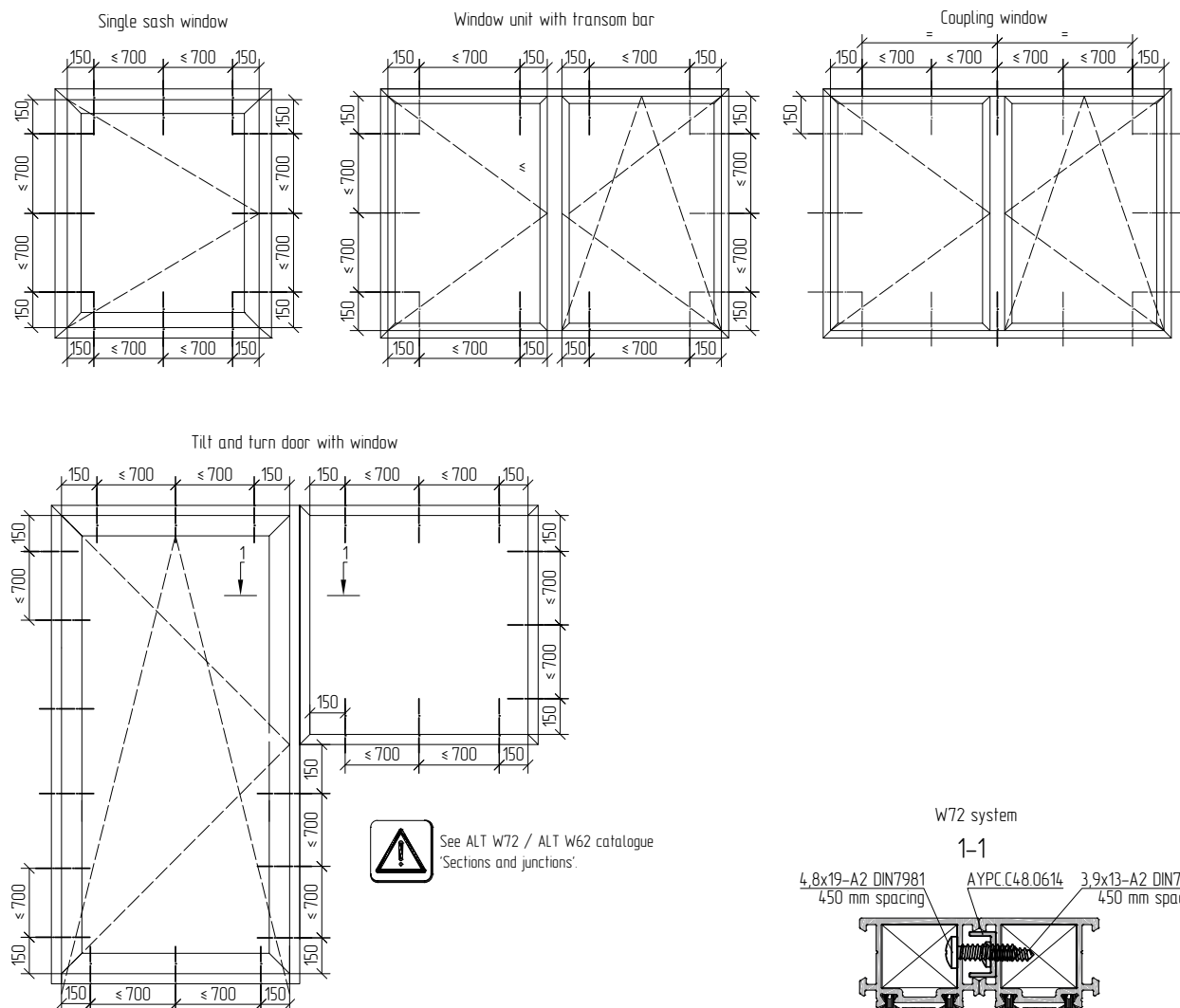
Layout of the fixing element
toward the bearing support/spacer



It is not allowed to remove the bearing supports after installing and fixing the window!
Install additional spacers near each fixing element!

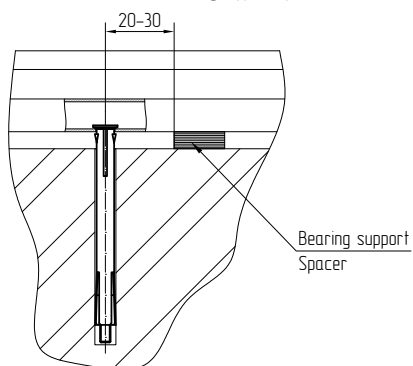
ALT W62 / ALT W72 system installation

Layout of fasteners



See ALT W72 / ALT W62 catalogue
'Sections and junctions'.

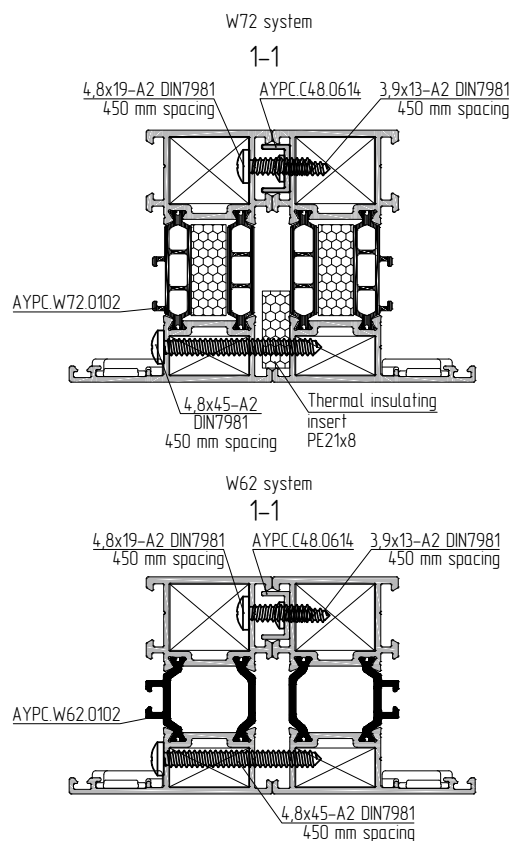
Layout of the fixing element
toward the bearing support/spacer



Bearing support
Spacer



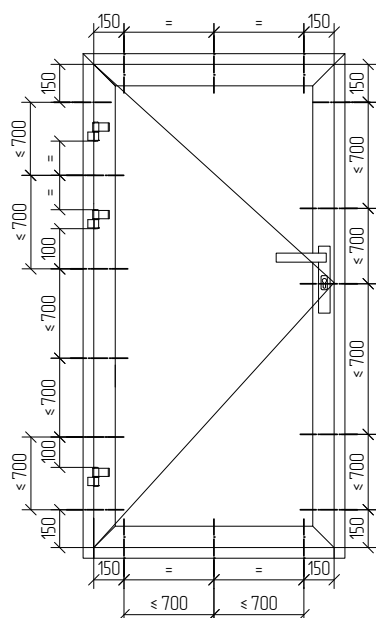
Type of fixing elements and its installation depth depends on the wall material.
Select in accordance with TRA of the installation region and the project documentation!



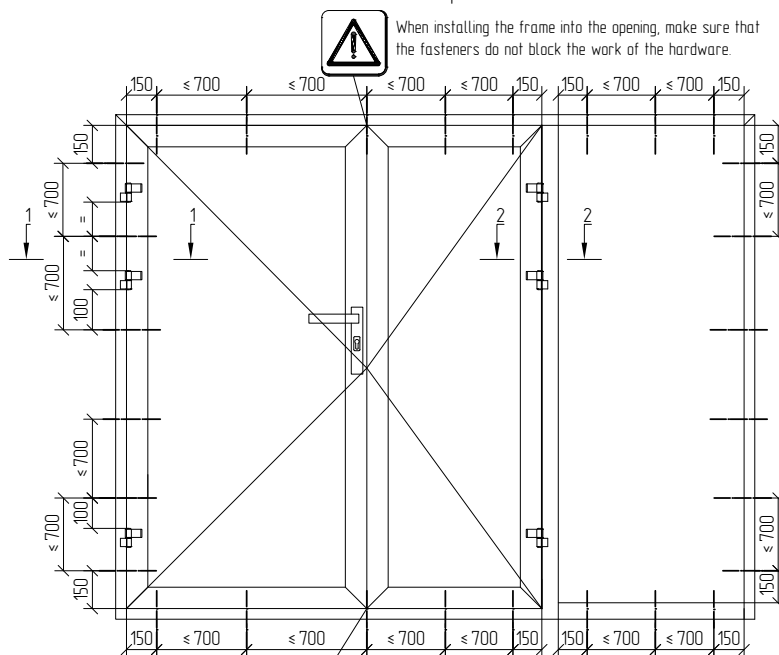
ALT W62 / ALT W72 system installation

Layout of attachment points

Single leaf door



Double leaf door with fixed part



Layout of the fasteners is the same for the outwards and inwards opening doors.

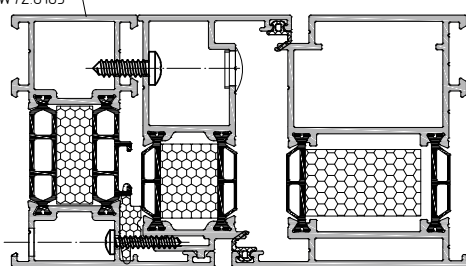


See ALT W72 / ALT W62 catalogue, section 'Profiles machining and assemblage'.

Frame profiles

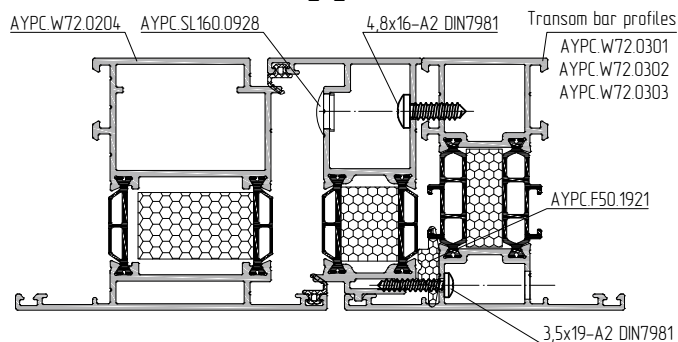
AYPC.W72.0101
AYPC.W72.0102
AYPC.W72.0103

1-1



W72 system

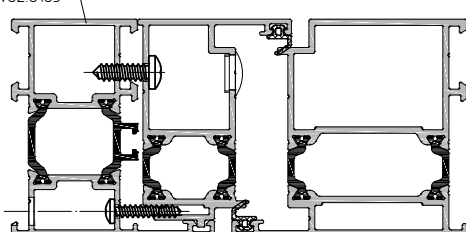
2-2



Frame profiles

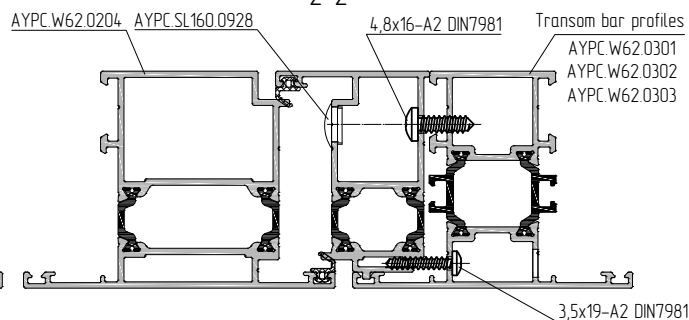
AYPC.W62.0101
AYPC.W62.0102
AYPC.W62.0103

1-1



W62 system

2-2



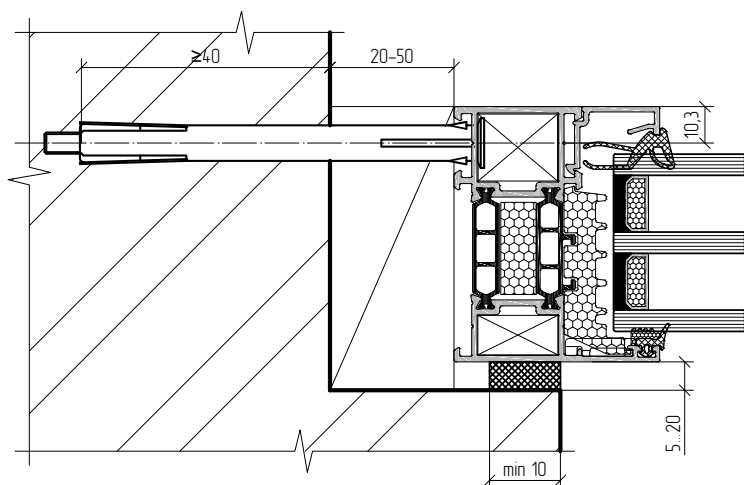
Type of fixing elements and its installation depth depends on the wall material.
Select in accordance with TRA of the installation region and the project documentation!

ALT W62 / ALT W72 system installation

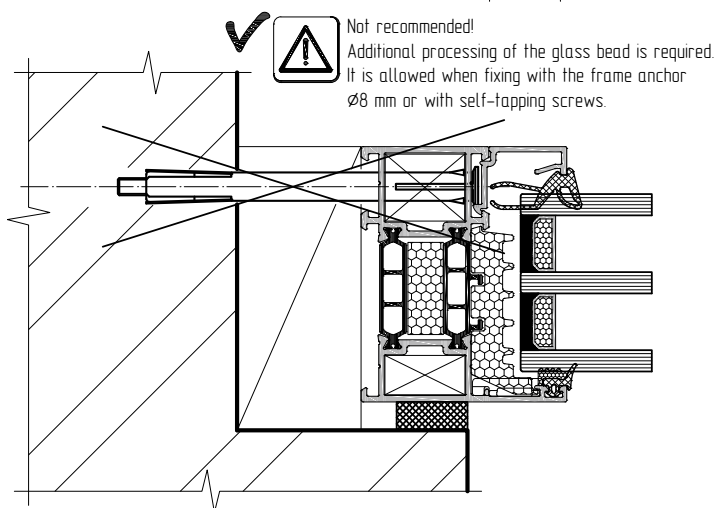
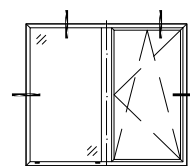
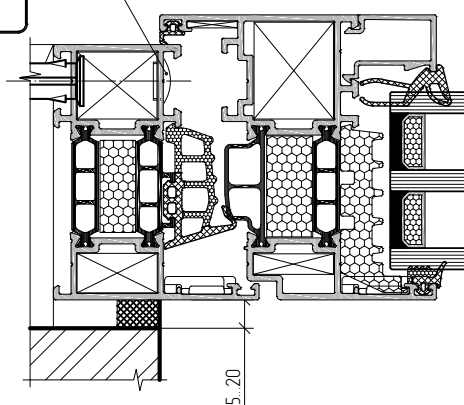
Window installation into the opening with rebated jambs using frame anchors


✓
Frame anchors should be fixed
only on the warm part of the profile

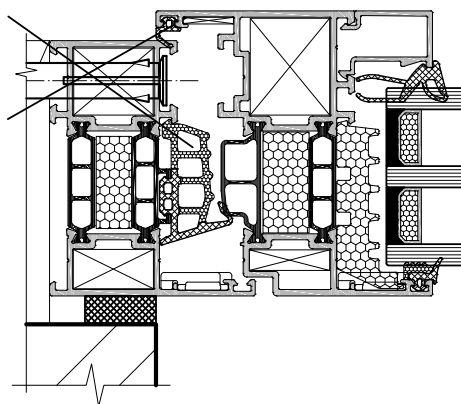
Requirements are the same for ALT W62 and ALT W72.




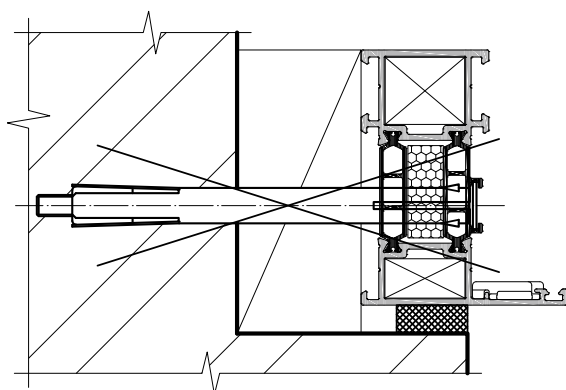
Decorative plug




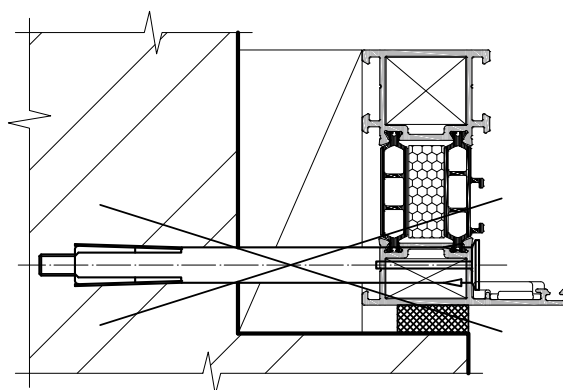
✗  Not allowed for outerframe!



✗  Fixing in polyamide is not allowed!



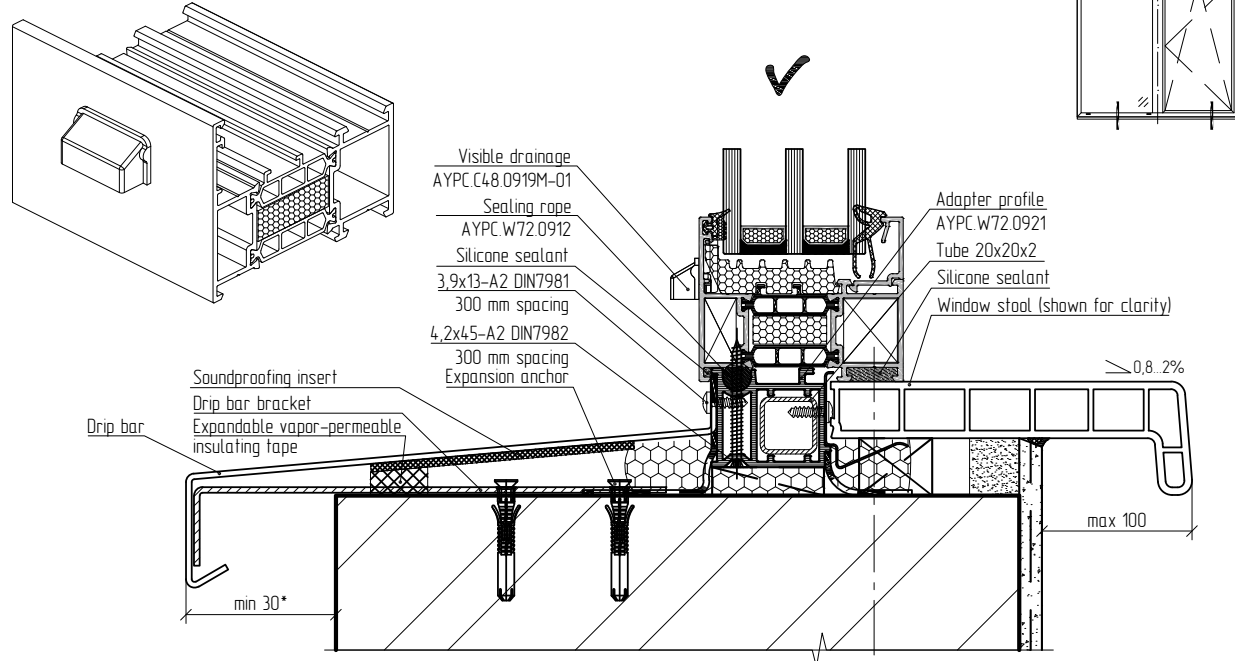
✗  Not allowed to install
in the outer part of the profile!



Before installing the frame refer to the joint scheme according to the project documentation and TRA of the installation region!

Window installation into the opening with rebated jambs using frame anchors

Visible drainage



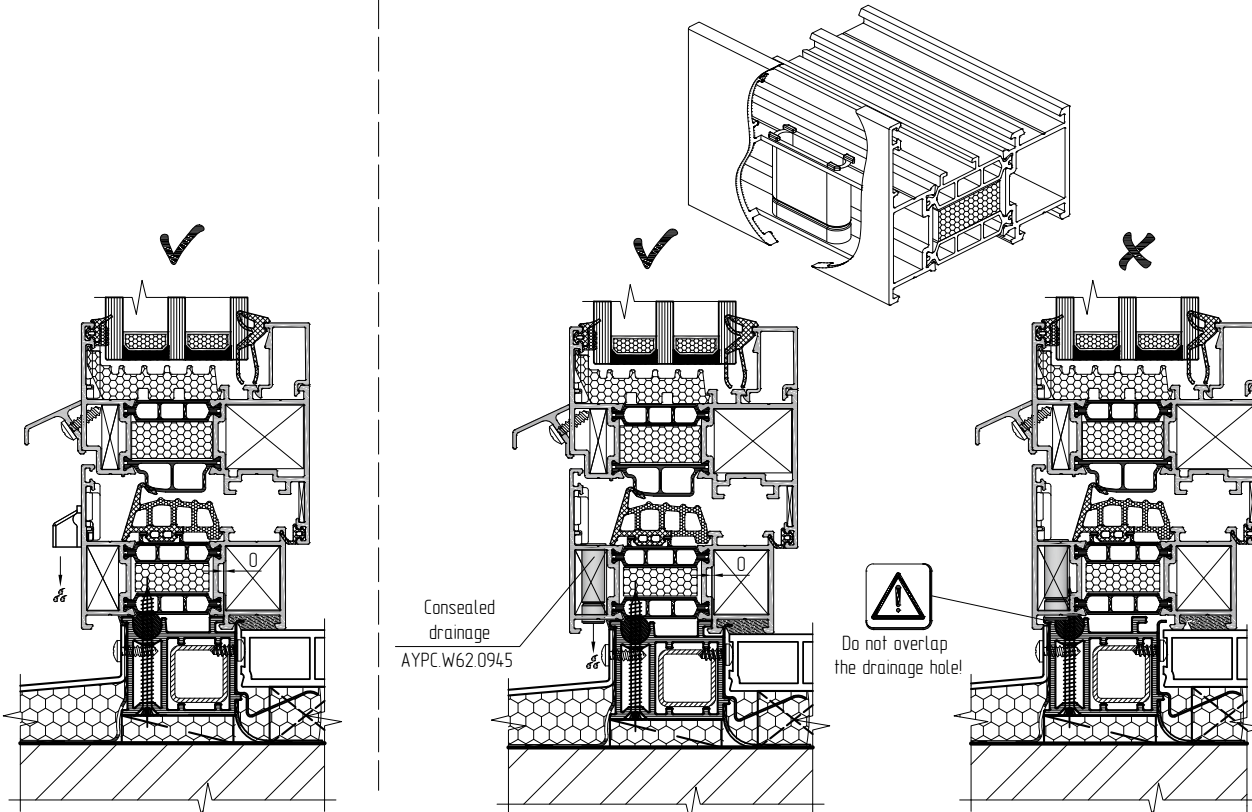
If the drip bar width is more than 150 mm and the window opening width is more than 900 mm, the drip bar is additionally attached to metal brackets and the brackets are attached to the bottom of the window opening with expending dowels.

Overlap of the drip bar on the façade depends on the region of construction.

A cement-sand screed or foam seal is applied on the surface of the opening under the drip bar.

Drainage

Consealed drainage

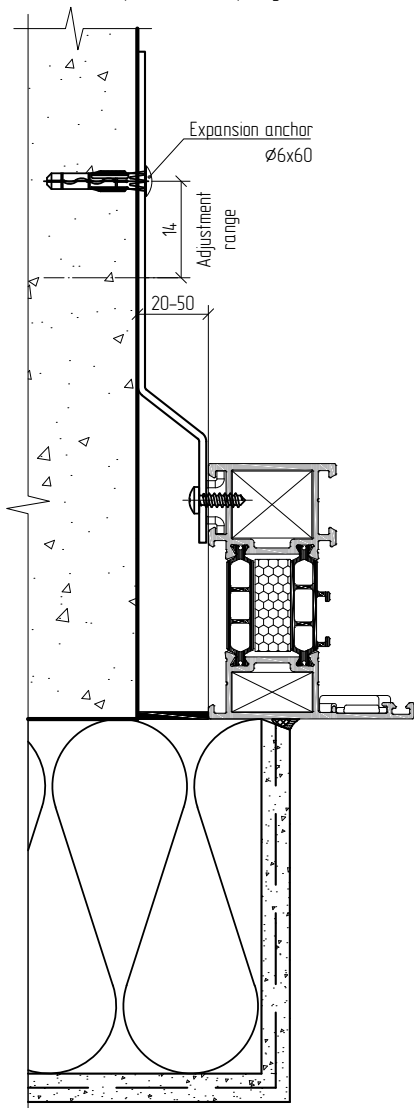


ALT W62 / ALT W72 system installation

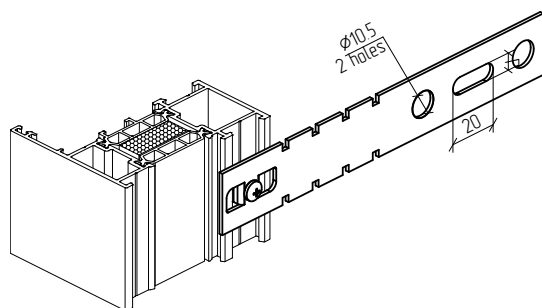
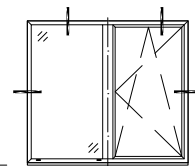
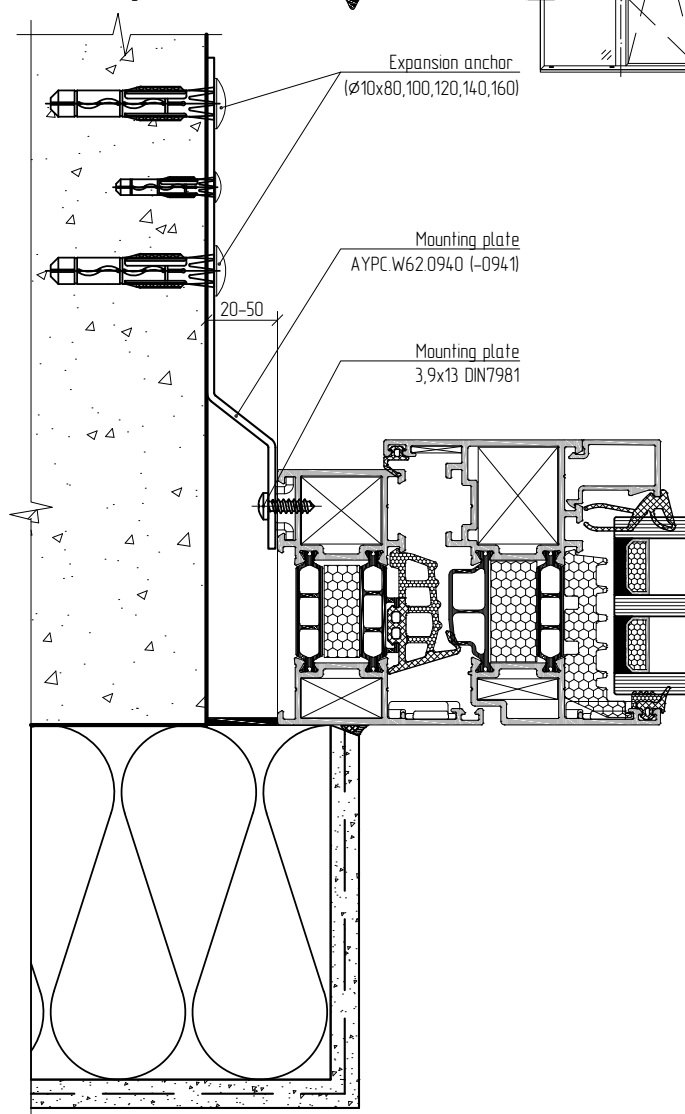
Window installation into the opening without rebated jambs using mounting plates

Requirements are the same for ALT W62 and ALT W72

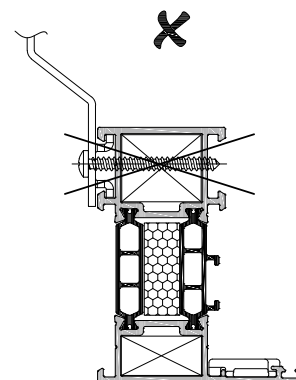
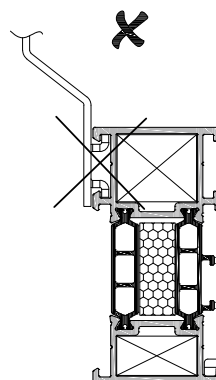
Pre-installation and adjustment
of the frame position in the opening



Final anchoring

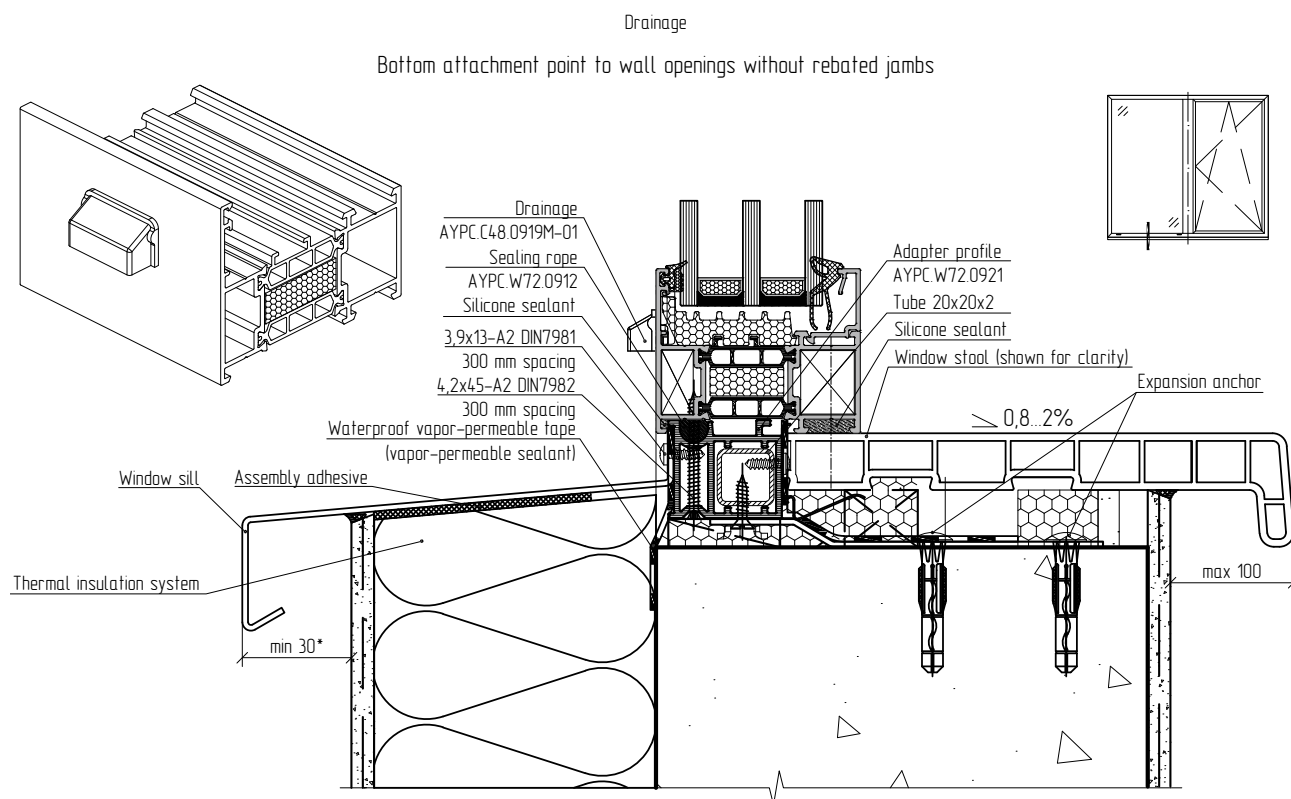


Before installing the frame refer to the joint scheme according to the project documentation and TRA of the installation region!

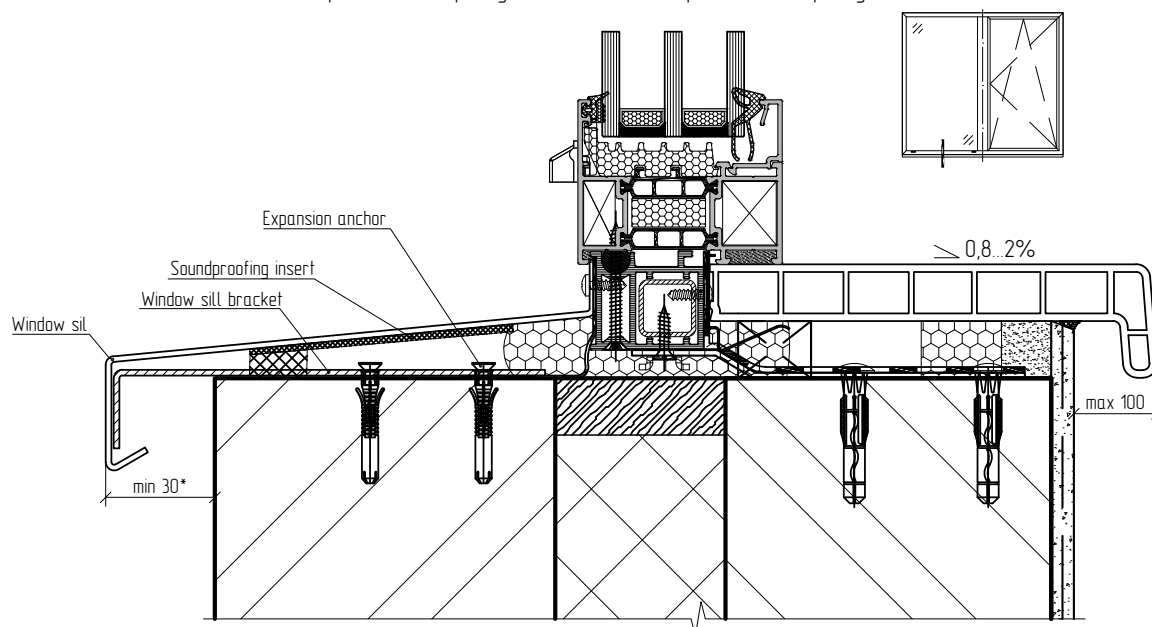


ALT W62 / ALT W72 system installation

Window installation into the opening without rebated jambs using mounting plates



Bottom attachment point to wall openingsBottom attachment point to wall openings



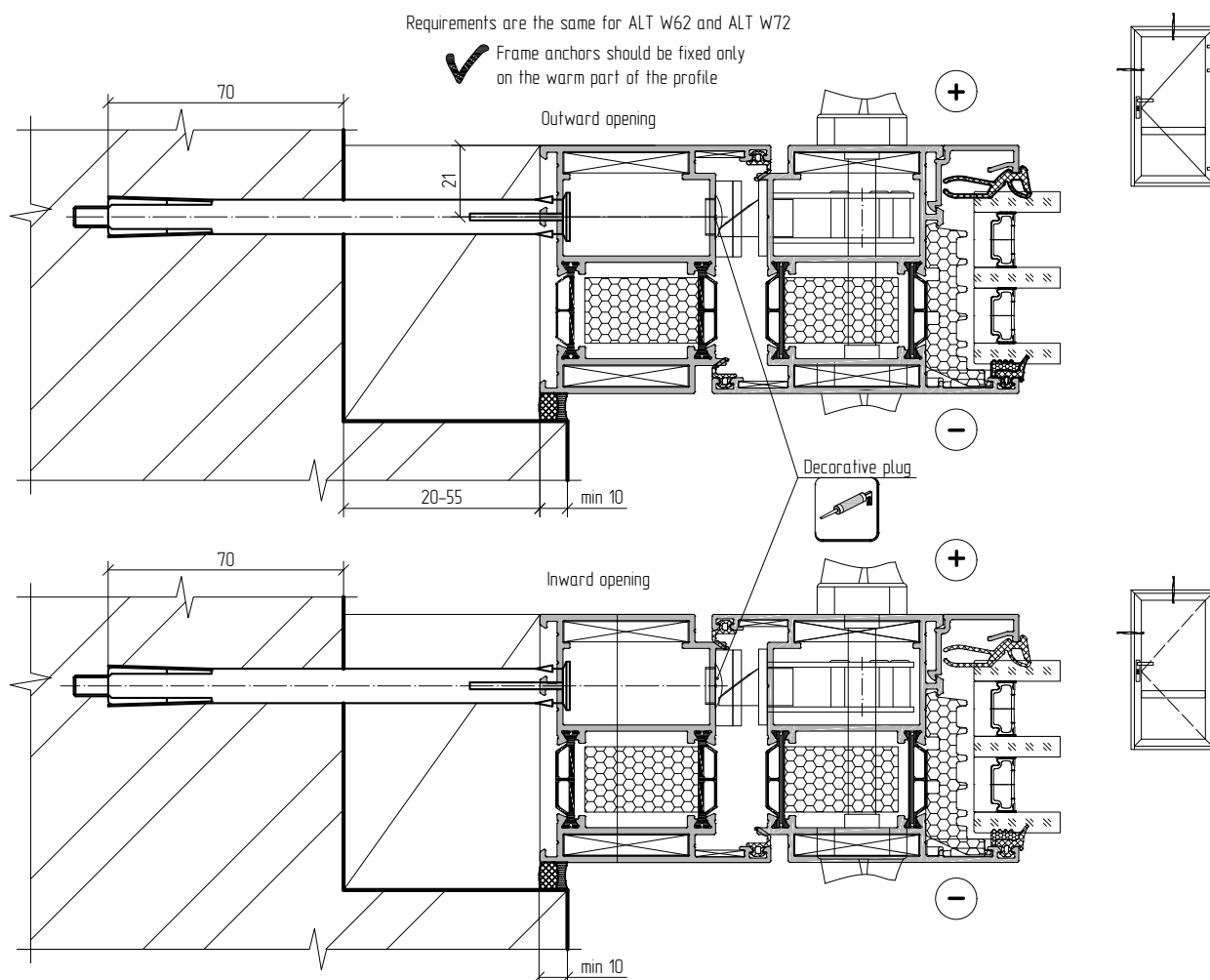
If the window sill width is more than 150 mm and the window opening width is more than 900 mm, the window sill is additionally attached to metal brackets, and the brackets are attached to the bottom of the window opening with expending dowels.
Overlap of window sill on the façade depends on the region of construction.
A cement-sand screed or foam seal is applied on the surface of the opening under the window sill.

ALT W62 / ALT W72 system installation

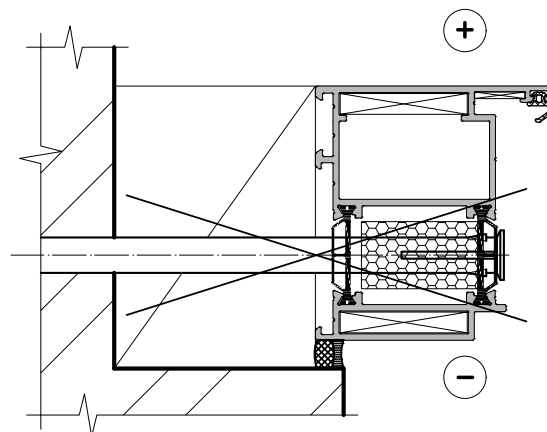
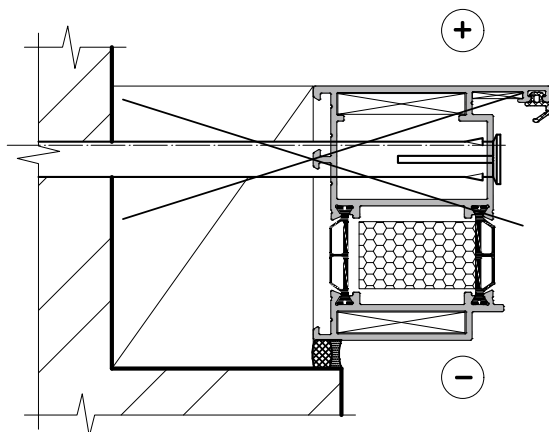
Door installation into the opening with rebated jambs using frame anchors

Requirements are the same for ALT W62 and ALT W72

✓ Frame anchors should be fixed only on the warm part of the profile



Installation in polyamide is not allowed!

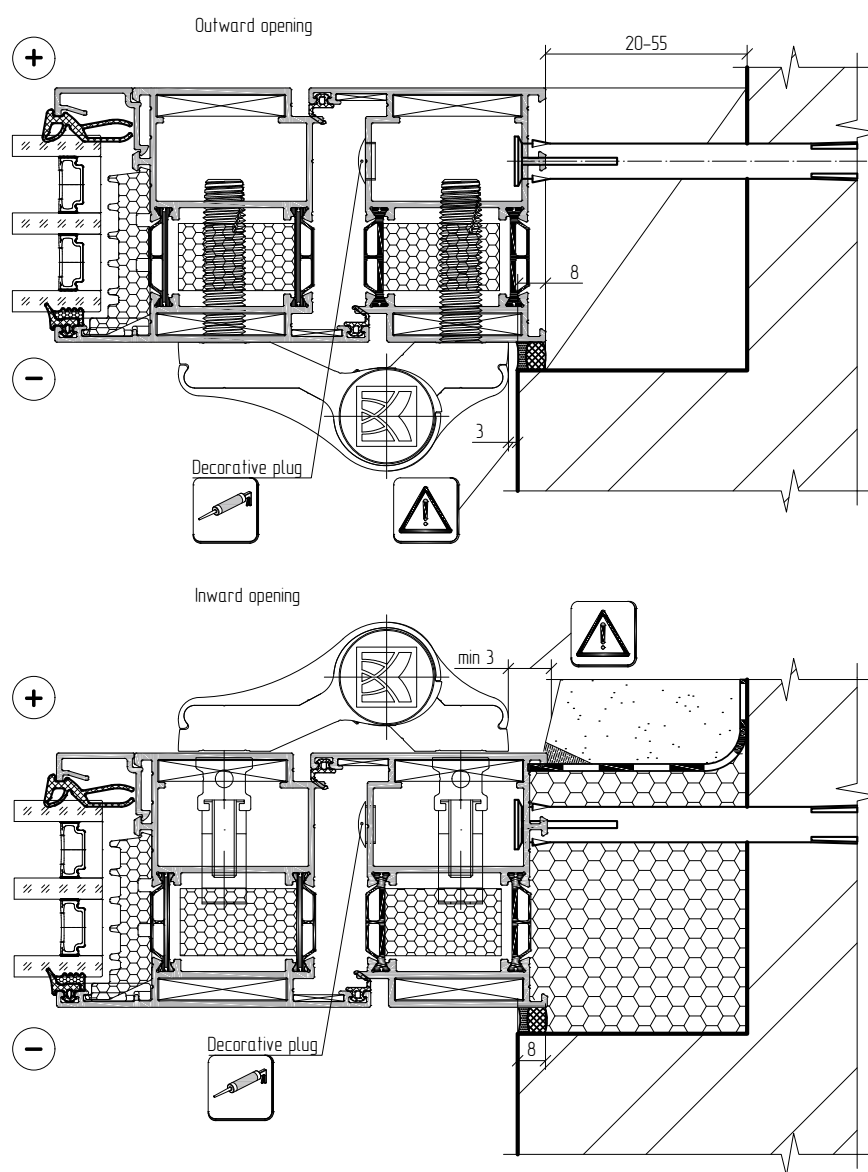


Before installing the frame refer to the joint scheme according to the project documentation and TRA of the installation region!

ALT W62 / ALT W72 system installation

Door installation into the opening with rebated jambs using frame anchors

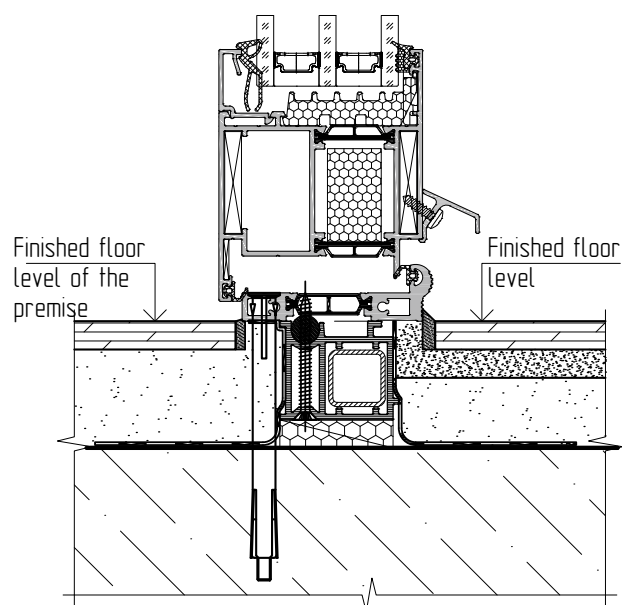
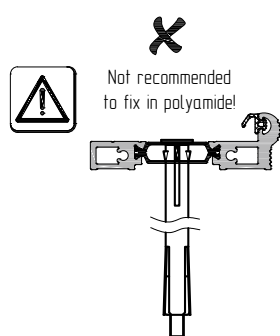
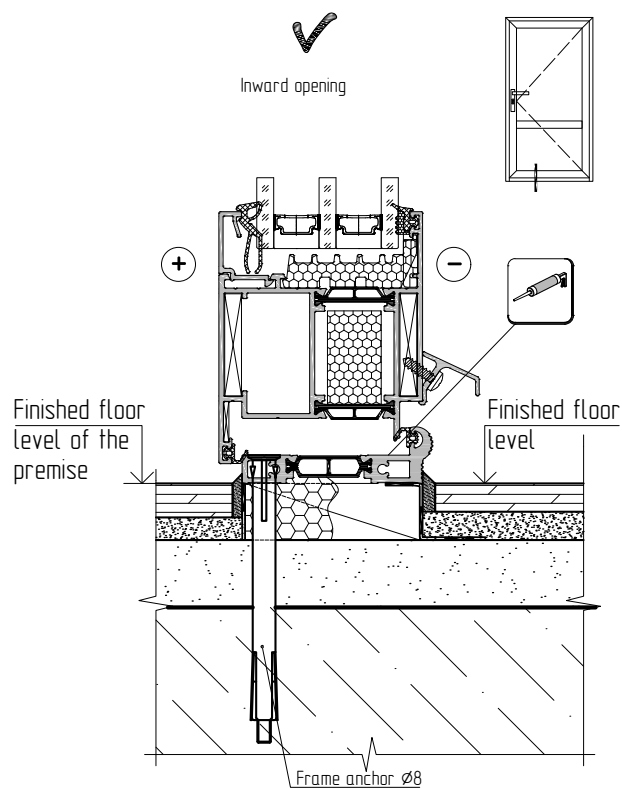
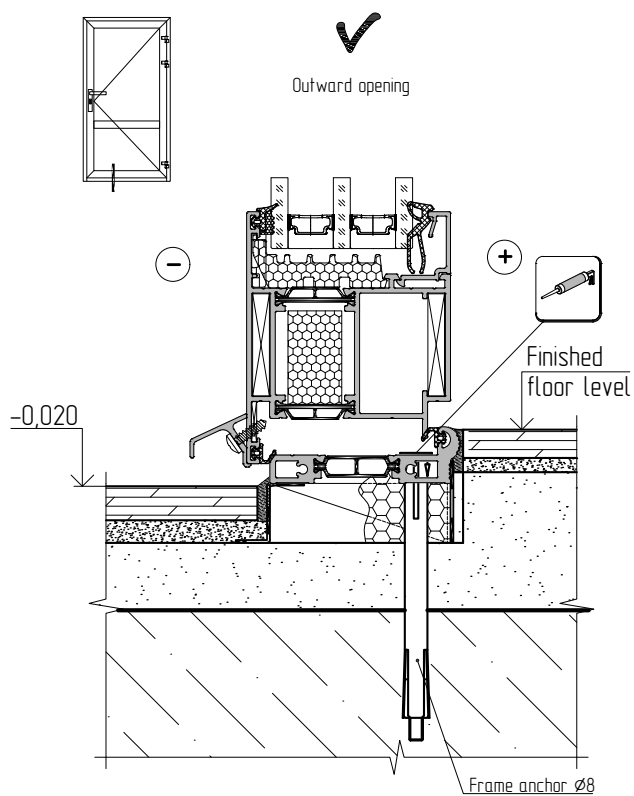
Requirements are the same for ALT W62 and ALT W72



ALT W62 / ALT W72 system installation

Door installation into the opening with rebated jambs using frame anchors

Requirements are the same for ALT W62 and ALT W72

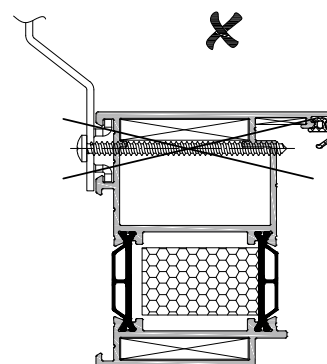
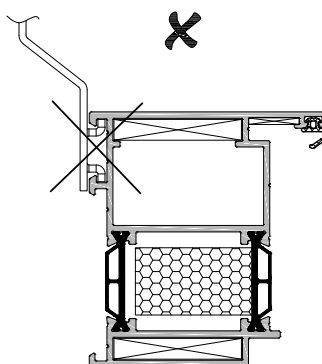
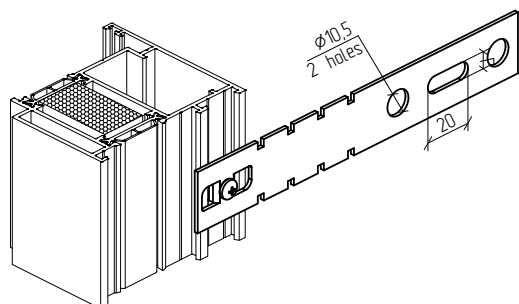
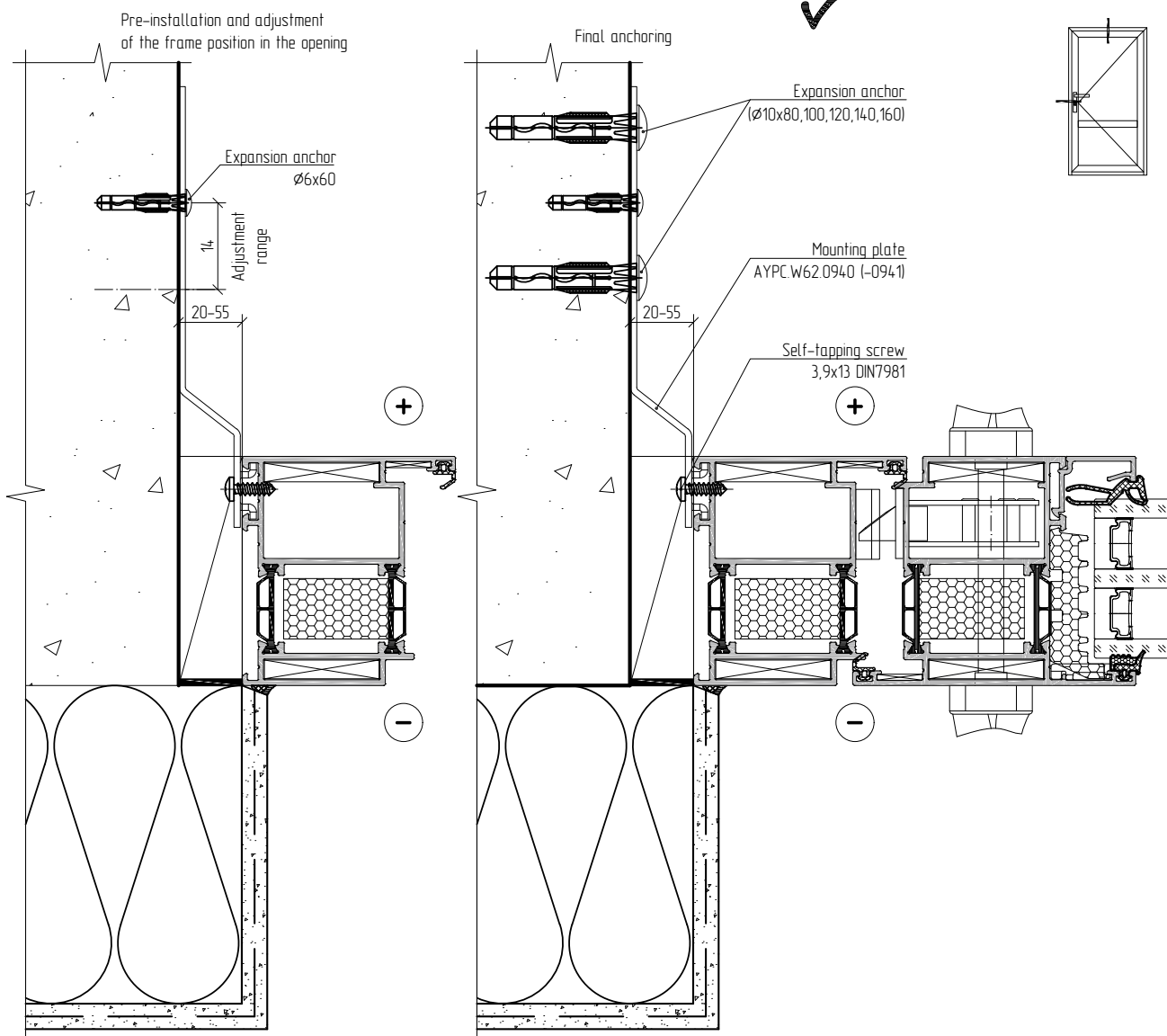


Before installing the frame refer to the joint scheme according to the project documentation and TRA of the installation region!

ALT W62 / ALT W72 system installation

Door installation into the opening with rebated jambs using mounting plates

Requirements are the same for ALT W62 and ALT W72

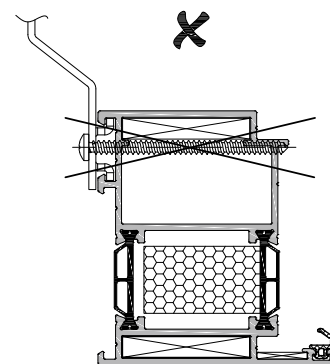
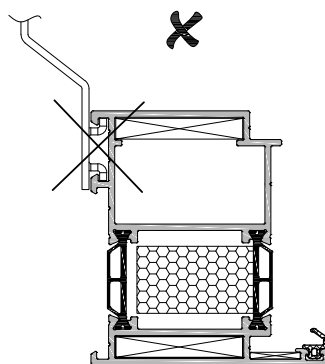
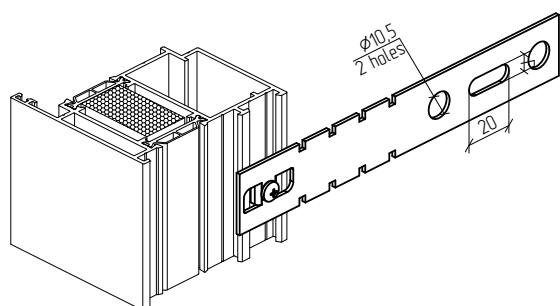
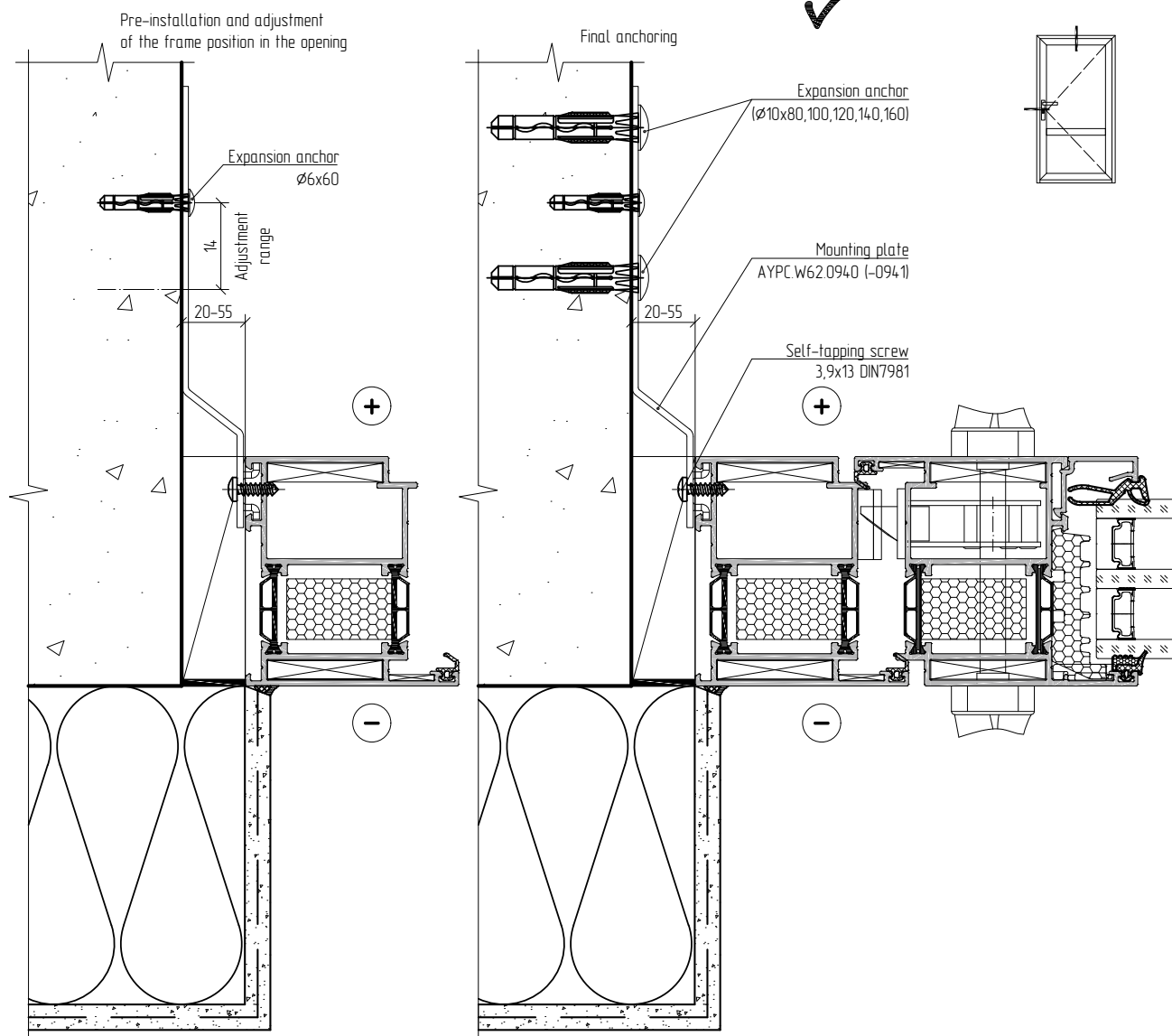


Before installing the frame refer to the joint scheme according to the project documentation and TRA of the installation region!

ALT W62 / ALT W72 system installation

Door installation into the opening with rebated jambs using mounting plates

Requirements are the same for ALT W62 and ALT W72

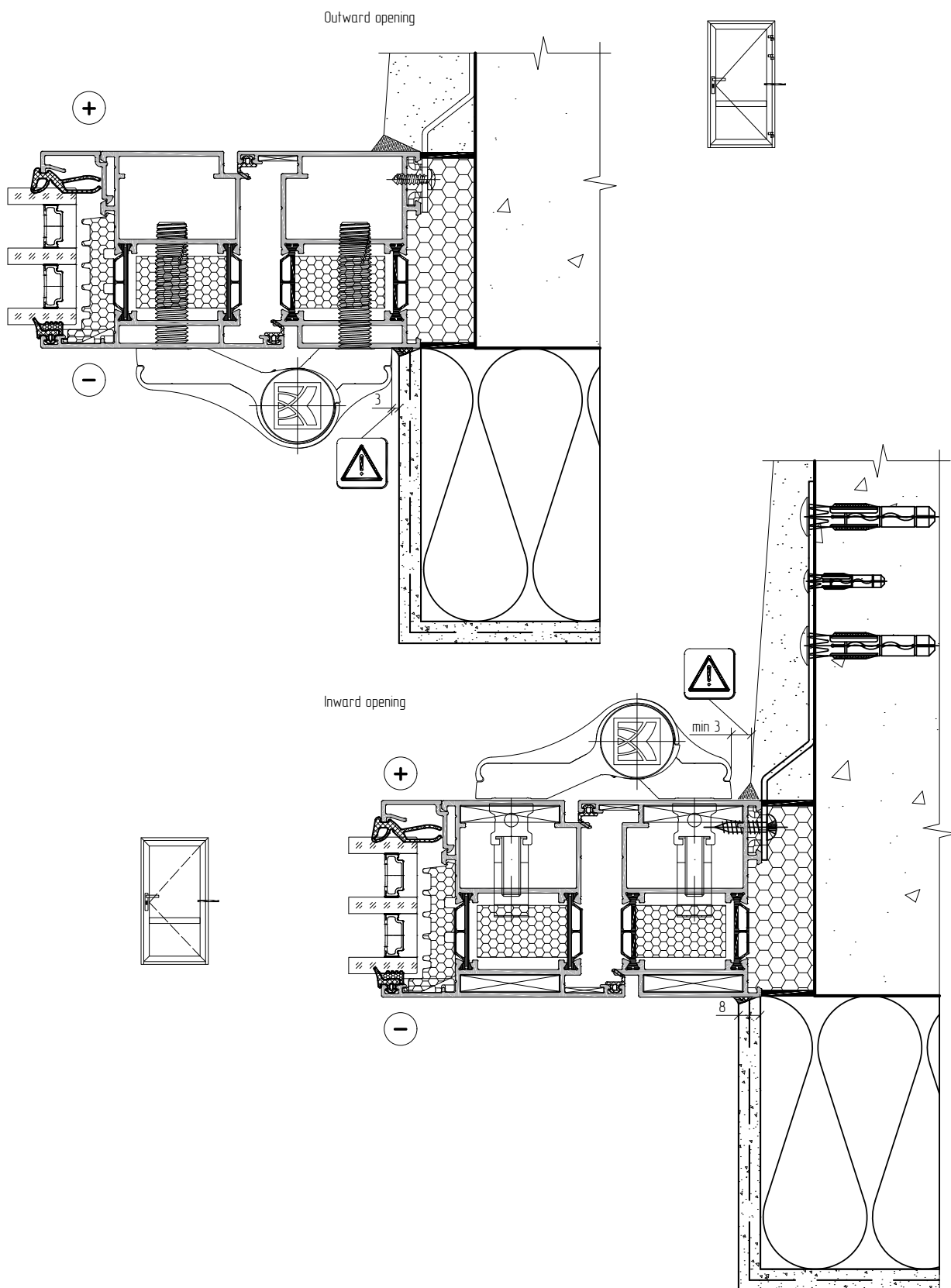


Before installing the frame refer to the joint scheme according to the project documentation and TRA of the installation region!

ALT W62 / ALT W72 system installation

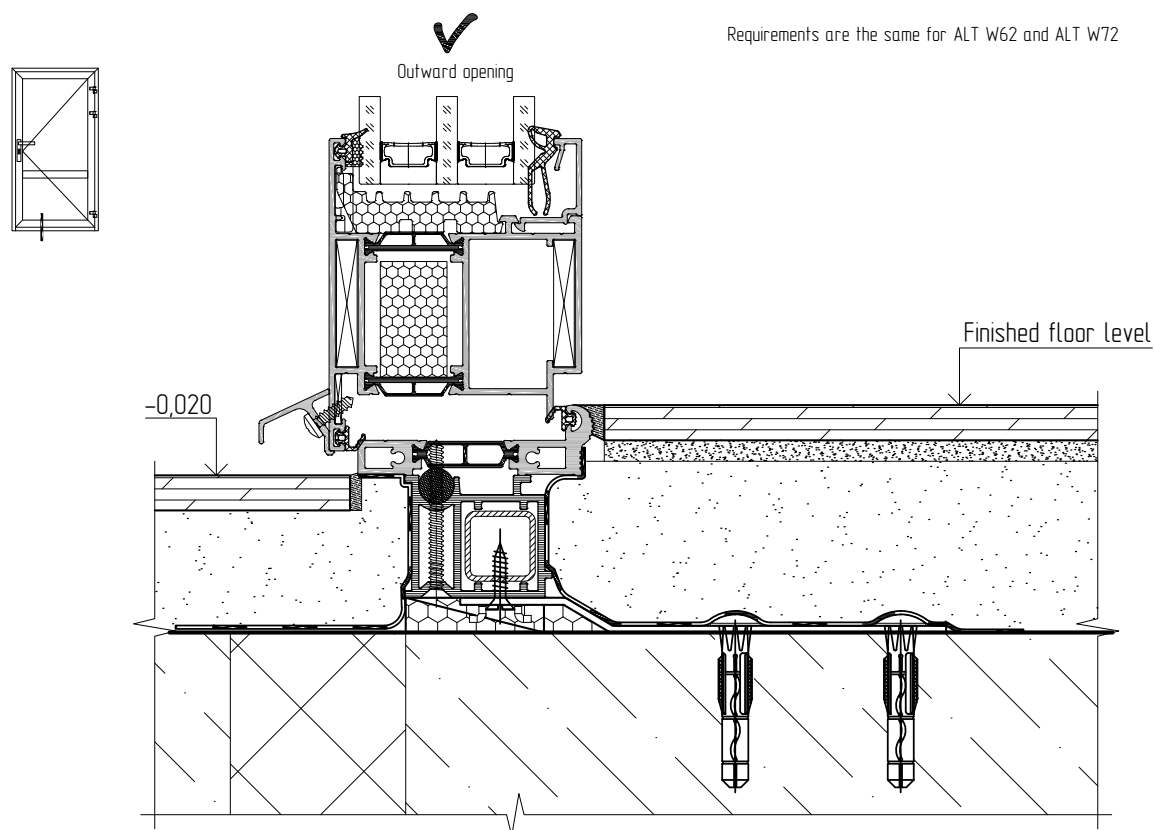
Door installation into the opening with rebated jambs using mounting plates

Requirements are the same for ALT W62 and ALT W72

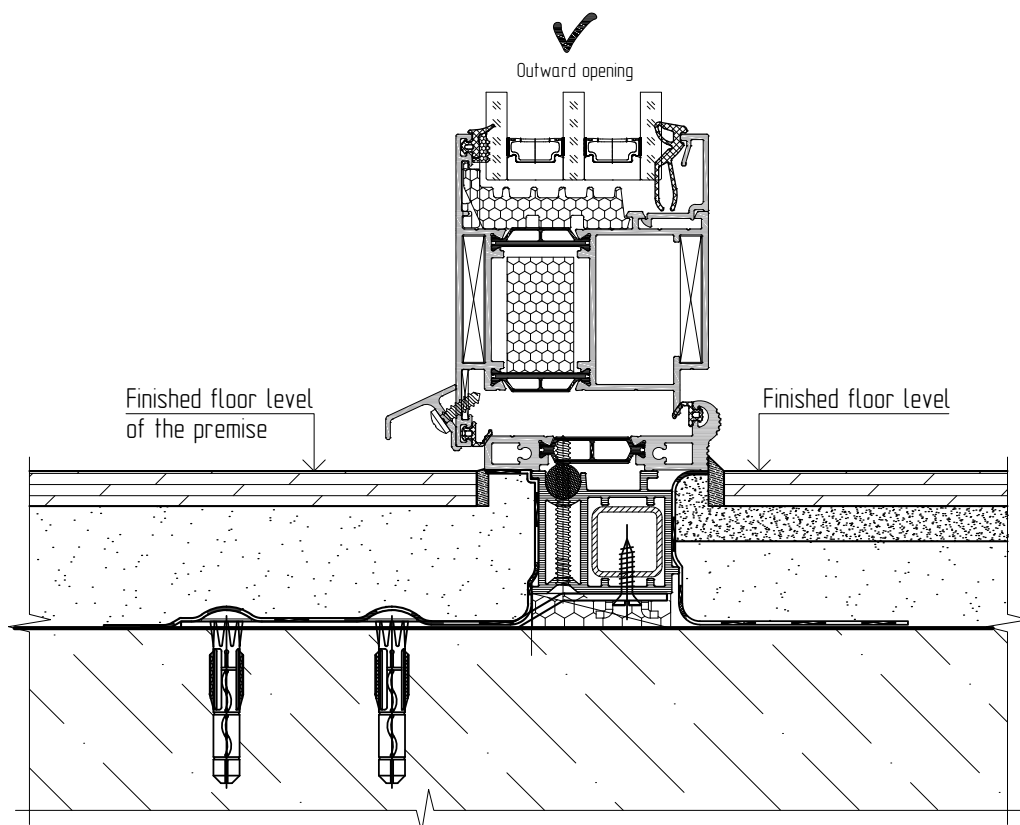


ALT W62 / ALT W72 system installation

Door installation into the opening with rebated jambs using mounting plates



Requirements are the same for ALT W62 and ALT W72

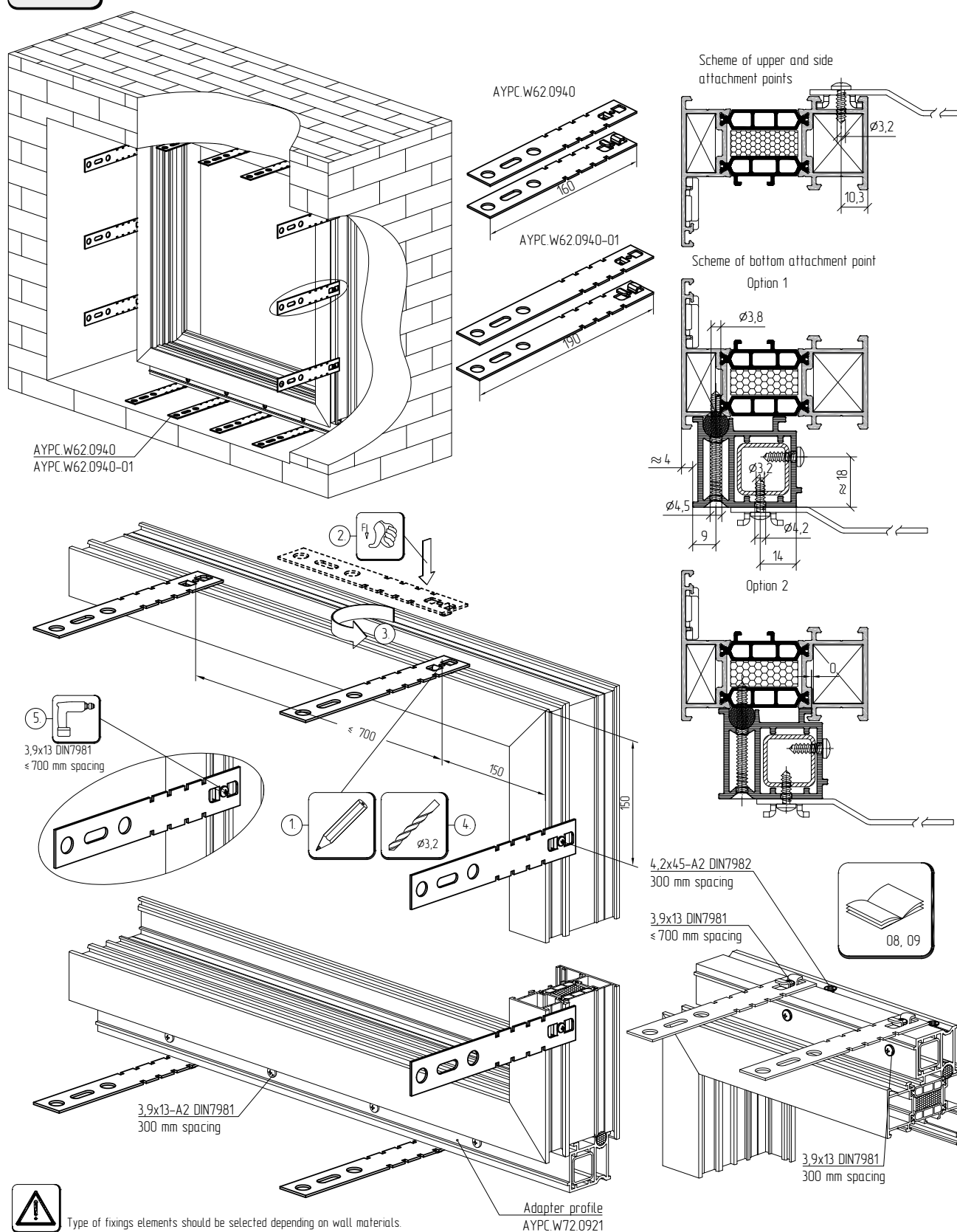


ALT W62 / ALT W72 system installation

4

Window installation with the use of mounting plates

The requirements for installation of the frame into the opening are the same for both mounting plates and anchors (for more information, see pages 07-10).



ALT W62 / ALT W72 system installation

4

Door installation with the use of mounting plates

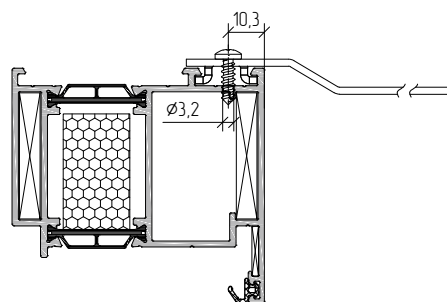
The requirements for installation the frame into the opening are the same for both mounting plates and anchors (for more information, see pages 11–14).

Outward opening

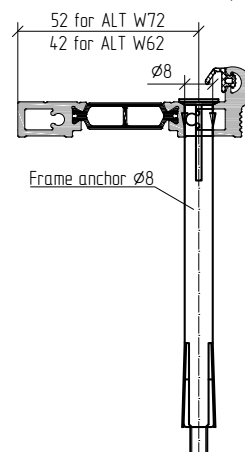
AYPC W62.0940
AYPC W62.0940-01

Frame anchor $\varnothing 8$

Scheme of upper
and side attachment points



Scheme of bottom attachment point



3,9x13 DIN7981
≤ 700 mm spacing

Frame anchor $\varnothing 8$

for

13-16



Type of fixings elements should be selected depending on wall materials.

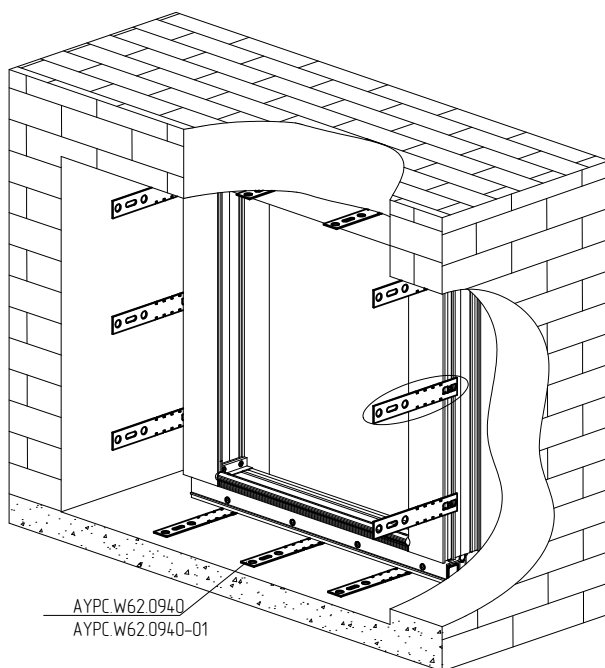
ALT W62 / ALT W72 system installation

4

Door installation with the use of mounting plates

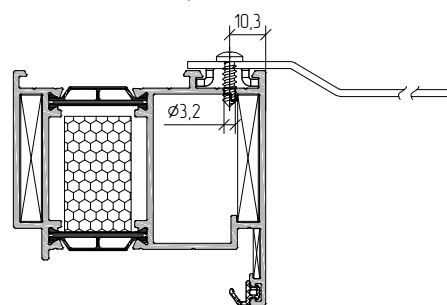
The requirements for installation the frame into the opening are the same for both mounting plates and anchors (for more information, see pages. 11-14).

Outward opening

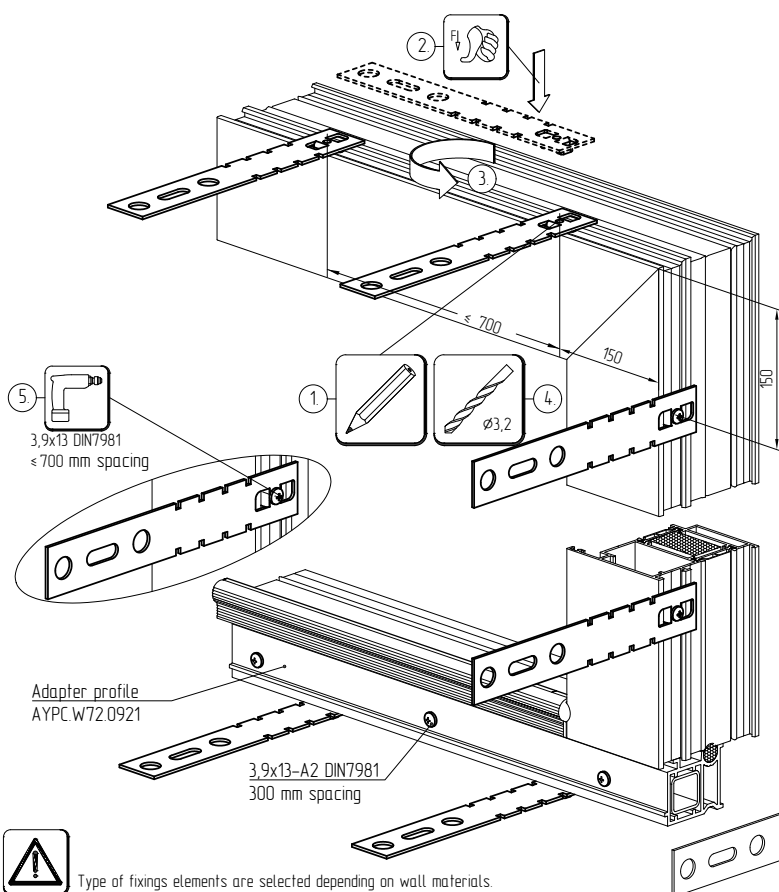
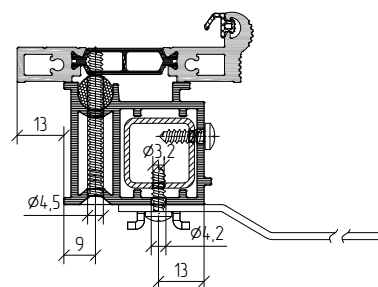


AYPC W62.0940
AYPC W62.0940-01

Scheme of upper and side attachment points



Scheme of bottom attachment point



Adapter profile
AYPC W72.0921

3.9x13-A2 DIN7981
300 mm spacing

4.2x45-A2 DIN7982
300 mm spacing

3.9x13 DIN7981
≤ 700 mm spacing

3.9x13 DIN7981
300 mm spacing

12-13



Type of fixings elements are selected depending on wall materials.

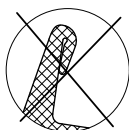
ALT W62 / ALT W72 system installation

5

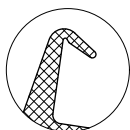
Gasket checking

Check all gaskets for damage, sticking, or breakage:

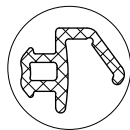
- perimeter of the gaskets;
- gasket joints locations.



Central gasket



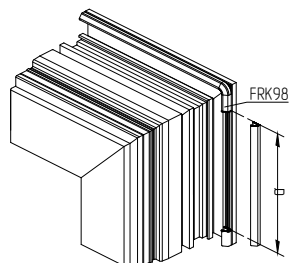
Rebate gasket



For windows:

Ensure that a part of FRK98 gasket has been locally removed.

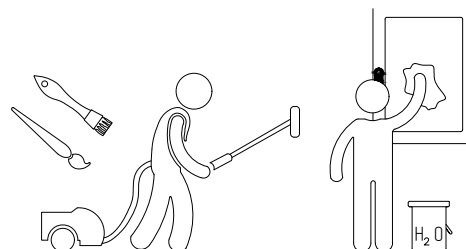
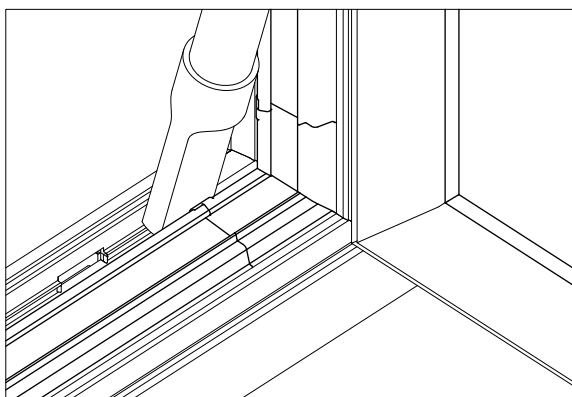
The dimension a of this part of FRK98 gasket depends on the opening type and used hinges. Please refer to ALT W72 / ALT W62 technical manual.



6

Product cleaning

1. Check the window elements for debris or dirt: building materials, dust, etc.
2. Clean the cunettes, drainage holes, grooves and hardware elements with a vacuum cleaner or a soft cloth and a detergent with a neutral pH in a diluted form for window units.



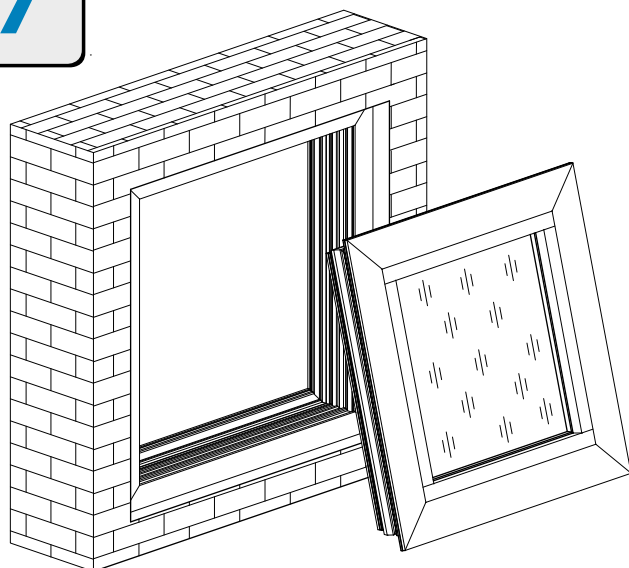
Weiss Cleaning&Care kit is recommended.



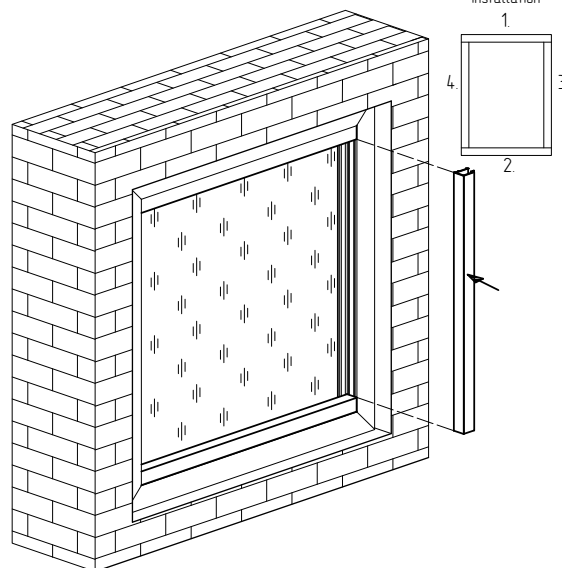
ALT W62 / ALT W72 system installation

7

Installation of the sashes / installation of the infill unit in fixed structures



Hang the sashes and door leaves on the hinges of the window or door frames and test opening them. The window sashes and door leaves must open and close freely without any unusual sounds or creaks. If opening and/or closing is defective, never use excessive force to avoid accidental damage to the hardware elements and structure of the product. If necessary, correct the position of the window sashes or door leaves in the frame by adjusting the hinge. Refer to the hardware manufacturer's catalogue for information about hinge adjustment. Check all safety-relevant components of the window/door (hinges, opening stoppers, etc.). Deformation or damage as well as under-tightening or missing fasteners are not allowed.



The glass must be carried vertically, avoiding impact, resting on corners and rigid surfaces.

Use manual vacuum grippers for glazing.

Put the glass unit in the correct position according to the marking and formula.

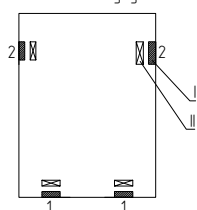
When positioning the supports and seam sealing, ensure that they do not overlap the drainage and ventilation holes.

Install the glass beads in accordance with the marking. See step 2 in the installation manual 'Infill unit removal'.

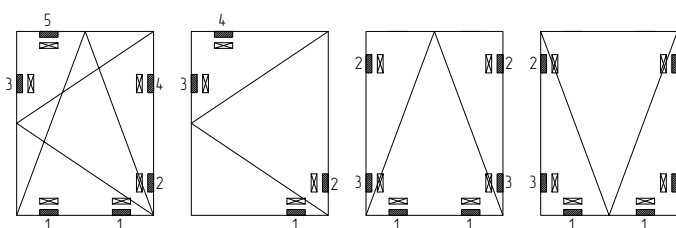


See W72/W62 catalogue, section 'Profiles machining and assemblage. Infill unit installation'

Installation scheme of infill unit supports in the frame and the sequence of infill unit wedging

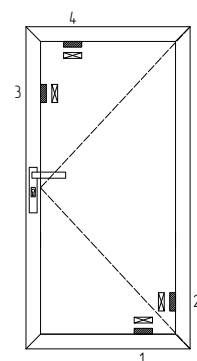


Installation scheme of infill unit supports in the sash and the sequence of infill unit wedging

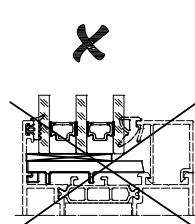
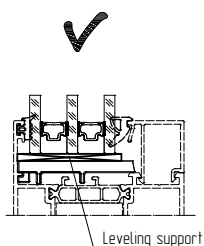


1 - leveling support;
2 - bearing support.

Installation scheme of infill unit supports in the leaf and the sequence of infill unit wedging



When selecting the width of leveling support look at the following recommendations:



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05.2021

