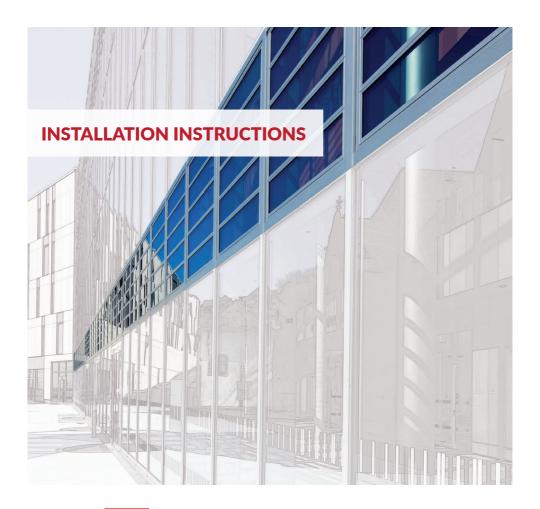


LOUVRE. VENT. TECHNOLOGY.





The purpose of this document is to provide practical information and guidance on the installation of FIEGER louvre windows, including handling on site & hoisting. This is advisory and the responsibility for the precise method chosen lies, of course, with the contractor on site.

DELIVERY/ACCEPTANCE OF GOODS



Packing crates should be offloaded using a fork-lift truck or similar device. After offloading, the crate & its contents must be checked for signs of damage and to ensure that the consignment is correct. In the event of any damage, missing or incorrect parts, FIEGER must be notified immediately and where possible, this must be noted on the delivery note.

To avoid damage to the louvre windows, the instructions on the packaging must be observed.

UNPACKING/OPENING OF CRATE

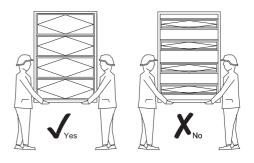


Prior to opening the crate, blocks should be used to lift the base of the crate. The box must be inclined slightly to the rear. This prevents the windows from falling out when the transport lock is released.

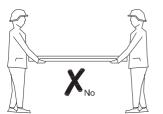
TRANSPORTATION OF LOUVRE WINDOWS

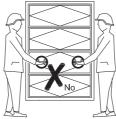
No

Louvre windows must only be transported with the louvres closed. Louvre windows can be transported horizontally or vertically.

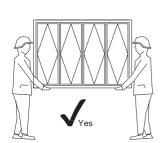


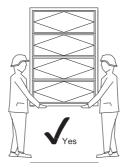
To prevent damage to the operating mechanism or glass breakage, the louvre window must be handled in a secure manner, i.e. no bending and twisting. Do not place or store on the corners.











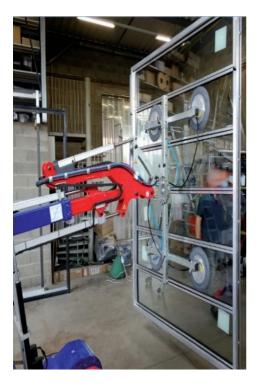


Typical defect caused by lifting with vacuum hoists.

TRANSPORT AND INSTALLATION WITH A MOBILE VACUUM SUCTION UNIT

As a rule, FIEGER louvre windows must NOT be transported or installed using vacuum hoists.

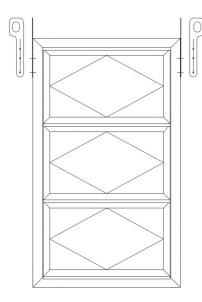
However, if the louvre window is of a size or weight that makes manual handling no longer possible, a mobile vacuum suction unit can be used **under the following conditions:** The use of a mobile vacuum suction unit must be registered with FIEGER at the order confirmation stage, as special preparation of the louvre blades is necessary during production. The suction plates must be attached to **at least two blades**. The suction plates must be connected via **rigid axles**. The system must be aligned as centrally as possible to **avoid uneven loading** on the operating mechanism!



IMPORTANT NOTICE

The use of a vacuum suction unit is at your own risk. FIEGER does not accept any liability for operating errors or damage to the louvre window resulting from its use. The procedure described here is based on our own experience and use by trained personnel. Please also check the instructions of your individual vacuum suction unit.

FIEGER LIFTING EYES



Screw size for fixing the Lifting Eyes: M6 x 20, Tightening torque 14 Nm

The use of Lifting Eyes is at your own risk!



These lifting eyes are designed for unloading or temporary attachment and transfer only.

At least 2 no. Screws (M6 x 20) must be used to fix the Lifting Eyes to the side frame. Take care not to damage the rivnuts. Loose rivnuts **must not** be used.

When hoisting the vent sections, a transverse lifting bar must always be used. This must be a similar width to the vent so that the side frames are lifted vertically.

The Lifting Eyes can be fitted in either orientation to suit the application on-site.

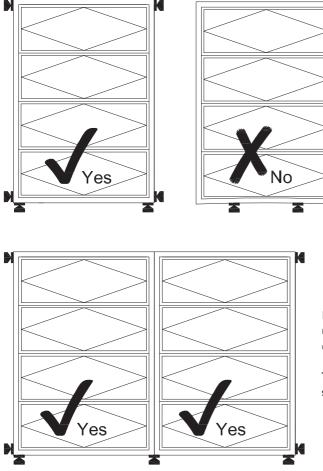




INSTALLATION

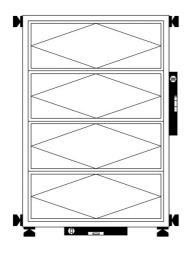
POSITIONING AND ALIGNING

Use of packers: In the installation of louvre vents, the load is transferred by the side frame extrusions. Due to the close tolerances between the vent and louvre frames (designed for air tightness & water-tightness), it is essential that the louvre vent is installed true & square. For horizontal adjustments, packers can be used, but must be positioned directly beneath the side frame extrusions. **If the blocks are wrongly positioned, this may cause malfunction and damage!**



Packers must also be positioned under the centre mullion if applicable.

The load is transferred by the side frame extrusions!

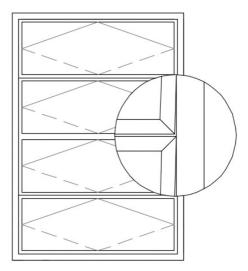


Check that the louvre frames are parallel with the vent frames and that no daylight can be seen around the louvre frames. If any light is seen to be entering around the louvre frames, then the vent hasn't been installed true and square.

If the louvre frames are not parallel with the vent frame, the louvres may not operate correctly and the brush pile seals will not fit correctly to minimize air loss. Louvre vents must be installed true and square, using a spirit level to check. Care should be taken not to overtighten fixing screws. This can cause distortion of the frame and lead to malfunction and damage.

If installed using fixing-screws, insert packers behind screws to avoid distortion.

Fixing screws must only be inserted into the dedicated pre-drilled fixing holes in the side frames (where provided).



IMPORTANT NOTICE

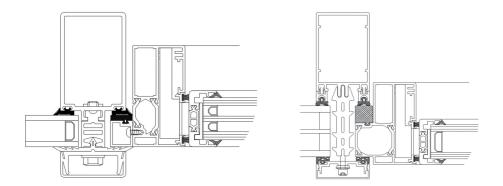
If the installation is planned with screw connections through the side-frames, please note that the operating mechanism is located within the side frames.

Fixing holes in the frames can only be prepared by FIEGER. Holes must not be drilled in the side frames.

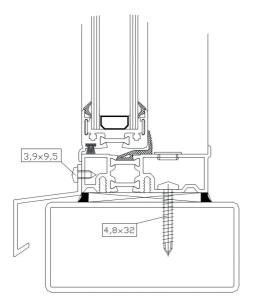
If holes are subsequently drilled into the frames, the mechanics can be damaged, which will nullify the guarantees.

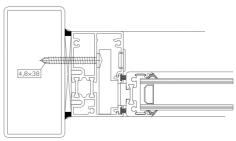
INSTALLATION INTO CURTAIN WALLING (FLW40 DEPICTED)

Louvre windows are installed into curtain walling similar to glass panes. Positioning and aligning see section "INSTALLATION".



INSTALLATION INTO STEELWORK (FLW24 DEPICTED)

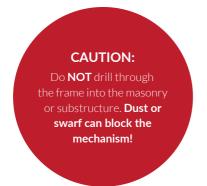




INSTALLATION USING PRE-DRILLED FIXING HOLES

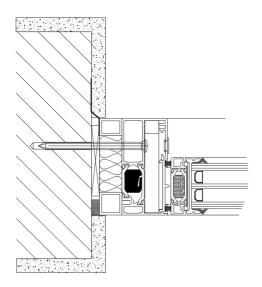
INSTALLATION PROCEDURE

Place the louvre window in the reveal, align vertically and mark the drilling holes. Remove the louvre window from the reveal or tilt it so that the holes can be drilled into the masonry or the substructure.



3,9×13

In the area of screw connection, underlay material/packers must be inserted in between frame and building structure. Take care not to overtighten screw to avoid warping of frame.



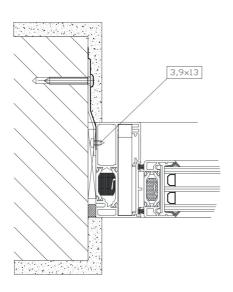
FIXING INTO TIMBER

Screw diameter max 5 mm/head diameter max 12 mm (flat head).

FIXING INTO CONCRETE AND MASONRY

Screw diameter max 7 mm / head diameter max 11.5 mm. The screw lengths must be adapted to the conditions on site.

INSTALLATION USING WALL ANCHOR STRAPS



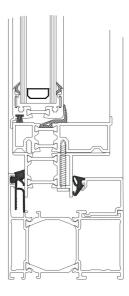
Wall anchors and fixing screws can be supplied by FIEGER.

Materials required for the window/wall connections or fixing materials (i.e. foils, silicone, screws etc.) are not included in the scope of delivery.

IMPORTANT!

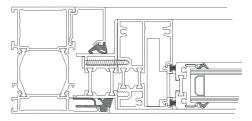
Installation and materials of wall connections must be in accordance with the currently applicable installation guidelines for windows and/or the on-site specifications!

INSTALLATION INTO WINDOW-FRAMES

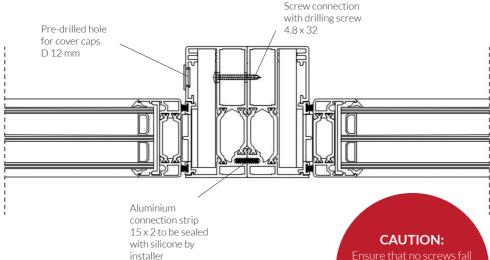


By using the appropriate adapter, all FIEGER louvre windows can be installed into existing window frames.

FLW24 example:



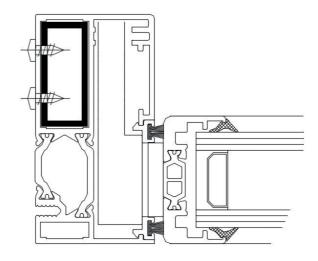
HORIZONTAL FRAME CONNECTION DETAIL



Ensure that no screws fall into frame during installation. This could block the operating mechanism!

VERTICAL FRAME CONNECTION DETAIL





COMMISSIONING



The commissioning of Fieger units should be carried out by qualified personnel; especially where SmoTec vents have been installed. As part of the commissioning procedure, each Louvre Window should be checked using either the manual control handle or the electric motor, as appropriate, to ensure correct operation.

In addition, the procedure should include a visual check of the installation to ensure that the joints between the louvres are even & between the end of the louvre blades & the side frames. Any unevenness or gaps will indicate that the Louvre Window isn't sitting plumb and this will need to be rectified. Checks should also be made to make sure that the louvres close evenly and tightly, flush with the outside of the frame. Any faults encountered during commissioning should be reported to us immediately. Improper installation and operation of the louvre windows voids the guarantee.

IMPORTANT ADVICE REGARDING THE 2006/42/EC MACHINERY DIRECTIVE

Manufacturer: A person or legal entity, who has produced the power-operated window ready for use in a building.

Details of the safety class of the product can be found on our website.

Reference: The contents of a leaflet corresponding in part to a publication by the ZVEI and ift-DIRECTIVE FE-11/1

FIEGER LAMELLENFENSTER GMBH

Auf der Aue 10 • 69488 Birkenau i. Odw. • Germany +49 6201 84 434 • 0 • info@fieger-lamellenfenster.de www.fieger-lamellenfenster.de

FIEGER LTD

Swatton Barn • Badbury • Swindon SN4 OEU • United Kingdom +44 1482 866000 • eccles@louvrewindow.co.uk www.louvrewindow.com



Highest eco-effectiveness Cradle to Cradle Certified[™] print products by Lokay

Cradle to Cradle Certified[™] is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.