INSTALLATION INSTRUCTIONS



IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER "TYPE 1"

In front of wall installation system with integrated insulating core



Scan here to view construction site video:



PREPARATION

Read the instructions through completely before starting work. If anything is unclear or you have any questions, please clarify these points first with the supplier. When using the material for the first time, we recommend instruction through a trained employee or representative from the supplier.

Clean the masonry of any coarse soiling and mortar residue, level out the masonry joints and any breaks in the masonry with a finishing layer. In addition, the flatness of the base is required for air-tight connection to the masonry. In case of heavily undulating surfaces less than 5 mm/m it is recommended to push the profile to the highest point so that the bumps are largely balanced. The wall must be dry, firm, grease- and ice-free and have a sufficient load-bearing capacity, adhesion tests are recommended.

The bonding of the system brackets and system boards to the wall is a component part of the airtightness of the connecting joint. The whole area of the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER "TYPE 1" must be bonded directly to the wall. Packing out in places to level off is not allowed. The load-bearing capacity of the in front of wall installation system is created by the direct bond to the load bearing masonry.

NOTE

The following description applies to the installation of both system brackets and system boards in the same way.

CUTTING TO SIZE

The system bracket with integrated insulating core can be cut to size using a standard mitre saw. The system bracket and insulating core are cut together, the insulating core remains folded in position so identical cut surfaces are produced. If longer lengths are required, the system brackets can be directly butt jointed. Fitting

to the outer surface of the masonry begins after all the parts have been cut to size. Please consult the ISO-TOP FLEXADHESIVE WF data sheet for more information. The ISO-TOP FLEXADHESIVE acts as both, adhesive and sealant.

Tongue and groove joint

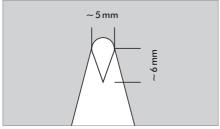
ISO-TOP WINFRAMER SYSTEM BRACKETS are equipped, for quick and easy installation of several horizontal brackets, with grooves and the abutting surfaces and separate tongues. The tongues are fitted, air tight and watertight, into the grooves with ISO-TOP FLEX-ADHESIVE WF. The sealing on the butt joint with adhesive must always be positioned down to the window opening. Apply the adhesive into both bracket grooves; install the tongue in the already mounted bracket and then butt-joint mount the second bracket.



FITTING

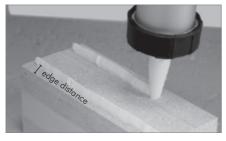
The adhesive surfaces must be cleaned before fitting. The adhesive surfaces should be as dry as possible, firm, free of ice, grease and loose mortar residue. A primer must be used on sandy surfaces if necessary.

The system adhesive ISO-TOP FLEX-ADHESIVE WF is applied to the system bracket. For accurate application, the nozzle must be cut as shown below. Cut the tip of the nozzle off so that the opening radius is approx. 5 mm. Then cut a triangle out on one side, about 6 mm long and with a front width point of approx. 5 mm. Pre-cut nozzles can be shortened if necessary.





Adhesive is applied to the system bracket as shown in the illustration below. The upper adhesive bead is applied approx. 15 mm (edge distance) below the top edge of the system bracket. The lower adhesive bead is applied approx. 15 mm above the bottom edge of the system bracket. The sealing sides between both lines should be closed to form a rectangle. The adhesive beads must be applied continuously across the whole length. On brackets over 140 mm, an additional adhesive bead must be applied to the material joint.



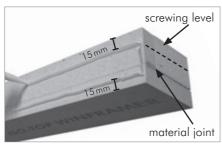
Approx. 50% more adhesive must then be calculated. Adhesive application for the installation of system boards is done in the same way, which means two adhesive beads must be applied for bonding to the wall, as shown above.

Fitting starts with bottom horizontal system bracket. Once completely fitted, fix the two vertical sides, followed by the top bracket.

After the adhesive beads have been applied, the system bracket is pressed onto the masonry, settled in place (moved in all directions to ensure the adhesive is evenly distributed) and positioned horizontally using a spirit level. When compressing the ISO-TOP WINFRAMER SYSTEM ANGLE onto the surface, the adhesive must be distributed that the entire back of the system angle is wetted. This is the case when the alue on the edge of the visible reveal of the system angle comes out on full length. The adhesive bead should reach a width of approx. 30 mm and be less than 4 mm thick. If the adhesive layer is too thick, this will have a negative effect on the load-bearing capacity. To increase the load capacity, the angle of the system can be stuck together fully on the wall surface. Therefore it is helpful to use notched trowels. The ISO-TOP WINFRAMER SYSTEM BRACKETS can be fixed in place on the masonry using clamp- or screw-type vices whilst installation.



In addition, the system brackets are bolted mechanically all the way round (screws with approval). For concealed attachment, the insulating core on the connecting strip, which works like a hinge, is simply moved back out of the way. The fixing screws must be selected to match the masonry material. Heed the specifications (including the edge distance of the masonry) of the screw manufacturers. The screwing level is directly below the horizontal system stub.



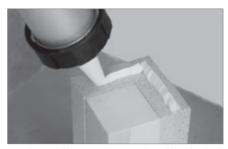
Screws should be fixed starting at the outer edges (right and left) with a distance of > 100 mm, distance between the screw points ≤700 mm. The same attachment spacing distances must be maintained all the way round. The system brackets must be pre-drilled (core diameter of the screw) before fitting to prevent them from breaking. This also applies to the subsequent attachment of the window frame. Screws with a head must be used, and the drill holes may need countersinking to match the back of the screws.

Following screw fixing, the insulating wedge is moved back into place and spot-fixed using the ISO-TOP FLEX-ADHESIVE WF.

The system brackets at the side are fitted on top of the bottom horizontal bracket. When the side system bracket is fitted, adhesive must be applied to the joints (see next picture). This bonding using the system adhesive ISO-TOP FLEX-ADHESIVE WF is necessary to achieve an air tight installation layer.

NOTE

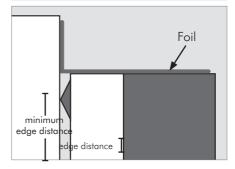
The adhesive surfaces must be always placed, so that no air entering through the adhesive surface from the side of the room to the outside is possible. This is the case, once the adhesive compound is escaping at the reveal transition and in the corners.



On the top horizontal system bracket, the butt joint to the masonry must be protected from water penetration during the construction phase by an additional adhesive bead or foil cover.

NOTE

If due to uneven surfaces e.g. airtight connection all around the masonry not possible we recommend the bonding of the window connection foils on the inside of the masonry to seal the window.



The system adhesive is only approved for use down to $\geq 0\,^{\circ}\text{C}$ on frost-free surfaces. These minimum temperatures applies to the ambient and bonding surface temperature. At low temperatures the drytimes lengthen considerably. We recommend that you test the adhesive first on two or three $30\,\text{cm}$ system brackets and to check at intervals of a few days ago on strength.

After the system bracket has been fitted, the window systems are installed in accordance with the generally accepted technical guidelines. Here, the specifications published in the

"installation guide" (current edition) issued by the RAL-Gütegemeinschaft Fenster und Haustüren e.V. (RAL quality assurance association for windows and doors) must be heeded.

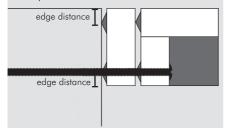
Fixing screws, window screws can be used for screwing the windows system to the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER "TYPE 1". Therefore the technical specifications of the screw manufacturer must be heeded. The screw holes must be pre-drilled in the brackets to prevent damage.

NOTE

The average load of the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER "TYPE 1" is specified as a min. of 200 kg/m. However individual maximum loads per/m related to specific construction surfaces can be found in the ift test certificates.

SPECIAL SOLUTIONS

Combinations of system brackets and system boards can also be installed. In this case, the technical adhesion between the system components must be identical to the adhesion between components and masonry. Screws are then driven through both components for mechanical attachment.



NOTE

A combination of the different types of ISO-TOP WINFRAMER on one unit are allowed, provided the technical and static parameters are met.