

## Installation sequence

### 1. Prepare the product for installation

First, remove all the packaging materials of the product (cardboard corners, polyethylene films, protective profile films, etc.) and carefully inspect the product for damage.

Windows and doors are an architectural element, and therefore the inspection of the products should be carried out in the distance of approximately 3-5 meters from the viewing surfaces at a certain angle of observation, which is consistent with the generally accepted use of the premises. Inspect the products on both for any surface defects (frames, glasses), scratches, stains or other visual damage.

In cases where the product defect(s) reducing its value is visually detected (e.g.: glass scratches, deep scratches of the frames, spots, etc.) and/or defect(s) for which the product cannot be used for its direct purpose (e.g.: breakage of glass, frames or their welding joints, etc.), postpone the installation of the product and inform the seller and the manufacturer about the defects by e-mail: [defektai@aveplast.lt](mailto:defektai@aveplast.lt) or tel.: +370 656 37822.

Not deep surface scratches or stains can be removed with special cosmetic products (special solvents, polishes, paints, etc.). Contact the seller of the products for the purchase of cosmetics.

In order to ensure the proper position of the distance blocks installed around the product packages, it is prohibited to move or carry glass products with tools attached to the glass.

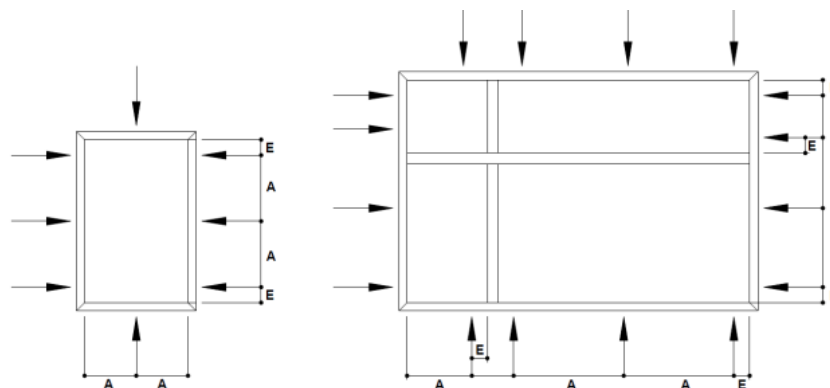
### 2. Insert the product in the wall opening

There are several ways to fix the jamb:

#### 2.1 Using special mounting plates.

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

\* 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).

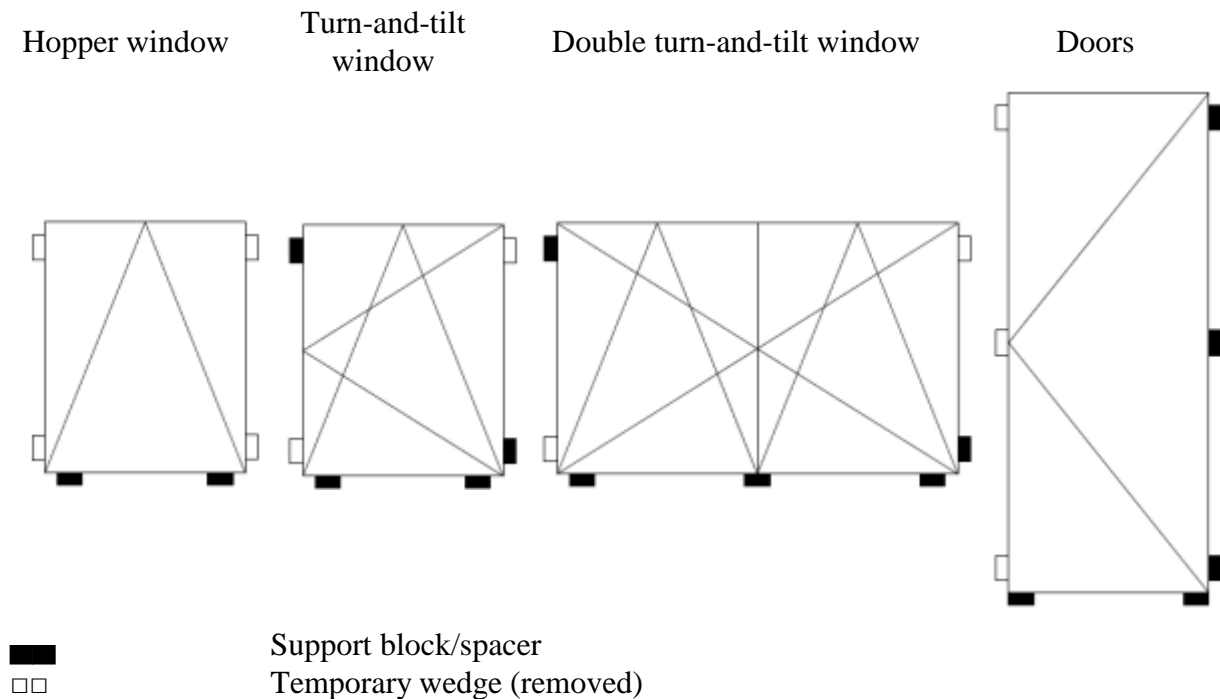


A – from 600-700 mm.

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 fig. drawing No. 2)



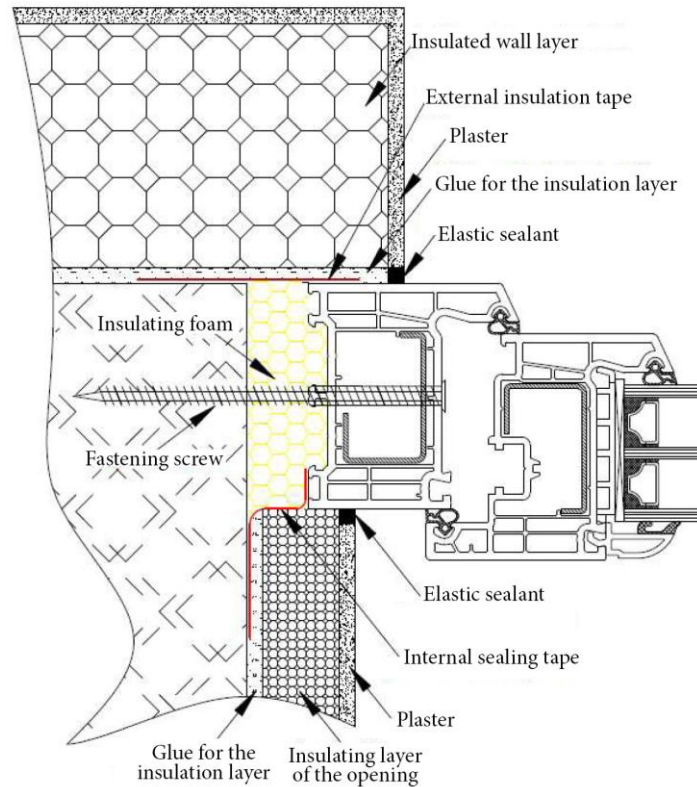
**Drawing 2.** Principle diagram of bearing and spacer plates and wedges

- \* The product with attached plates is inserted into the opening.
- \* The jamb is fixed with the supporting and spacer plastic blocks and temporary wooden wedges in the opening and aligned in horizontal and vertical planes. It is important that the temporary wedges do not interfere with opening the leaf (s) of the product being fastened.
- \* When the jamb position is correct, the fixing plates are bent to the opening and secured with plugs, masonry nails and wood screws. Different bolts can be used in different openings. For correct selection of bolts, consult their sales companies.

## 2.2 Using anchoring screws.

- \* The holes are drilled through the window jamb profile (see Fig. 3) for the anchoring screws. The diameter of the holes must be at least (up to 1 mm) larger than the diameter of the anchor bolts, or the same.
- \* The holes for the anchor bolts must be positioned as specified above (see fig. drawing No. 1).
- \* The product is inserted into the opening.
- \* The jamb is fixed with the supporting and spacer plastic blocks and temporary wooden wedges in the opening and aligned in horizontal and vertical planes. It is important that the temporary wedges do not interfere with opening the leaf (s) of the product being fastened.
- \* When the position of the jamb is correct, the holes are drilled through the holes in the opening. It should be noted that the depth of the holes drilled in the openings should not be too small.

\* The anchor bolts are hammered through the holes in the jamb, and the jamb is tightened through them. It is important to not deform (overstress) the jamb when screwing. (see fig. drawing No. 3)



Fragment of the horizontal (lateral) cross-section

***Drawing 3. Window fastening scheme***

\* The openings must withstand the expansion force of the anchor bolt, therefore, consult their sales companies for the proper bolt selection. It is recommended to use anchor bolts of no less than 7 mm and no thinner than 10 mm to fasten the products.

### *2.3 Other mounting methods.*

\* In certain situations (e.g., insulation of the buildings for fitting of the product, etc.), other fastening methods of the products, and special fasteners can be used (for example: steel angles, glass fiber holders, special profile elements, etc.). In such cases, consult a window/door manufacturer at the factory for the correct fitting of the products and selection of special fittings.

### ***3. Adjust the closing and release mechanism of the product***

The fittings (hardware) of different companies can be used for product opening. If it is not possible to adjust them, check that the product is in the correct position. If the jamb position is incorrect, the product must be reinstalled and attached to repeatedly. Adjust the opening mechanism according to the regulations/diagrams for the respective opening mechanisms, or contact the manufacturer/seller of the window/door.

#### ***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***

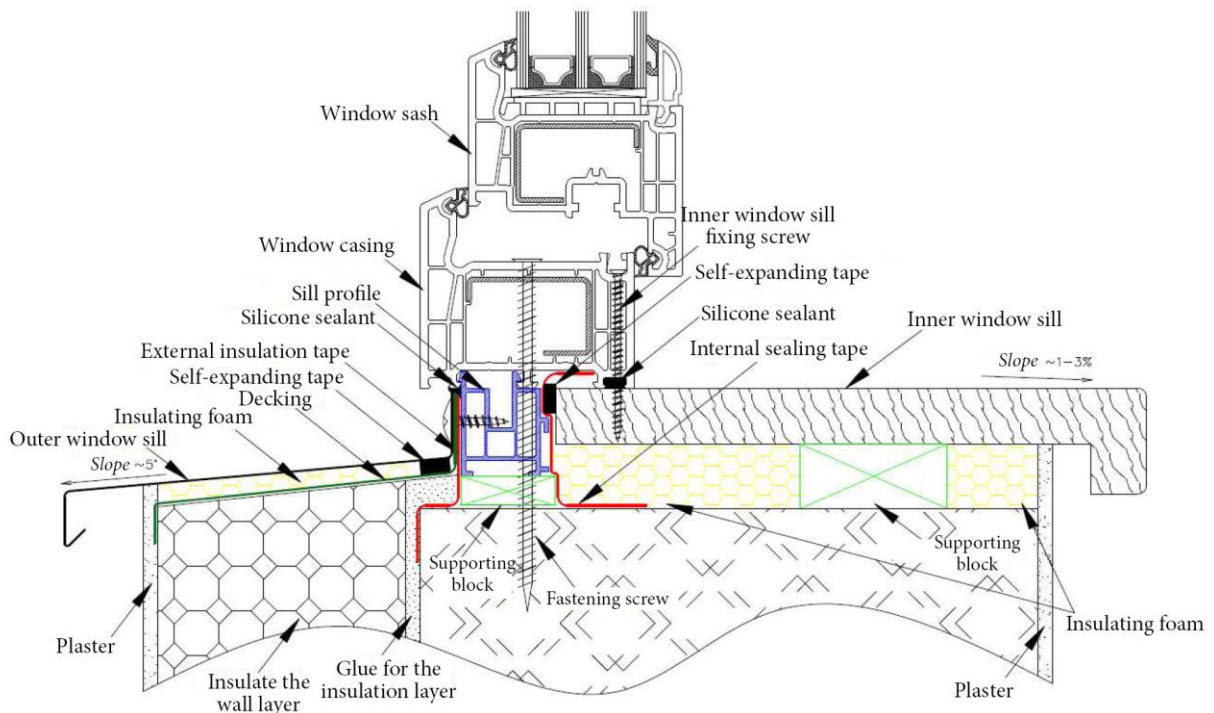
Sealing of the product connections with the opening is carried out on the entire perimeter of the jamb (see Fig. No. 3 and No. 4) using sealing materials and sealants for this purpose (e.g.: silicone, expanding spacers/ strips, adhesive sealing strips, etc.).

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).

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\* – 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 the sealing of the product joints with the openings, otherwise there may be a loss of sealing material properties (material erosion, detachment, etc.), which would result in need for the remaking the earlier work on windows and doors.

Before attaching the sills, it is necessary to check the sealing of joints of individual product jambs at the top and bottom of the opening. After identifying the leakage points (slots, etc.) of the joining areas of individual product jambs, they must be sealed additionally with silicone sealant.

Before fixing the sills, check the condition of the previously attached sealing strips and adhesive seams. Should you notice any signs of erosion of the sealing strips (surface decay, etc.), the sealing strips must be replaced with new ones. If you notice that the sealing strips are detached, they must be affixed using special materials. For correct bonding materials, consult your sales outlets or contact your product retailer.

The installation of window sills is a final and very important stage for the installation of Windows. Not only the bolts and insulating materials should be used for the installation window sills (e.g. foam polyurethane), but also sealing materials (silicone sealants, expanding sealing strips, etc.). – see Fig. drawing No. 4) that the properly installed window sills create additional barriers for air penetration through the product after installation.

### 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.

*Below is a summary of the rules for the installation of windows and doors manufactured by Aveplast JSC. In case of uncertainty or the non-compliance of these rules, you can read the Aveplast JSC instructions in the sales locations of windows and doors (see <http://www.tikslangai.lt/kontaktai/biuru-ir-atstovybiu-kontaktai/>) for your needs.*

