WINDOWS AND DOORS INSTALLATION

INSTALLATION PROCESS

1. Prepare the product for installation

First, remove all packaging materials from the product (e.g., cardboard corners, polyethylene films, protective profile films, etc.) and carefully inspect it for any damage.

Windows and doors are architectural elements; therefore, the inspection should be carried out from a distance of approximately 3–5 meters from the viewing surfaces at a specific angle, in line with the generally accepted use of the premises. Inspect the products on both sides for any surface defects (frames, glass), scratches, stains, or other visible damage.

If any defects are visually detected that reduce the product's value (e.g., glass scratches, deep frame scratches, stains, etc.) and/or defects that render the product unusable for its intended purpose (e.g., broken glass, damaged frames, or welding joint failures), postpone the installation and inform the seller and manufacturer immediately via email: **defektai@aveplast.lt** or phone: **+370 656 37 822.**

Minor surface scratches or stains can be removed with specialized cosmetic products (e.g., special solvents, polishes, paints, etc.). Contact the seller for assistance in purchasing suitable cosmetic products.

To ensure the proper positioning of spacer blocks installed around the glass packages, it is strictly prohibited to move or carry glass products using tools attached to the glass.

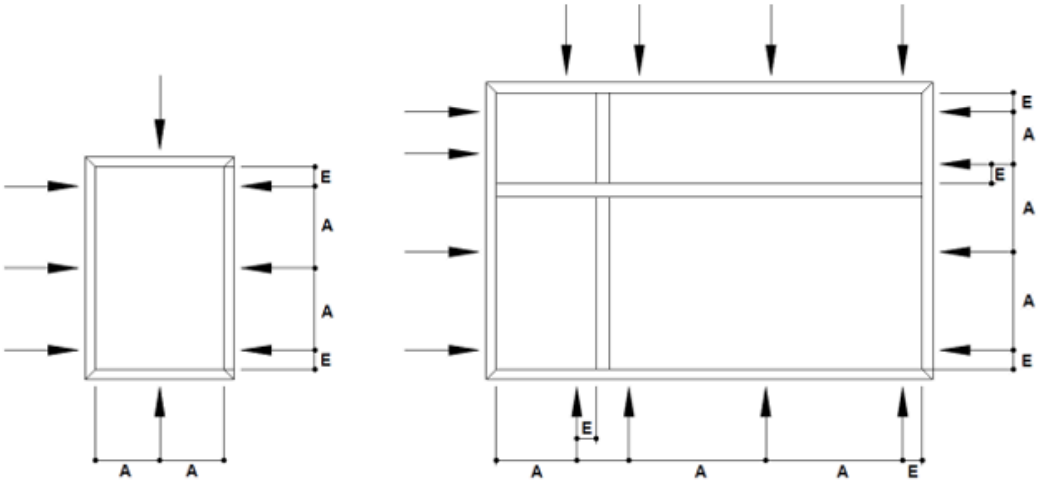
2. Insert the product in the wall opening

There are several ways to fix the jamb:

2.1 Using special mounting plates

I Galvanized steel plates for fixing structures are used for fixing the jamb. Contact your product retailer for their purchase.

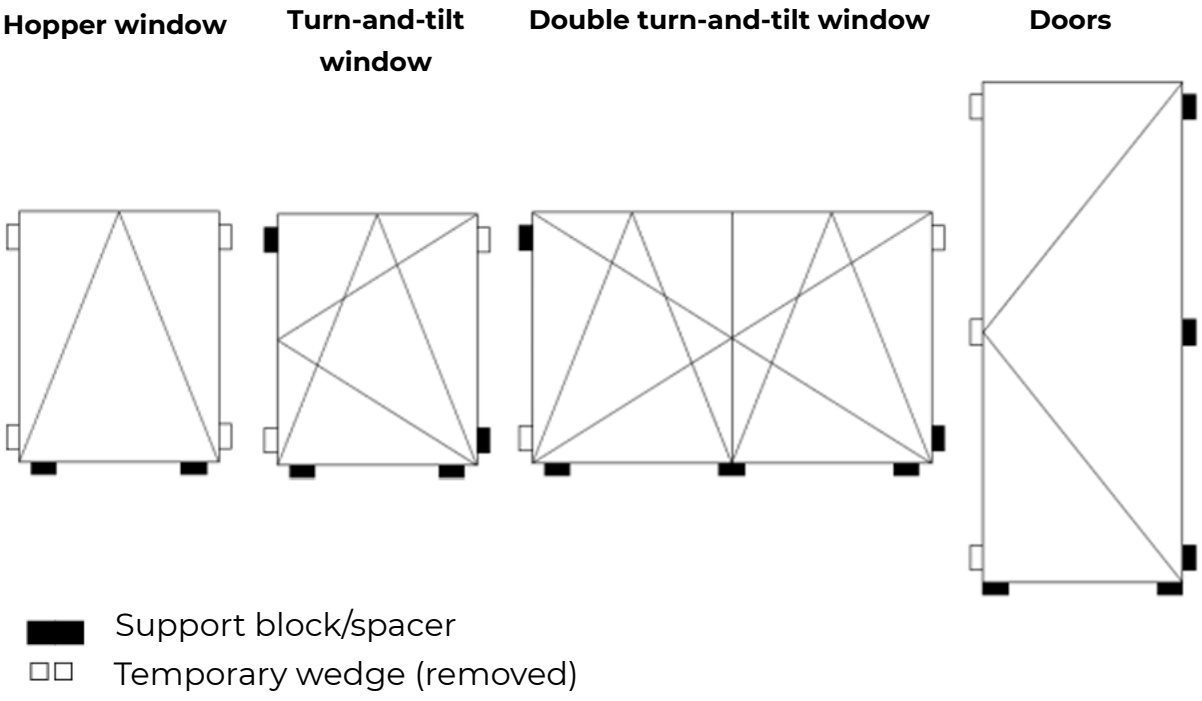
I Mounting plates are attached to the product jamb. The distance between the plates must not exceed 60-70 cm, and the distance from the outer edges of the jamb should be about 15 cm (See Drawing No. 1).



A – from 600-700 mm
E – about 150 mm

Drawing 1. Principle diagram of the mounting points

Before inserting the product into the wall opening, the base of the opening is aligned in a horizontal plane. PVC blocks are used for levelling the base of the opening. They must be placed under the ends of the threshold of the external entrance door, at a distance of about 15 cm from the outer edges of the window jamb and 15-20 cm from the middle of each pillar, and at least every 60 70 cm apart (See Drawing No. 2).

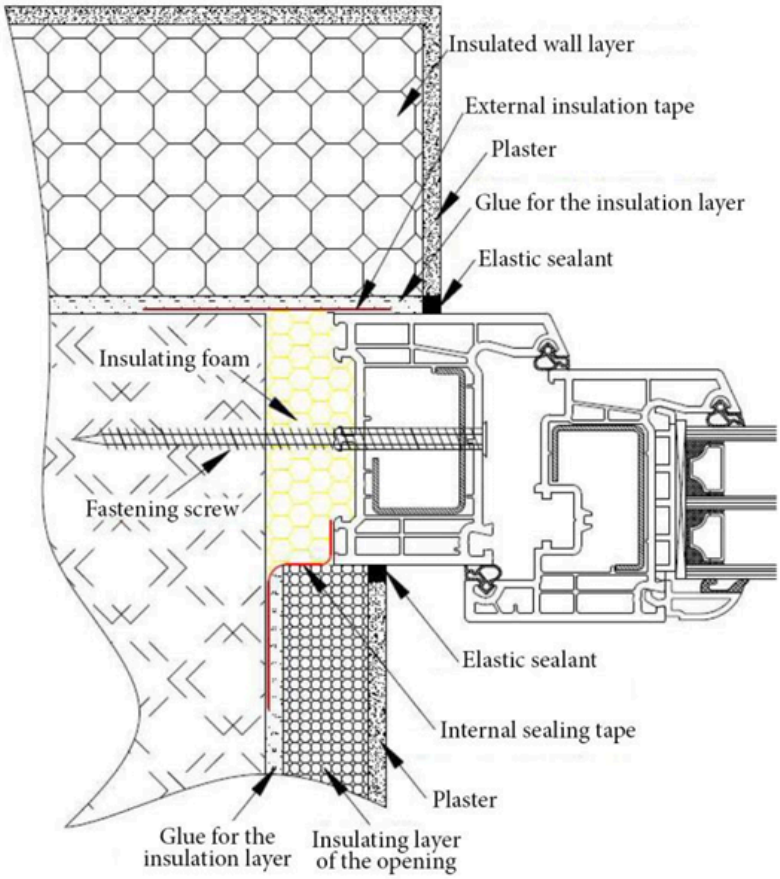


Drawing 2. Principle diagram of bearing and spacer plates and wedges

- The product with attached plates is inserted into the opening.
- The jamb is secured using supporting and spacer plastic blocks along with temporary wooden wedges, ensuring proper alignment in both horizontal and vertical planes. It is important that the temporary wedges do not obstruct the opening of the product's leaf(s).
- Once the jamb is correctly positioned, the fixing plates are bent towards the opening and secured using plugs, masonry nails, and wood screws. Different types of bolts may be required depending on the opening type. For proper bolt selection, consult the respective sales companies.

2.2 Using anchoring screws

- Holes are drilled through the window jamb profile (see Fig. 3) for the anchoring screws. The diameter of these holes must be at least 1 mm larger than the diameter of the anchor bolts or match their size.
- The anchor bolt holes must be positioned as specified above (see Drawing No. 1).
- The product is then inserted into the opening.
- The jamb is secured using supporting and spacer plastic blocks along with temporary wooden wedges to ensure proper alignment in both horizontal and vertical planes. It is important that the temporary wedges do not obstruct the opening of the product's leaf(s).
- Once the jamb is correctly positioned, holes are drilled through the pre-drilled holes into the opening. It is important to ensure that the drilled hole depth is sufficient to provide strong anchoring.
- The anchor bolts are then hammered through the holes in the jamb, securing it in place. When tightening the jamb, it is crucial not to deform or overstress it (see Drawing No. 3).
- The openings must be able to withstand the expansion force of the anchor bolt; therefore, consult the respective sales companies for proper bolt selection. It is recommended to use anchor bolts with a diameter of at least 7 mm and no thinner than 10 mm for securing the products.



Fragment of the horizontal (lateral) cross-section

Drawing 3. Window fastening scheme

2.3 Other mounting methods

I In certain situations (e.g., building insulation or product installation), alternative fastening methods and special fasteners can be used, such as steel angles, glass fiber holders, or specialized profile elements. In such cases, consult the window or door manufacturer for guidance on the proper installation and selection of suitable fasteners.

3. Adjust the closing and release mechanism of the product

Different manufacturers' fittings (hardware) can be used for product operation. If adjustments cannot be made, first verify that the product is properly positioned. If the jamb is misaligned, the product must be reinstalled and re-secured.

Adjust the opening mechanism according to the specified regulations or diagrams for the respective system, or contact the window/door manufacturer or seller for assistance.

4. Seal the connections of the product with the company

The isolation of openings and product joints is recommended using special insulation materials (e.g.: foam polyurethane, expanding bands, etc.). Different insulating materials have different properties, therefore, consult the window/door manufacturer or seller for their proper selection and use. Make sure that the insulating material (e.g.: foam polyurethane) does not deform the fastened jamb of the product when expanding. When fixing the jamb with the mounting plates, it is recommended to tighten the jamb from the inside with wooden mandrels in all directions. After the insulation material cures and expands, remove the temporary (side) fastening wedges and isolate their locations permanently. After permanent curing of insulation material, remove the temporary fixings of the jamb.

5. Fully adjust the closing/opening mechanism

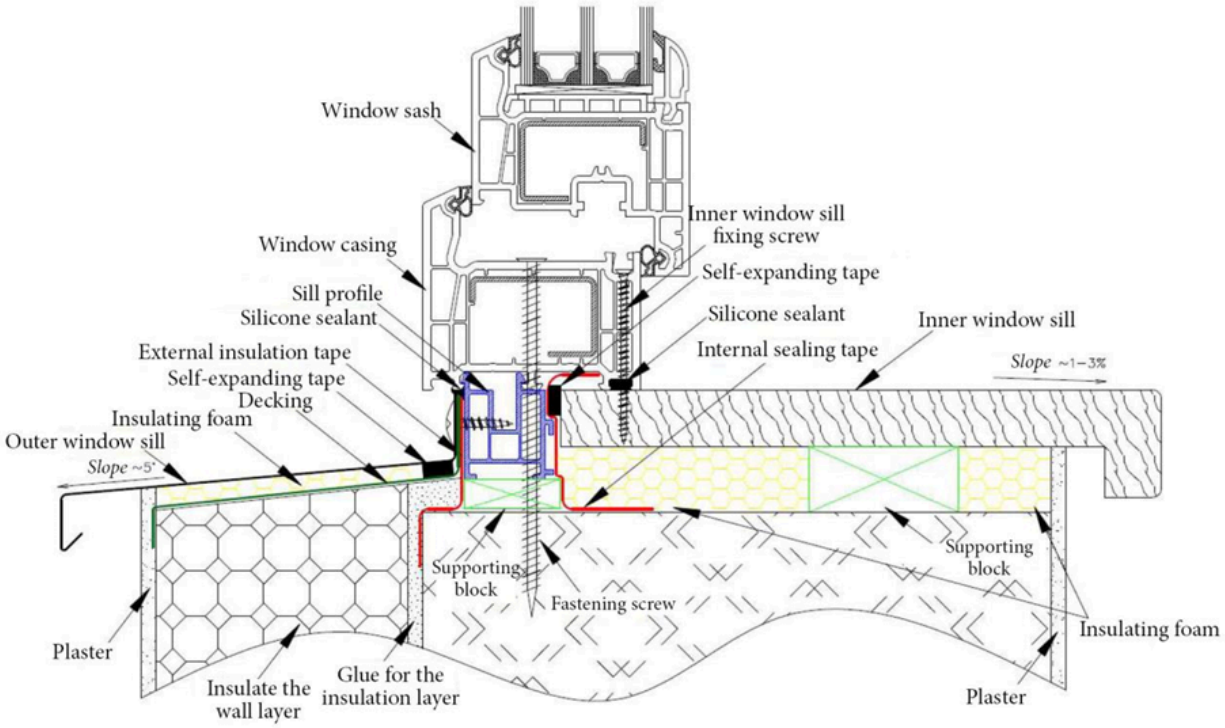
If the closing/opening mechanism is more thing with the difficulty or jamming, check for any jamb deformations. If the jamb is deformed, remove the cause of deformation or re-install the product.

6. Perform the sealing of the connection of product with the opening

Sealing of the product connections with the opening is carried out on the entire perimeter of the jamb (see Fig. No. 3 and No. 4) using sealing materials and sealants for this purpose (e.g.: silicone, expanding spacers/ strips, adhesive sealing strips, etc.). The properties of different sealing materials are different, therefore, consult the window/door manufacturing company for their proper selection and usage. Only the correct selection and use of sealants and/or sealing materials can ensure long lasting and sufficient sealing of the product joints.

7. Mount the internal and external sills

The run different sill mounting technologies for different sills, therefore, ask the window sill manufacturing and selling companies about correct installation. It is recommended to attach internal sills to the window jamb, and to screw the outer sills to a special sills profile (see fig. drawing No. 4).



* – To be used when the sill profile is without sealing gaskets
Vertical (lower) cross-section fragment

Drawing 4. Scheme for the installation of exterior and interior window sills

It is recommended to install the sills immediately after sealing the product joints with the openings. Otherwise, the sealing material may degrade over time (erosion, detachment, etc.) and require rework on the previously installed windows and doors.

Before attaching the sills, thoroughly inspect the sealing of joints at the top and bottom of the opening. If any leakage points (e.g., gaps or slots) are detected in the joint areas of individual jambs, they must be additionally sealed with silicone sealant.

Before fixing the sills, check the condition of the previously applied sealing strips and adhesive seams. If you notice any signs of erosion or surface decay, the sealing strips must be replaced. If the strips have detached, they must be reaffixed using special bonding materials. For guidance on the correct bonding materials, consult your sales outlet or product retailer.

The installation of window sills is a critical final step in window installation. Properly installed sills help create an additional barrier against air penetration. For installation, use not only bolts and insulating materials (e.g., polyurethane foam) but also sealing materials such as silicone sealants and expanding sealing strips (see Drawing No. 4).

8. Install the opening side rims

Rims are recommended for the opening finish, and in some cases for insulation. The rims can be installed on both sides of the product jamb. The rims can be attached to the jamb by gluing or fastening with a variety of holders. Externally, it is recommended to use air-cameras with rims. There is a very large selection of different edgings and trim strips on the market, but only the edges recommended by the manufacturer should be used. Consult the window/door manufacturing company for proper selection of frames and installation methods. Inappropriate rims or their incorrect installation may eventually lead to irreversible loss of the properties of windows or doors (e.g.: due to temperature deformations, etc.).

9. Clean the product surfaces

Make sure to clean the dust and other dirt from the product surface. Not deep surface scratches must be treated with special solvents and polishes. Contact your product retailer for their purchase and use. Clean the glass with water or household glass gleaming detergents.