

Installation instructions for installation of windows, doors, displays, and facades



BB Windows & Doors TM
Bertrand

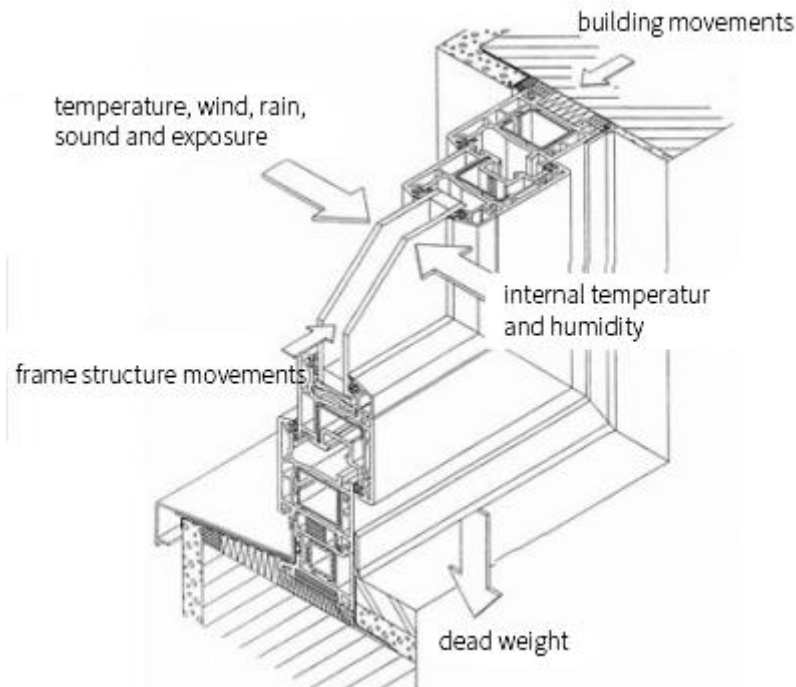
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INSTALLATION INSTRUCTIONS FOR INSTALLATION OF WINDOWS, DOORS, DISPLAYS, AND FACADES

Proper installation of joinery is one of the most crucial factors affecting its correct, long-lasting, trouble-free, and enjoyable use. Improper installation can lead to distortion of the structural elements of frames or sashes, malfunctioning of hardware, jamming, or, in extreme cases, damage to the installed joinery.

1. General notes

External joinery is considered correctly installed when the supported and mounted frame transfers loads such as its own weight, wind suction or pressure, thermal changes, and other stresses during use.



Before beginning installation, a zero point or reference level for the installation of joinery relative to the zero point must be identified and marked by the Customer (or a surveyor). At least one zero point must be clearly and unambiguously designated on each floor. If floors are divided into separate, non-connected sections, at least one zero point should be marked in each section.

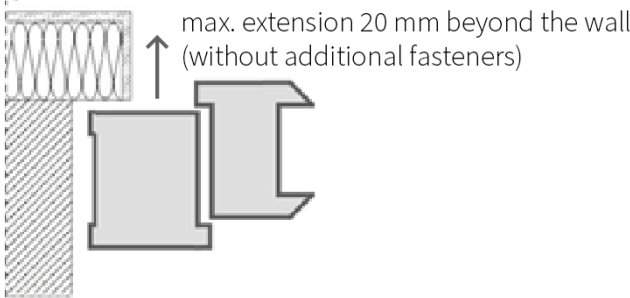
2. Placement of the window in the opening

Before starting window installation, the dimensions of the wall openings should ensure the proper installation clearance around the joinery, typically 10–30 mm on each side of the window frame. Ideally, the gap between the window frame and the wall should be 15 mm. This clearance allows for the expansion and

contraction of the window due to temperature and humidity changes and compensates for structural movements of the building caused by variable loads or uneven settling.

The window should be properly leveled and plumbed in the opening. Maximum deviations are as follows:
 From vertical and horizontal: max. 1 mm per 1 m length, but no more than 3 mm across the entire element. For diagonals: max. 3 mm.

In walls with external insulation, the window should be positioned at the outer edge of the wall, aligned with the insulation layer.

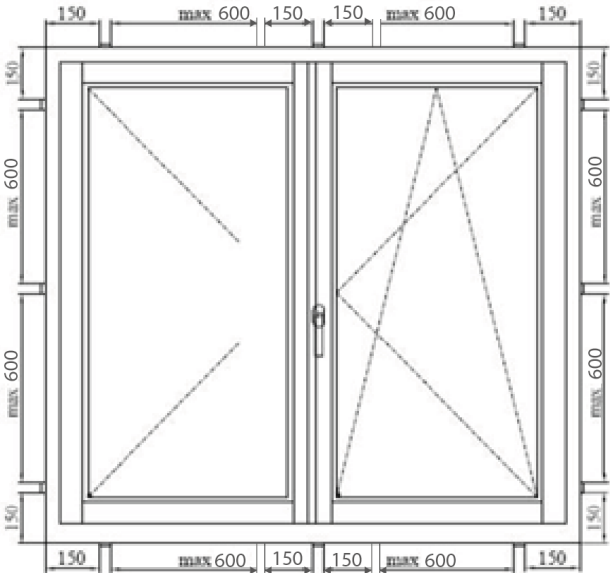


3. Fixing the window in the opening

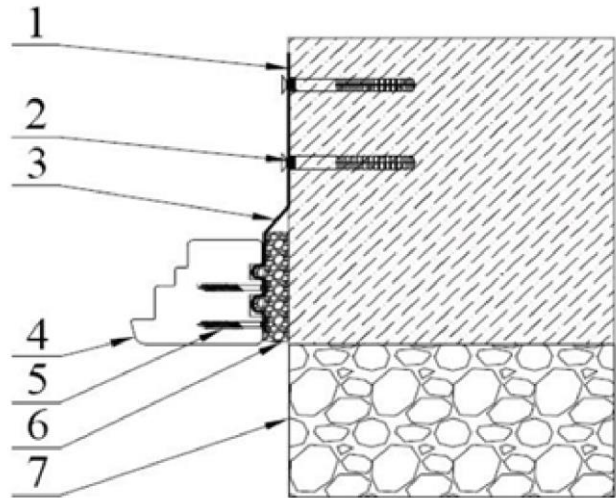
The window opening prepared for installation must be free of obstacles (e.g., props, lintel supports, etc.). Window openings should match the design dimensions, considering proper installation clearances for joinery. The reveals should be even, and window openings aligned vertically across floors and horizontally within each floor (lintels in one line unless otherwise specified by the building design). For ventilated facades, a geodetic grid is recommended for precise positioning of the joinery.

Polyurethane foams and similar insulation materials are used solely for sealing and insulating the joint between the window and the wall, not for fixing the windows. Installation using brackets or, alternatively, dowels is recommended, depending on the installation method.

(in mm)

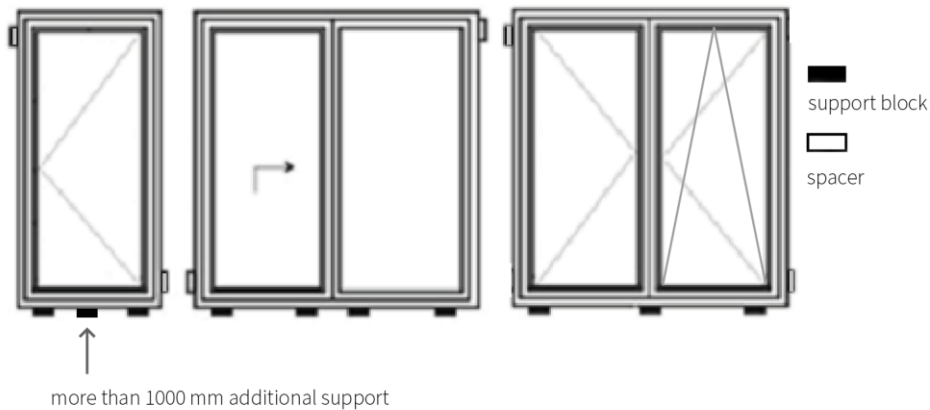


- 1 - wall
- 2 - 2 studs no anchor, dedicated to the type of masonry
- 3 - anchor for installation of wooden windows
- 4 - window frame
- 5 - wood screw
- 6 - polyurethane foam
- 7 - insulation



The distance between a bracket and the corner of the window should not exceed 250 mm. The spacing between brackets should not exceed 600 mm.

Support and spacer blocks are used to position the window in the opening. For single-sash windows, support blocks should be placed at two points at the edges of the window. For double-sash windows, they should be placed at least at three points.



For proper window operation, support and spacer blocks must not be removed. They should be made of impregnated wood or hard PVC.

These recommendations align with ITB (Building Research Institute) guidelines..

4. Thermal insulation

The gap between the frame and the reveal should be fully filled with thermal insulation material, except at fixed and spacer points. Insulating materials may include polyurethane foams, mineral wool, or expanding tapes. These materials must be used in accordance with the manufacturer's instructions, particularly regarding the temperature and humidity conditions required for application and the cleanliness of the gap being filled.

5. Sealing

A "rough" installation does not involve additional sealing to protect the window-to-wall joint from moisture. This responsibility lies with the Customer.

External sealing between the frame and the reveal should prevent rainwater penetration into the joint while maintaining vapor permeability.

Internal sealing should prevent water vapor from the room from entering the joint, thus avoiding condensation within the gap between the window and the reveal.

For airtight installation, the substrate must be properly prepared—it should be smooth, dry, and clean, free of contaminants.