



Installation instructions for windows and doors

IMPORTANT INFORMATION!

It is important that windows and doors are inserted correctly into the wall. The products are subject to a number of quality requirements and must not be deformed or destroyed at the assembly. Also, the mounting joint between the frame and the wall must be carried out so that one achieves the same air and rain tightness and insulation as in the wall at large. Last but not least, the fastening should be so strong and secure that the windows or doors do not fall out by strong winds. The installation of Windows and doors will in practice vary according to the window materials used and the type of wall in which they should be installed. However, the principles to be followed at assembly are similar, regardless of window and wall type.

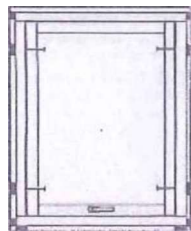
In the case of offloading and further handling of the windows and/or doors, hereinafter referred to as products, it should be ensured that the use of assistive devices and methods cannot damage the products.

The buyer shall check that the delivery is in accordance with the contractual basis and that there are no apparent defects or errors, such as transportation damage, to the products. Should there be any reason to provide a complaint, the supplier shall promptly be notified.

Marking, installation instructions and/or cork tiles on glass should be removed within 1-2 weeks of the goods receipt. Evt. Pads, package foil or other protective packaging should first be removed when the products are assembled.

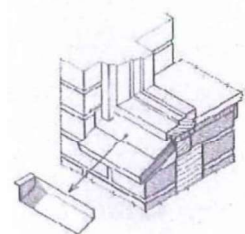
For outdoor storage, the products should be placed on battons or a pallet so that they are not in contact with the substrate. The products should be protected from precipitation and dirt by being covered in a stable and satisfying manner. At the same time, it should be packaged in such a way that there is a possibility of ventilation around the products, so that the risk of condensation under the covering is limited. Separate products should be kept under roof.

Preparations first examine if the opening in the wall has the correct dimensions in relation to the size of the window or door. Normally the opening in the wall is set in the rounded metre (M to 100mm) eg. 1.2 M or 1200 mm. The window or door usually measures 10-12mm less than the module target. For example, a window of 2m will measure 1988 mm. This will provide a mounting joint in either side of the window/door of 6 mm. In practice, this will vary somewhat, but larger gaps over 6 mm should be avoided if at all possible. When the control of the opening is carried out, place a block in each corner of the lower side frame which is then adjusted until the bricks are level. Thus, the window or door is ready to be put in place in the wall.

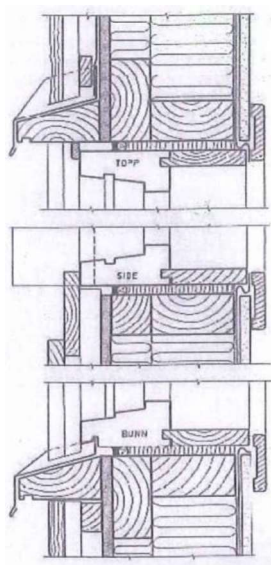


Bricks, wedges and fastening points

Location in the wall detail drawings of the house often show where the window should be placed in relation to the wall plane. In wooden houses it is most common that the outside of the sill is placed slightly outside the outside of the timber frame so that an extension sill in the carpenter's panel can be fitted covering over the mounting joint. The location depends otherwise on the wall type and fitting details. In brick and concrete houses, windows and doors are usually set back somewhat in relation to the wall plane.



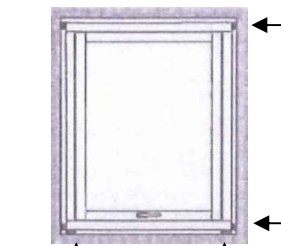
Brick Wall window



Window in wooden wall

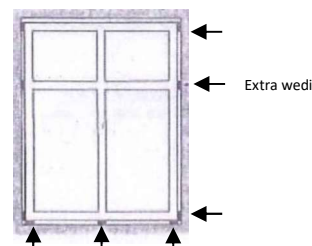
Levelling the Sill once the window or door is set in the correct place in the opening, attach wedges in the mounting joint by the extension of the top frame. Then place wedges in the lower corners of the bottom frame

extension. The window frame or door leaf should sit in place and be in the closed position during the fitting of wedge. The wedges are regulated until straightness and flatness are achieved and controlled with a spirit level. The window frame or door leaf must then be opened so that one sees whether the clearance between these and the sill are correct, and that no part touches the sill during opening and closing. At the same time, check that the sash/door leaf is evenly distributed and that the gap is the same around top and sides. In the case of rehabilitation of older houses, one often will find that the wall is out of line. Windows and doors should then be adapted to the wall's plumb line to avoid crooked linings.



Location of the carrier blocks and wedges

In Windows with horizontal shoot bolts, it should also be fixed at the side frame next to the shoot bolt. For Windows with vertical midpost or multiple vertical posts, it may be necessary to place packers/wedges in the mounting joints directly beneath the posts. In no event must these be placed above the top frame.

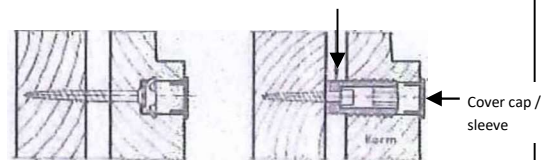


EXTRA packer/wedges placed under posts and transoms

Fixing in the wall If the sill is equipped with pre-drilled holes for the use of fastening and adjustment rollers, put them in place in the holes and screw firmly. The wedges should then be removed (not the bricks). It is always advantageous to use fixing and adjusting screws, because it is easy to make the adjustment. The fixing is also considerably stronger than the use of nails. If the nail is used as a fastening agent, the nails should be placed in about 1/6 of the height from the corners of the side frames. It should be nailed through custom bricks placed in the mounting joint, and the nails are deeply dipped into the side frames. Make sure that the fasteners do not get in the way of hinges or fittings. Parts of bricks protruding beyond the frame surface are sawn away.

There should never be nail fasteners in the bottom or top frame for normal window sizes, but on large window widths this may be necessary for safety reasons. The fastening points should always lie inside the from the join between the frame and the sill, or inside the glass in the fixed frame windows. The nail or screw residue can be concealed by drilling a hole that is fastened into the hole. The cavity is later covered with a plastic stopper or wood spun-glued cover cap (sleeve).

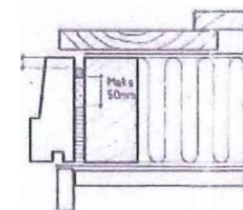
Sleeve



Fastening with fixing and adjusting screw

Exterior sealing of mounting joints exterior sealing is necessary to prevent air inflow in the joint and the wall. In wooden walls the outer weatherproof board can be pulled over the seam and clamped against the sill with thin barge. Grout, sealant, silicone or other weatherproof material can also be used. The sealant must be fitted against a bottom filling strip.

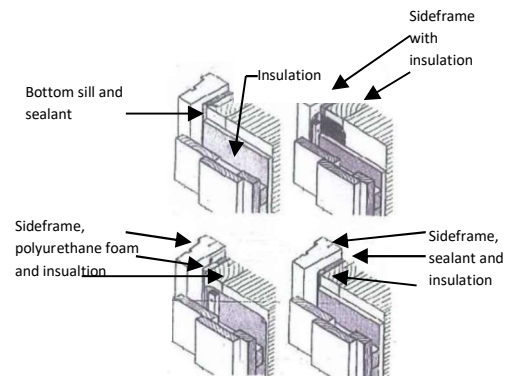
The grout/sealant must not fill the entire mounting joint and is not recommended for use at lower temperatures in the air a + 7-8 °c due to the risk of large deformations of the sill. This is because the foam starts expansion, often long after the foaming is performed, when the temperature again rises to about + 20 °c. The deformation can become so large that windows and doors do not open or close, become damaged and must be repaired or replaced.



Sealing with Joiningfoam

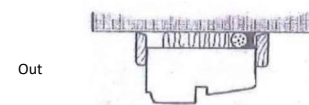
In the case of grouting or foaming, there should always be 8-10mm distance between the joint seal and the outer protective screen. This cavity acts as both the drain channel and pressure leveling chamber and is very important to prevent the actual sealing from getting wet.

Exterior sealing around metal or alu clad windows can be carried out with adhesive tape, sealant or foam. These materials must be protected from the breakdown by sun and rain with render cover beads, metal profiles or otherwise shielded against climate impacts.



Sealing of the frames outside with different materials

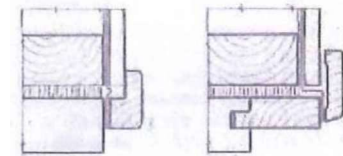
A special case is the insertion of windows into walls that are not waterproofed and that they bring water into the wall. Then should the outer is a continuous loop. The joint is shielded externally, insulated in the usual way, and the inner seal ensures the airflow. Moisture in the wall can then dry out without damaging the sill.



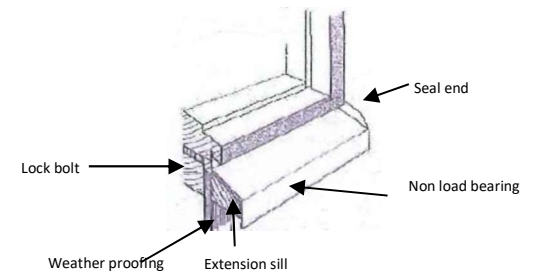
Outer sealing loop

Insulation of mounting joints Mounting joints should be insulated with mineral wool, which is deeply pushed into the joint from the inside. The insulation must not be pushed so tightly that the outer seal is destroyed or the frames bow.

Interior sealing of mounting joints The internal sealing is important and must be performed accurately. It prevents water vapor from the inside from penetrating and condensing against the outer sealing. Typically, the vapor barrier (plastic foil) in the wall is pulled into the window or door liner and clamped against it. Tape or sealant can also be used.

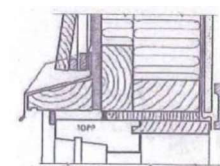


Sill detail It is absolutely necessary to have a fixture that protects the wall under the window against water intrusion. The vast majority of windows and doors have a covered groove under the frame/threshold to which the seizure should be raised. Thus, the upper edge of the seizure is well protected from rain splashes. Fittings should never be at the bottom of the frame/sill, but should have a distance of at least 6mm. The fitting should also have the edge at both ends to prevent rain from draining sideways into the wall structure. The front edge may be replaced with properly fitted end caps to be mounted on the fitting.



Placement of a extension sill

Overcover It will be advantageous to have an overcover or drip nose over all windows and doors. A fixture should be installed that provides an overcover of at least 40-50mm depth, if the wall design alone does not provide such protection.



References For more detailed information refer to the following building details sheet from the Norwegian Building Research Institute:

A 523.701 insertion of the window in the timber frame of wood A 523.702 the insertion of window in masonry and concrete walls A 523.703 insertion of metal and plastic windows A 523.706 replacement of windows in older walls K A 523.721 insertion of the door

Control arrangement

the NORDVESTVINDUET AS products are NDVK approved. The installation

instructions are approved by the Norwegian Door and window control, and it will, in practice, say that the validity



of warranty on products, given by The Ndvk's members, depends on the use of this manual in principle.



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