

 MADE IN FARSE

INSTALLATION & USER MANUAL

WINDOWS AND DOORS IN WOOD, WOOD/ALU
AND DAYLIGHT



November 2025

 **Outline**
vinduer til tiden

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CONGRATULATIONS ON YOUR CHOICE OF OUTLINE



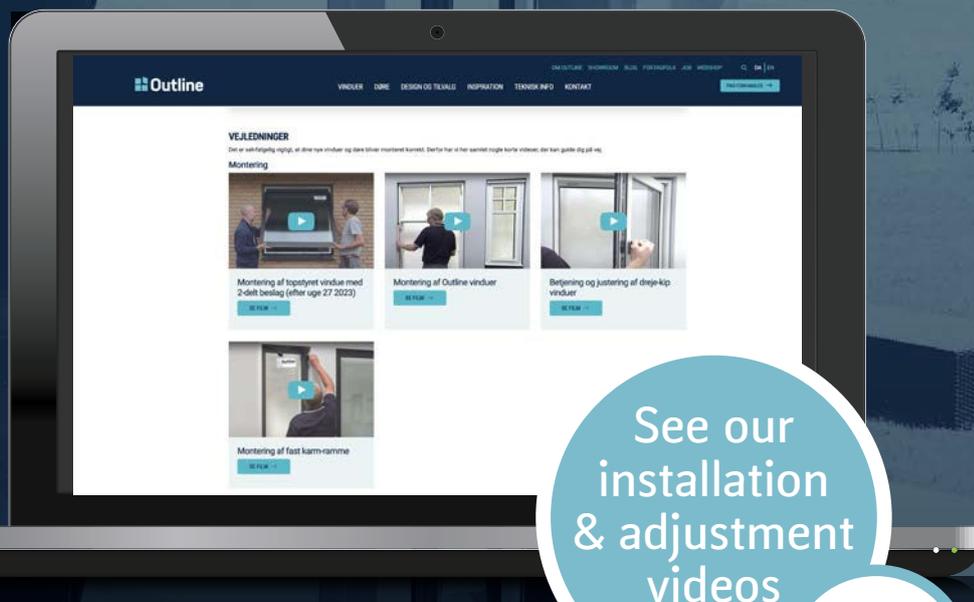
Outline Windows is one of Denmark's leading manufacturers of energy-optimized windows and doors in wood and wood/aluminium for all types of homes. We have over 30 years of experience, and all products are based on quality craftsmanship, designed and manufactured in Farsø.

We have chosen to maintain the production of our windows and doors in Denmark to ensure the high standards of Danish craftsmanship and design that make Outline windows truly special.

At www.outline.dk/en you can find helpful advice and guidance on installation, adjustment, and maintenance.



INSTALLATION AND ADJUSTMENT VIDEOS



www.outline.dk/en/technical-info/installation-user-instructions/

Did you know that Outline Windows offers guides for most of our elements?

Our installation videos are a great help when installing your windows and doors.

Our adjustment videos will prepare you well for fine-tuning your elements.

We offer the following videos, among others:

- Installation videos
- Adjustment videos
- Operation videos
- Removal videos
- Separation of frame/sash
- Measurement guide
- Maintenance
- Replacement of handles



RECEIPT AND STORAGE

Check upon receipt that the elements match the delivery agreement, and contact the dealer immediately if there are any errors, defects, or transport damage such as dents, scratches, chips, or broken glass.

If you do not contact the dealer within 5 working days regarding this, your right to claim will lapse. The same applies if the elements are installed or transported further.

Handling and unloading must be carried out with care, and the elements must be stored on an even surface, properly covered and protected against moisture, dirt, and weather conditions.



NB: Please note that all doors are delivered with a transport block. It must be removed before installation!

DELIVERY

Before handing over to the client, the person responsible for installation must ensure that:

- Tightness strips, fittings and rebates are cleaned of mortar etc.
- Openable sashes are adjusted for correct clearance.
- Hinges and striking plates are adjusted for correct tightening or easy movement.
- All parts – except friction parts – are lubricated with suitable lubricant.
- Any damage to the surface treatment is repaired.
- Users are instructed in the correct operation of the elements and/or provided with this product information.
- Oak and hardwood thresholds must be retreated with the appropriate top treatment after installation.
- Check that the ordered items match the specifications in the order.



The industry's terms and conditions of sale and delivery can be found at www.vinduesindustrien.dk

In connection with our delivery to you, we store a few personal details. These include your address and, if provided, your name, phone number, and email.

The information is stored to ensure correct delivery and for statistical purposes. We retain the data for 10 years due to our warranty obligations. After this period, the information will be deleted.

Your data will be treated confidentially and only accessible to employees in Outline's Customer Service Center. You can always have your information deleted or corrected by contacting our customer service.

LIFTING OF ELEMENTS

When lifting elements, a suction cup dimensioned for the element's weight must be used.

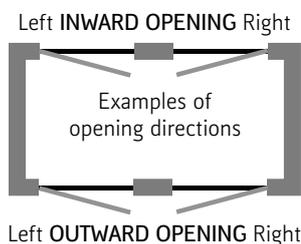
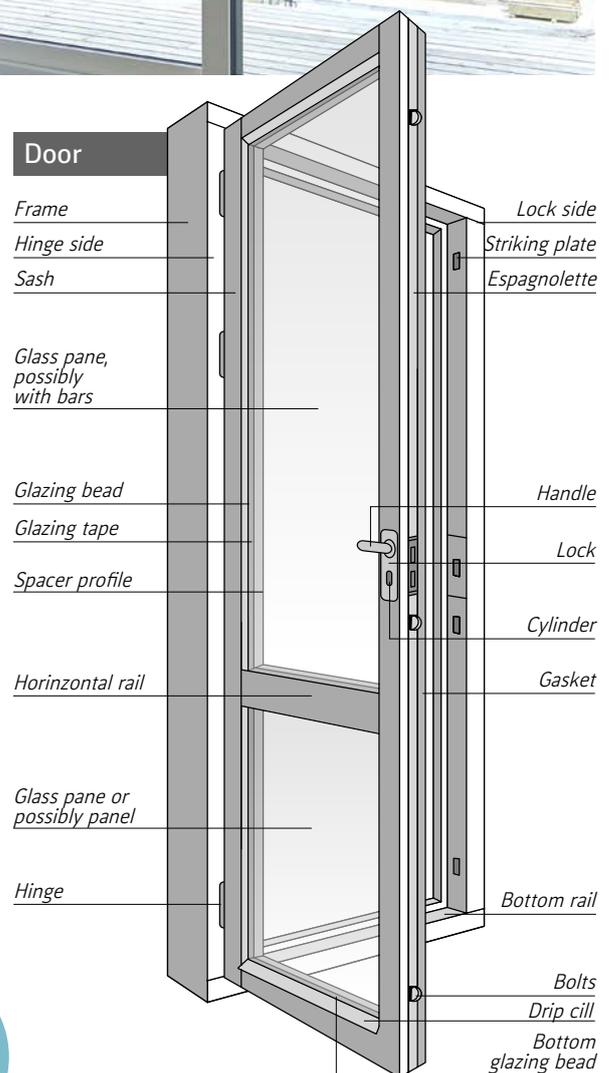
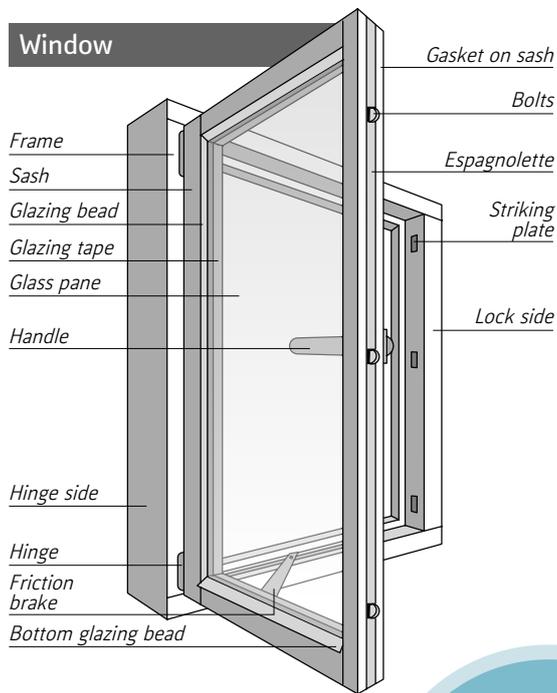
When lifting the element, it is important to place the suction cups at the center of the element's center of gravity.

For tall elements, it is advantageous to lift from the upper half of the glass.

For lift-and-slide doors and Daylight sliding doors, the active sash must be dismantled.



WHAT IS WHAT ON A WINDOW AND A DOOR...



Read more about opening directions



CLICK HERE



**WOOD
& WOOD/
ALU**

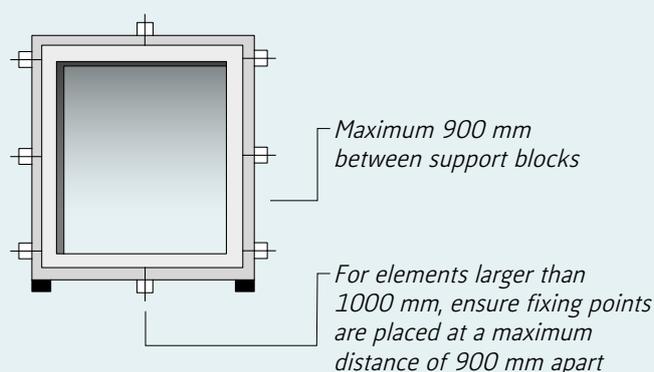


INSTALLATION & FASTENING

Windows and doors



INSTALLATION AND FASTENING WINDOWS AND DOORS



Shimming and fixing points for windows

Correct installation is essential for trouble-free operation. Therefore, installation should be carried out by professionals.

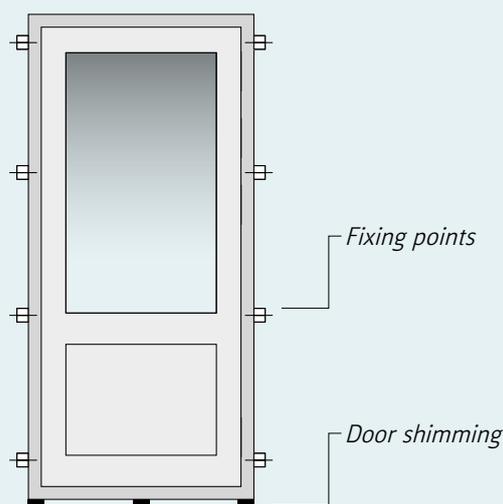
The surface is highly resistant to wind and weather, but during installation care must be taken to avoid scratches and impacts. Protect against mortar and concrete, and avoid direct contact with glue, tape, aggressive cleaning agents, acids, etc.

Special notes on windows

We recommend that fixed frame elements and combination elements with muntins are shimmed horizontally and vertically at the muntins.

The distance between two fixing points must not exceed 900 mm. Two- or multi-sash windows must have permanent shimming under vertical mullions.

For element heights under 1188 mm, the middle fixing in the side frames may be omitted, and for element widths under 1000 mm, fixing in the top and bottom frames may be omitted. At the outer



Shimming and fixing points for doors

ends of the bottom frame, permanent shimming must be placed.

Screws must be mounted in the frame rebate.

Special notes on doors

Fixing at the top and bottom of the side frames must be placed as close to the hinges as possible. Double-leaf doors must, in addition to the shown fixings, also be fixed at least one point in the top and bottom frames.

At the outer ends of the bottom frame, permanent shimming must be placed.

Shimming Bottom Frame/Threshold

Bottom frame/threshold must be shimmed every 300 mm for elements with fibre and aluminium thresholds.

For hardwood thresholds, every 500 mm.

Note that the elements and posts are not load-bearing

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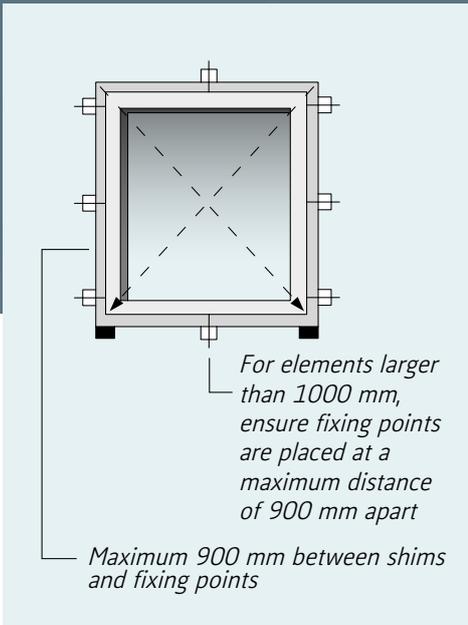


Figure 1: Diagonal measurement - tolerance +/- 2 mm

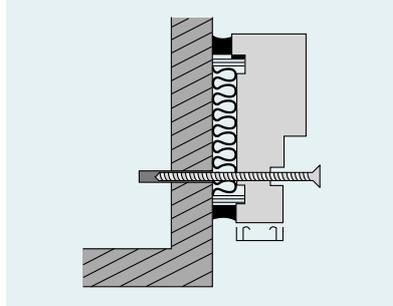


Figure 2: Wood/Alu

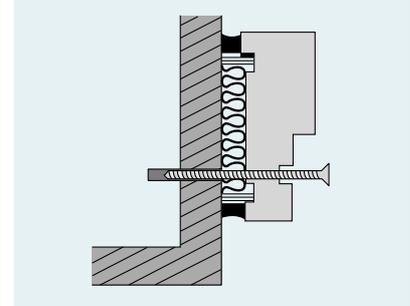


Figure 3: Wood

Frame and sash must be separated during installation. The distance between the frame and wall opening should be 10–15 mm all around, taking the windowsill into account.

The frame is placed in the wall opening approx. 3–5 cm from the outer edge of the exterior wall and temporarily secured with wedges in the corners, inserted from both inside and outside. **IMPORTANT:** Use the wedges to ensure that all sides of the frame are plumb and level, and that the **diagonal measurements are identical** (figure 1).

There must be solid support at all fixing points. This, along with any additional shimming, must be of appropriate size to allow space for sealing material both inside and outside the joint. The contact surface of the solid support should be no less than 25 cm², and the material must be pressure- and water-resistant.

Fixing is done with screws, the type depending on the wall material. Frame screws with large heads are used. Fixing must be done in the rebate as shown in figures 2 and 3.

First, fix the frame on the hinge side. It is important that the frame is plumb in both directions. Then insert the sash and adjust if necessary so that the sash closes precisely against the frame. The gap between frame and sash must be even at the top and sides. Then fix the frame on the lock side and check that the sash makes contact with the frame and can open and close smoothly.

Elements fixed to the inner wall before facing must be shimmed and fixed to the facing wall after masonry work to ensure element stability. Check/adjust any striking plates for bolts and flush bolts for correct tightening.



OPERATION & FUNCTION

Windows



Topguided windows



Operation: The window is opened and closed using the handle located at the center of the bottom sash rail. On the underside of this rail is an espagnolette that secures the sash in the striking plate on the frame. The striking plate has two slots: the inner for closing the window, and the outer for ventilation. Do not leave your home with windows in the ventilation position.

When the window is opened and pushed out at the bottom, the sash simultaneously slides down at the top. This provides very good and effective ventilation (figure 1).

(Delivered after July 2023)

Separation of frame and sash: Requires two people. Start by opening the window approx. 30°. Then remove the pressure rod from the frame part. Lift the sash into a horizontal position, after which it can be released from the fitting.

(Delivered before July 2023)

Separation of frame and sash: Requires two people. Start by opening the window approx. 30°. Then remove the screws from the sliding fitting in the sash part (from sides and top), after which the sash can be released from the fitting.

Adjustment: Friction is adjusted by turning the screw in the sliding block on each side. The screw must be tightened equally on both sides, otherwise the sash may become misaligned. This is done with a Torx 20 (figure 2).

Bolts can be adjusted using a size 11 wrench. You can adjust the washer at the bottom of the bolt, as these are conical, for better engagement with the striking plate if needed.

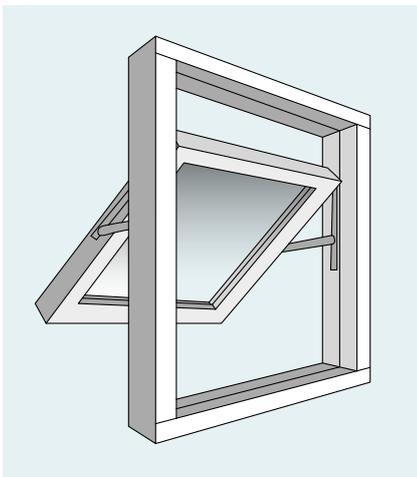


Figure 1: Viewed from inside

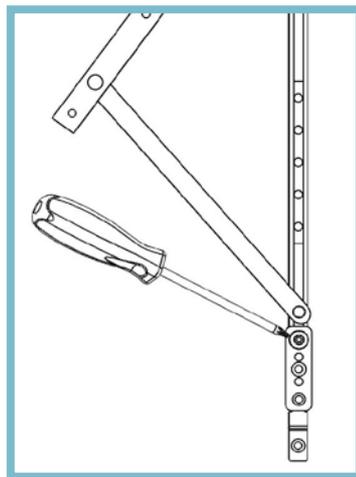


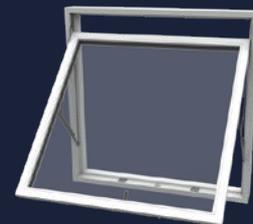
Figure 2: Adjustment of top-guided fitting up/down

Watch
installation
video on
YouTube



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Top-reversible windows



Operation: The window is opened and closed using the handle located at the center of the bottom sash rail. On the underside of this rail is an espagnolette that secures the sash in the striking plate on the frame. The striking plate has two slots: the inner for closing the window, and the outer for ventilation. Do not leave your home with windows in the ventilation position.

The sash opens and automatically engages the opening restrictor. Further opening of the window is done by deactivating the restrictor. This is done by pulling the locking arm in the direction of the arrow (figure 2) inward toward the rebate, and then opening or closing the sash.

Cleaning position (figure 1): The sash can then be rotated 180° outside the facade, allowing the exterior to be cleaned from inside. When the sash is fully opened, it automatically locks in the cleaning safety position on the left side. It cannot be expected that the window will remain open in an unlocked position. To close the window again, pull the sash slightly inward.

The locking arm is pulled in the direction of the arrow (figure 3) inward toward the rebate, and the sash is closed simultaneously.

Separation of frame and sash: Requires two people. Start by opening the window approx. 30°. Then remove the screws from the sliding fitting in the sash part (from sides and top), after which the sash can be released from the fitting. Bolts can be adjusted using a size 11 wrench. You can adjust the washer at the bottom of the bolt, as these are conical, for better engagement with the striking plate if needed.

Adjustment: Sliding fittings in top-reversible windows cannot be adjusted.

Top-reversible windows cannot be supplied with a friction brake.

It cannot be expected that the window will remain in the stepless ventilation position during strong winds or draught.
NOTE: Delivered without handle-operated brake function.

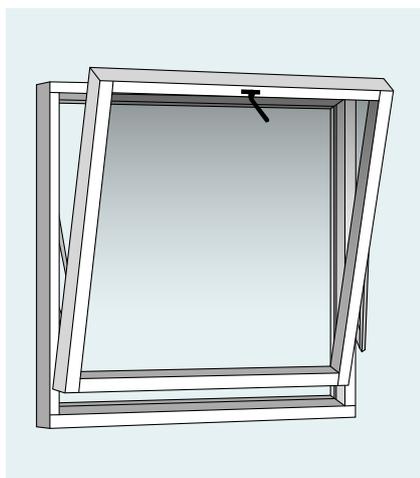


Figure 1: In some cases, the sash can be opened so high that it may touch the upper brick wall

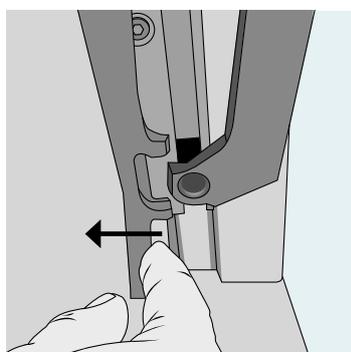


Figure 2: Deactivation of opening restrictor

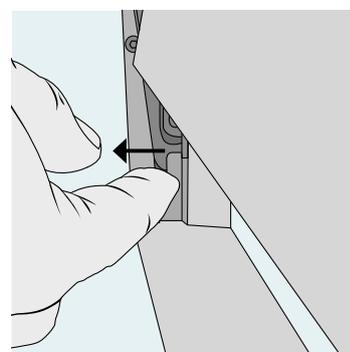


Figure 3: Cleaning position

Tophung windows



Operation: The window is hinged at the top and fitted with casement fasteners and a stay bar, which are used to open and close the window, or with a handle and espagnolette (figure 1).

Separation of frame and sash: The sash must be moved to a horizontal position and can then be lifted free of the hinges. Smaller sashes can be handled by one person.

Adjustment: Casement fasteners can be tightened or loosened by turning the eyelet and stay bar (figure 2).

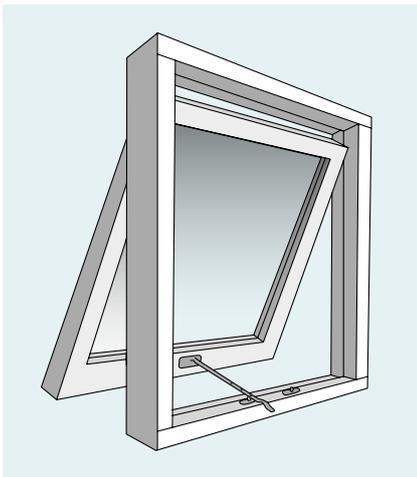


Figure 1: Viewed from inside

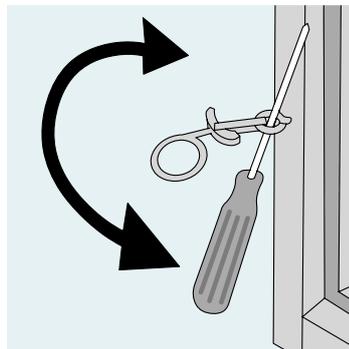


Figure 2: Adjustment of casement fasteners

Tilt-turn windows



Function: The tilt-turn window is an inward opening window with both sidehung and bottom-hung functionality. The sidehung function is primarily used for cleaning the exterior side of the glass, while the bottom-hung function is used for daily ventilation and airing (figure 1).

Operation: The sash is operated using a handle on the side of the sash. In the closed position, the handle points downward. To avoid incorrect operation, ensure the sash is pressed against the frame before operating the handle. In tilt mode, there will be a ventilation opening at the top (figures 2 & 3).

Separation of frame and sash:

1. Set the handle to the horizontal position (sidehung position) and open the sash.
2. Activate the misoperation restrictor on the side of the sash.
3. Turn the handle to the vertical position (tilt position).
4. Rotate the locking disc at the top of the sash.

5. Lift the locking disc and disconnect the pivot joint.

Note: The sash is now loose at the top.

6. Close the sash almost completely (it should still be tilted), then lift the sash off.

Separation of frame and sash – double tilt-turn:

1. Open the sash.
2. Rotate the locking disc at the top of the sash.
Note: The sash is now loose at the top.
3. Lift the sash off the bottom fitting (figures 4 & 5).

Adjustment: Tilt-turn windows can be adjusted vertically and horizontally. All adjustments are made by first opening the sash and using a 4 mm Allen key.

Maintenance:

Lubricate the locking and pivot points of the fittings at least once a year.

See
operating
video on
YouTube



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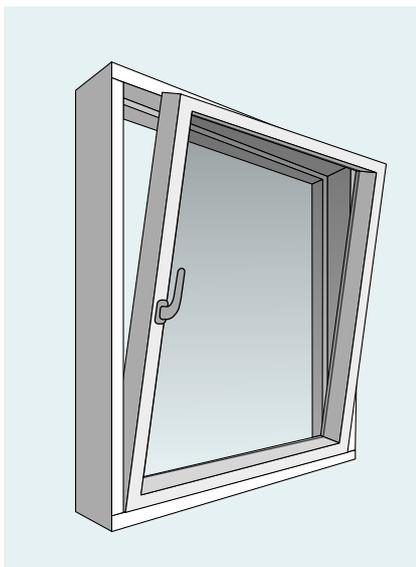


Figure 1: Viewed from inside



Figure 2



Figure 3

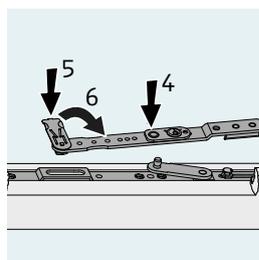


Figure 4

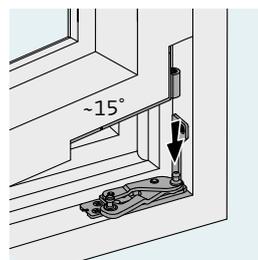


Figure 5

Foto copyright: SIEGENIA GRUPPE

Sidehung windows



Operation – standard: Sidehung windows in the standard version are fitted with stay bars and case-ment fasteners, which are used to open and close the window. The stay bar is mounted on the hinge side and is used to hold the window in the open position (figure 1).

Operation – with handle and espagnolette: Sidehung windows can be supplied with espagnolette locks, with or without handle-operated brake. Both the locking mechanism and the friction brake are operated using a handle on one of the vertical sash profiles. The brake is mounted in the bottom rail of the sash and allows the window to be held in any ventilation position up to a maximum of 90°. The window is braked by turning the handle on the open window to the closed position.

The window must never be operated with the handle in the activated position.

Separation of frame and sash:

Standard sidehung sashes can be lifted off the frame when opened to 90°. For sashes with friction brake, the brake must be released before lifting off the sash. This is done by removing the friction arm in the frame rebate. Depending on the size of the window, this may require one or two people.

Adjustment: Casement fasteners and stay bars can be tightened or loosened by turning the eyelet. Handle-operated brake cannot be adjusted. The hinge can be adjusted vertically using a 5 mm Allen key (figure 2).

In strong winds, it cannot be expected that the stay bar or brake will hold the sash in a ventilation or open position. You should not leave the home with windows in the ventilation position.

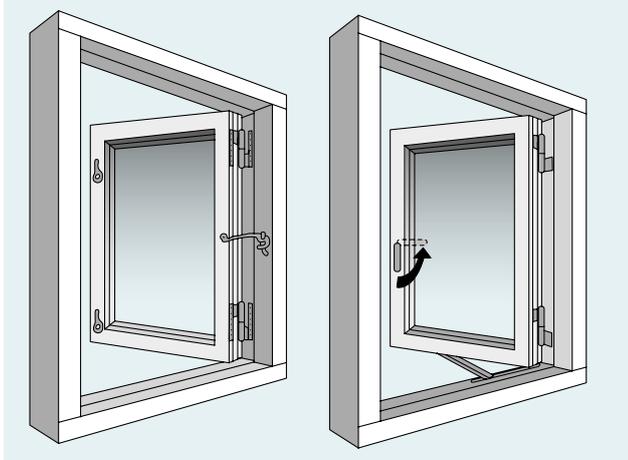


Figure 1: Viewed from inside

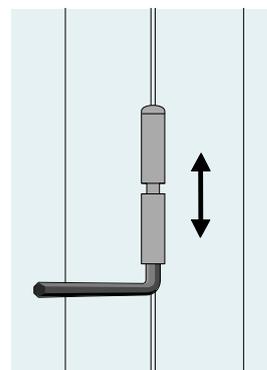


Figure 2: Adjustment of the hinge using a 5 mm Allen key

See
operating
video on
YouTube



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Sideguided windows



Operation: Sideguided windows can be fitted with casement fasteners or handle-operated espagnolette locks (see previous page on sidehung windows).

Sideguided windows have the advantage that the exterior side can be cleaned from the inside. They can be opened up to 90°, creating an opening of approx. 10–15 cm at the rear edge of the sash – enough to reach out and clean the exterior side of the glass (figure 1).

This function is intended solely for cleaning the exterior side of the window and should not be used for ventilation or airing.

Separation of frame and sash: The frame and sash can only be separated by removing the screws that secure the guide arms to the sash. Even for small sashes, this requires two people.

Adjustment: Friction is adjusted by turning the screw in the sliding block at the top of the element.

This is done using a Torx 20.

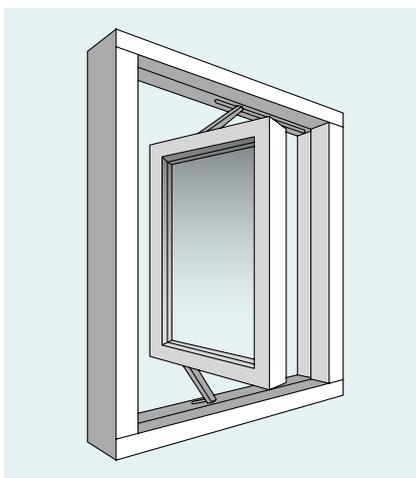


Figure 1: Viewed from inside



Floating Mullion



Position and Release

For safety reasons and to meet fire regulations, double and multi-leaf windows may be fitted with a walk-through floating mullion.

This means that the mullion is fixed to the slave leaf and follows it when opened. The floating mullion is released by unlocking the flush bolts at the top and bottom (figure 1).

Adjustment: The flush bolt can be adjusted by turning the bolt. The bolt can be extended, and the bottom plug adjusted, as it is conical.

Use an 11 mm Allen key.

Operation: The floating mullion is operated by first opening the master leaf, then unlocking the flush bolts in the slave post. This fully opens the emergency exit.

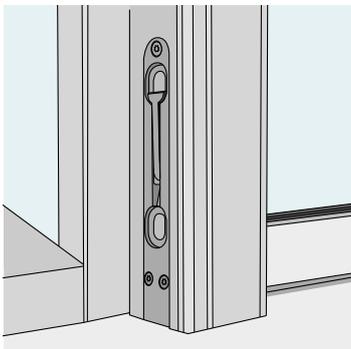


Figure 1





OPERATION & FUNCTION

Doors



Entrance Doors



Operation: Entrance doors are standardly equipped with a lockbox for cylinder and a three-point locking system.

The upper and lower locking points are activated by lifting the handle upwards. This ensures the door is fully sealed and ready to be locked. All three locking points are released by pressing the handle down. The door compresses properly into the rebate only when the three-point locking system is engaged and the bolts are inserted into the striking plate (figure 1).

Separation of frame and sash: When the door is opened to 90°, the door leaf can be lifted off the hinges. If the door is fitted with a brake, it must first be released from the frame.

Adjustment: All doors are fitted with adjustable hinges, allowing fine adjustment of the door sash vertically and sideways towards the hinge side.

(Note: black/white hinges are not adjustable). This does not apply to doors produced before January 2014 or doors with special hinges such as brass, coloured, or stainless steel.

Up/down adjustment of door sash (approx. +/-1 mm)

Door sashes: The door sash can be adjusted in height via our up/down adjustable hinges. If the adjustment screws are turned counterclockwise, the door sash is lowered (use a 6 mm Allen key). (Note: black/white hinges are not adjustable).

The door sash is raised by turning the Allen key clockwise (figure 2). The door sash can be adjusted towards the hinge side by loosening the 2 screws in the groove with a Torx 20, and tightening the 2 grub screws with a 2 mm Allen key. Remember to re-tighten the screws in the groove afterwards.

Adjustment of security striking plate

There are two different versions of the security striking plate, both of which can be adjusted. Both the striking plate at the cylinder and the bolt can be adjusted. Adjustments are made using a Torx 20 (figures 3 and 4).

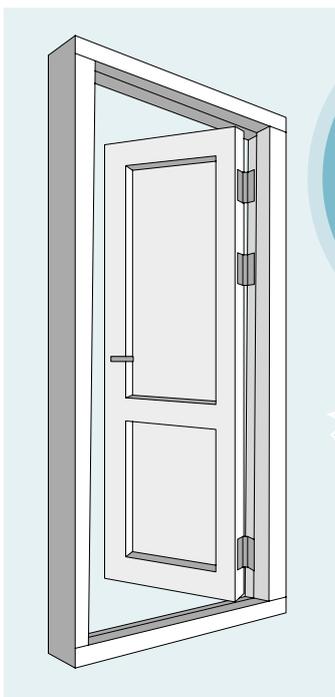


Figure 1: Viewed from inside

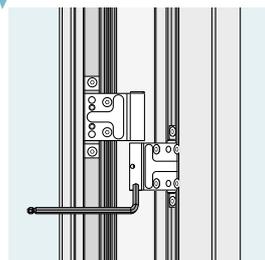


Figure 2: Use 6 mm Allen key

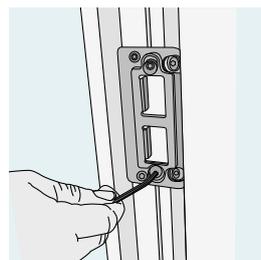


Figure 3: Use Torx 20

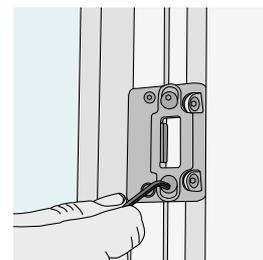


Figure 4: Use Torx 20

Stable Doors



Operation: The two door halves can be opened as one door when the handle on the lower half is turned to the open position before using the handle on the upper half. For lockable doors with two-point locking, the handle on the upper half must be lifted upwards to lock the door (figure 1).

For doors without a lockbox for cylinder:
See operation of terrace doors.

Separation of frame and sash: When the door is opened to 90°, the door leaves can be lifted off the hinges. If the door is fitted with a brake, it must first be released from the frame.

Adjustment: All doors are fitted with adjustable hinges, allowing fine adjustment of the door sash vertically and sideways towards the hinge side. This does not apply to doors produced before January 2014 or doors with special hinges such as brass, coloured, or stainless steel. (Note: black/white hinges are not adjustable).

Up/down adjustment of door sash (approx. +/-1 mm)

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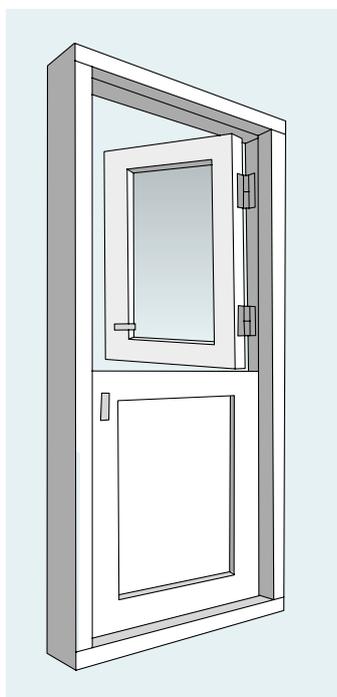


Figure 1: Viewed from inside

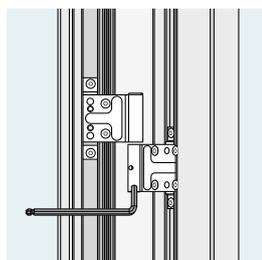


Figure 2: Use 6 mm Allen key

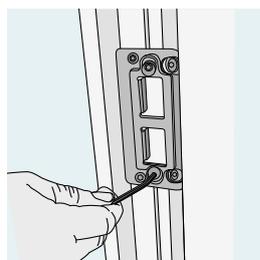


Figure 3: Use Torx 20

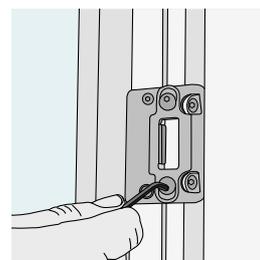


Figure 4: Use Torx 20

Terrace Doors



Operation: The handle operates an espagnolette with three locking points and a friction brake at the top of the door sash. The door can be opened when the handle is turned to the horizontal position.

The door compresses properly into the rebate only when the three-point locking system is activated and the bolts are engaged in the striking plate.

The friction brake allows the sash to be held in any ventilation position from approx. 5 cm to approx. 90°. The door is held in the ventilation position by turning the handle on the open door to the closed position. Never close the door with the handle in the closed position. On double terrace doors, only the master leaf is fitted with a handle as standard. The second leaf is held in the closed position by flush bolts (figure 1).

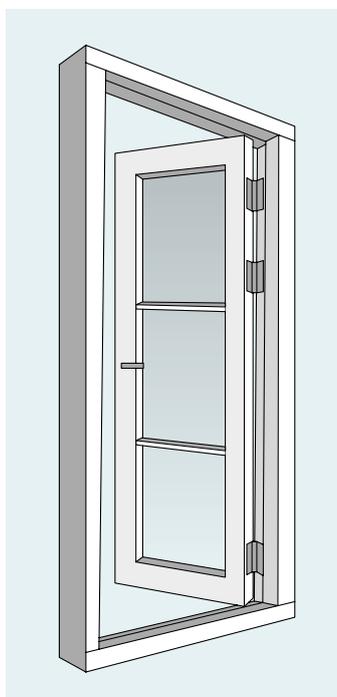


Figure 1: Viewed from inside

In strong winds, the friction brake may not be able to hold the sash in the ventilation position.

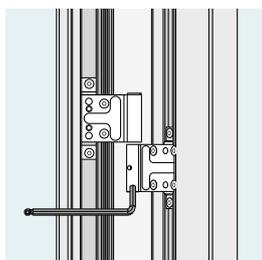


Figure 2: Use 6 mm Allen key

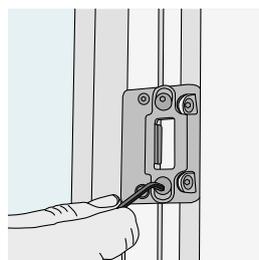


Figure 3: Use Torx 20

Separation of frame and sash: When the door is opened to 90°, the door leaf can be lifted off the hinges. If the door is fitted with a brake, it must first be released from the frame.

Adjustment: All doors are fitted with adjustable hinges, allowing fine adjustment of the door sash vertically and sideways towards the hinge side. This does not apply to doors produced before January 2014 or doors with special hinges such as brass, coloured, or stainless steel.

Up/down adjustment of door sash (approx. +/-1 mm)

(Note: black/white hinges are not adjustable).

Door sashes: The door sash can be adjusted in height via our up/down adjustable hinges. If the adjustment screws are turned counterclockwise, the door sash is lowered (use a 6 mm Allen key). The door sash is raised by turning the Allen key clockwise (figure 2). The door sash can be adjusted towards the hinge side by loosening the 2 screws in the groove with a Torx 20, and tightening the 2 grub screws with a 2 mm Allen key. Remember to re-tighten the screws in the groove afterwards.

(Note: black/white hinges are not adjustable).

Adjustment of security striking plate

The security striking plate is adjusted using a Torx 20 (figure 3).

Our doors are made of wood, a natural and living material. This means that the wood can react to changes in its surroundings, such as temperature and humidity.

If the doors remain open for extended periods, they may warp. We therefore recommend keeping the doors closed when not in use to maintain their dimensional stability and functionality.

Window Doors



Operation: The handle operates an espagnolette with three locking points and a friction brake at the top of the door sash. The door can be opened when the handle is turned to the horizontal position.

The door compresses properly into the rebate only when the three-point locking system is activated and the bolts are engaged in the striking plate.

The friction brake allows the sash to be held in any ventilation position from approx. 5 cm to approx. 90°. The door is held in the ventilation position by turning the handle on the open door to the closed position. Never close the door with the handle in the closed position. On double terrace doors, only the master leaf is fitted with a handle as standard. The second leaf is held in the closed position by flush bolts (figure 1).

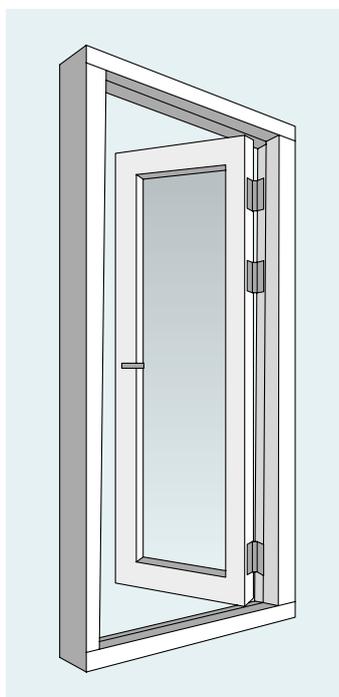


Figure 1: Viewed from inside

In strong winds, the friction brake may not be able to hold the sash in the ventilation position.

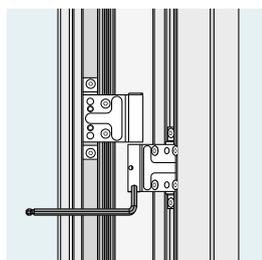


Figure 2: Use 6 mm Allen key

Separation of frame and sash: When the door is opened to 90°, the door leaf can be lifted off the hinges. If the door is fitted with a brake, it must first be released from the frame.

Adjustment: All doors are fitted with adjustable hinges, allowing fine adjustment of the door sash vertically and sideways towards the hinge side. This does not apply to doors produced before January 2014 or doors with special hinges such as brass, coloured, or stainless steel.

Up/down adjustment of door sash (approx. +/-1 mm)

(Note: black/white hinges are not adjustable).

Door sashes: The door sash can be adjusted in height via our up/down adjustable hinges. If the adjustment screws are turned counterclockwise, the door sash is lowered (use a 6 mm Allen key). The door sash is raised by turning the Allen key clockwise (figure 2). The door sash can be adjusted towards the hinge side by loosening the 2 screws in the groove with a Torx 20, and tightening the 2 grub screws with a 2 mm Allen key. Remember to re-tighten the screws in the groove afterwards.

(Note: black/white hinges are not adjustable).

Adjustment of security striking plate

The security striking plate is adjusted using a Torx 20 (figure 3).

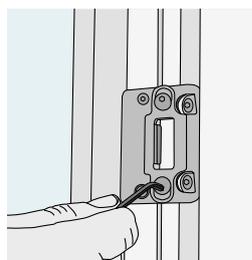


Figure 3: Use Torx 20

Our doors are made of wood, a natural and living material. This means that the wood can react to changes in its surroundings, such as temperature and humidity.

If the doors remain open for extended periods, they may warp. We therefore recommend keeping the doors closed when not in use to maintain their dimensional stability and functionality.

Tilt-Turn Doors



Function: The tilt-turn balcony door is an inward opening door with both side-hung and bottom-hung functions.

The side-hung function is primarily used for cleaning the exterior side of the glass, while the bottom-hung function is used for daily ventilation and airing (figure 1).

Operation: The sash is operated using a handle on the side frame.

In the closed position, the handle points downward. To avoid incorrect operation, ensure the sash is pressed against the frame before operating the handle. In tilt mode, there will be a ventilation opening at the top (figures 2 and 3).

Separation of frame and sash (figures 4 and 5):

1. Set the handle to the horizontal position (side-hung mode) and open the sash.
2. Activate the mishandling restrictor on the side frame.
3. Turn the handle to the vertical position (tilt mode).
4. Rotate the locking disc at the top of the sash.
5. Lift the locking disc and disconnect the pivot joint.

Note: The sash is now loose at the top.

6. Close the sash almost completely (it should still be tilted), then lift the sash off.

Maintenance: Lubricate the locking and pivot points of the fitting at least once a year.

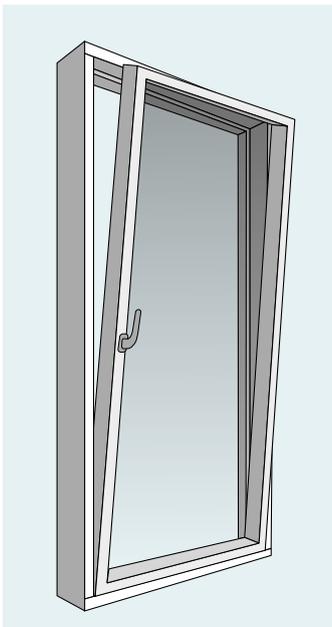


Figure 1: Viewed from inside

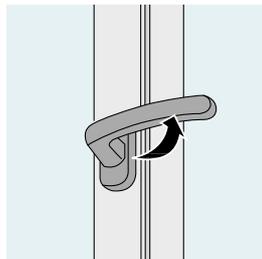


Figure 2



Figure 3

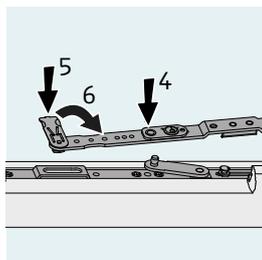


Figure 4

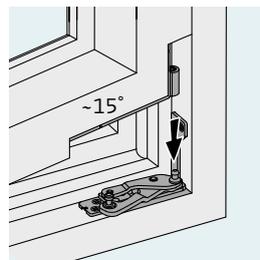


Figure 5

Note: The threshold must NOT be stepped on.

Our doors are made of wood, a natural and living material. This means that the wood can react to changes in its surroundings, such as temperature and humidity.

If the doors remain open for extended periods, they may warp. We therefore recommend keeping the doors closed when not in use to maintain their dimensional stability and functionality.

Sliding Doors



Our doors are made of wood, a natural and living material. This means the wood may react to changes in the environment, such as temperature and humidity.

If the doors remain open for extended periods, they may warp. We therefore recommend keeping the doors closed when not in use to maintain their dimensional stability and functionality.

Operation: Sliding doors are operated by turning the handle 180° downward, which lifts the door and allows it to slide sideways. The handle must not be left in a horizontal position.

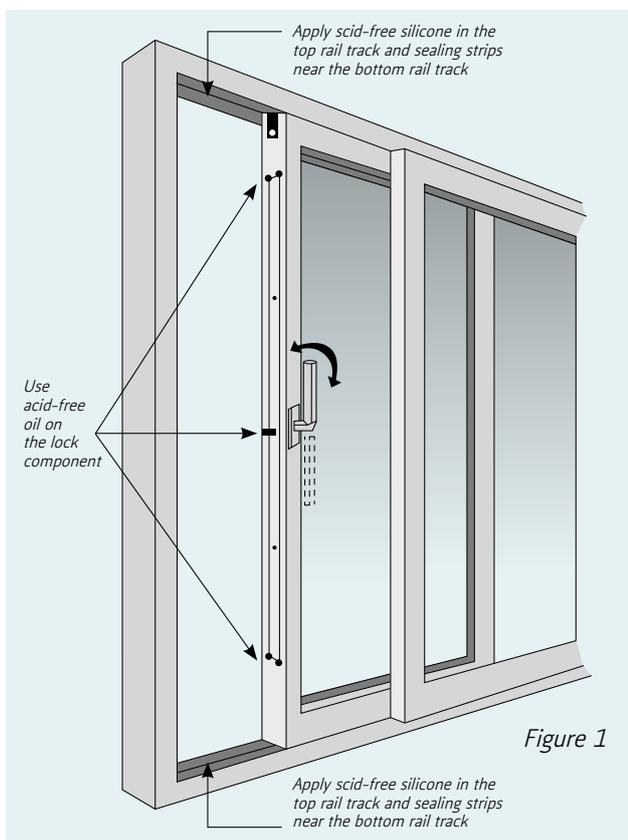
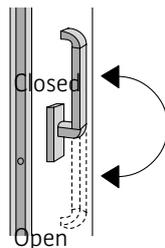


Figure 1

Maintenance: The guide rail and gaskets must be lubricated with acid-free silicone to ensure smooth and trouble-free operation. Locking hardware should be lubricated with acid-free oil. Lubrication should be performed 1–2 times per year or as needed.

Since the operable sash slides externally, it is important to keep the track clean to avoid functional issues (figure 1).

Delivery: A single sliding door is delivered fully assembled on a pallet, ready for installation. A double sliding door is delivered partially assembled and requires additional on-site assembly.

Separate installation guides apply depending on the type of sliding door. See the following sections for each type.

Support Requirements: Sliding doors are available with a frame depth of either 114 mm or 144 mm.

The exterior part of the threshold is made of aluminium, which is not strong enough to support the sliding door without proper support.

A stable base must be established under the track to ensure correct and long-lasting support.

NOTE: Sliding doors are not **self-supporting**, and no load must be placed directly on the frame. To ensure proper load distribution, a **load-bearing beam** must always be installed above the door.

Single Sliding Door (HS25)



Important: Before lifting the frame off the pallet, the master sash must be removed. This is crucial, as the threshold may be damaged during transport from pallet to wall opening if the sash is not removed first.

Removal of the Master Sash - single sliding door:

1. Upon receiving the door on the pallet, the master sash must be removed
2. Grip the handle and move the door toward the closed position, while holding it back in the open position. This prevents marks on the mullion (figures 1 and 2)
3. Stop halfway and close the handle (figures 3 and 4).
4. Place suction cups on the glass of the master sash.
5. Lift off the sash and place it securely.



Figure 1

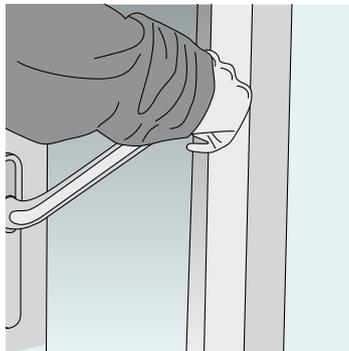


Figure 2

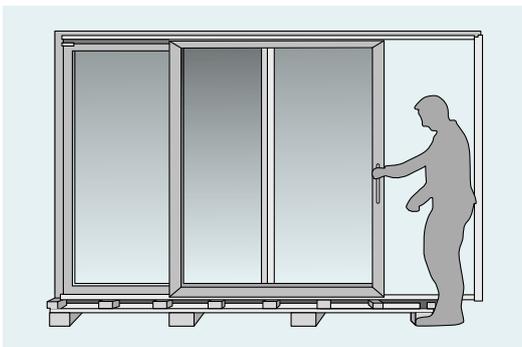


Figure 3

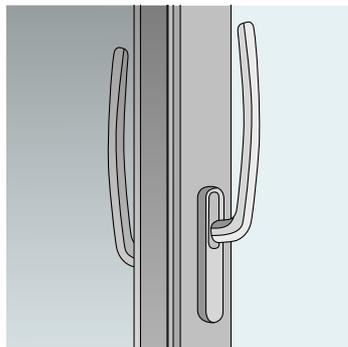


Figure 4

Correct Shimming Is Critical: Incorrect shimming can affect the door's functionality. Always ensure proper support under the frame and threshold.

Continued on next page →

Removal of the Master Sash – single sliding door:

6. Begin by loosely shimming the element in the wall opening using three shims: one under the mullion and one under each side frame (figure 7 with green shims).
7. Then release the frame from the pallet and support beams, and carefully move it to its final position in the wall opening. Ensure that the front edge of the bottom rail track is placed inside the plinth.
8. Center the door in the wall opening, so the joints at the side frames are uniform. Temporarily fix the element at the top and bottom using win-bags or wedges.
9. Check that the door is plumb and level, and verify the diagonal measurement.

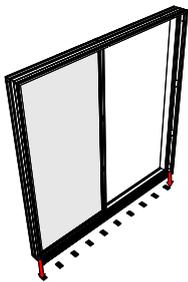


Figure 5: Threshold shimming

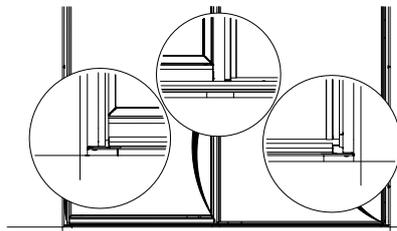


Figure 6: Loosely shim element

10. Fasten the side frames and top frame:
 - a. On the striking side, mount screws close to the bolts with a maximum spacing of 60 cm.
 - b. On the opposite side (fixed part), screws should be placed with a maximum spacing of 90 cm.
For wood/aluminium products, the included aluminium cover must be mounted at the end of the installation guide.
 - c. Also screw into the top rail track to secure the top frame.
11. Shims must be placed under the threshold at every second drainage hole in the bottom rail track – corresponding to every 200 mm (figure 7 with red shims).

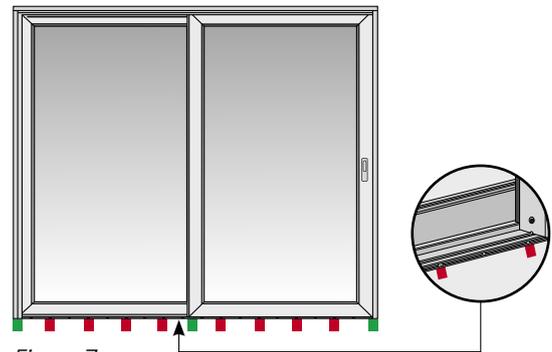


Figure 7

Adjustment of Shimming – single sliding door

12. Before adjustment, the master sash must be mounted. Set the handle in the open position, lift the sash into the top rail track, and then push it onto the bottom rail track.
13. Set up a laser outside, projecting across the full width of the frame – approximately 100 mm up on the glass (figure 8).
14. Place vertical masking tape on the glass on both sides of the master sash, centered above the wheels, at a height that intersects the laser beam (200 mm from the end of the aluminium) (figure 9).

15. Move the sash so the tape aligns with the mullion (center), and mark the laser line on the tape on both sides (figure 10).
16. Adjust each shim in height by sliding the sash back and forth so one of the tape pieces is directly above the shim. Repeat for all shims. The laser height must match the line on the tape (figure 11).
17. Shims on the opening side are adjusted based on the tape near the handle, while shims on the fixed side are adjusted using the tape opposite the handle. This method ensures that there is weight over the shims during adjustment.

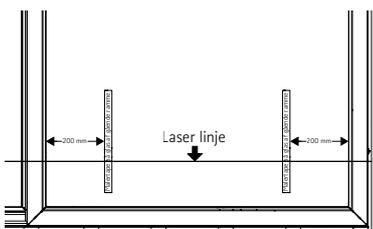


Figure 8: Laser position 0 – apply tape to sash

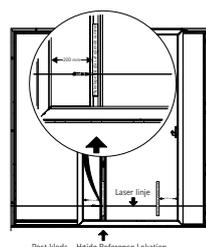


Figure 9: Laser position 1 – mark line on tape at laser height

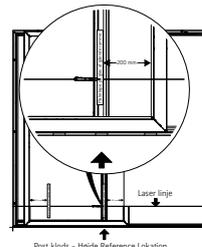


Figure 10: Laser position 2 – mark line on tape at laser height

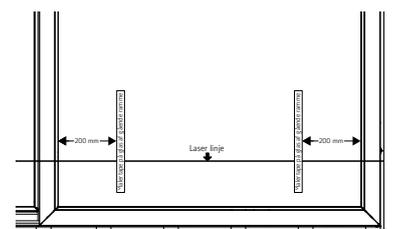
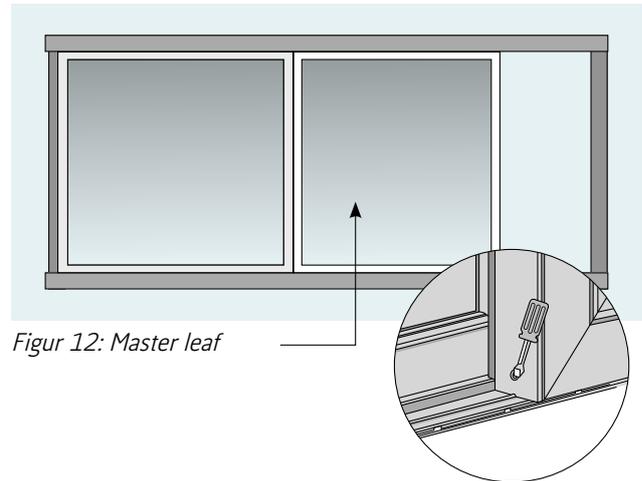


Figure 11: Laser position 3 – adjust all blocks so lines match laser

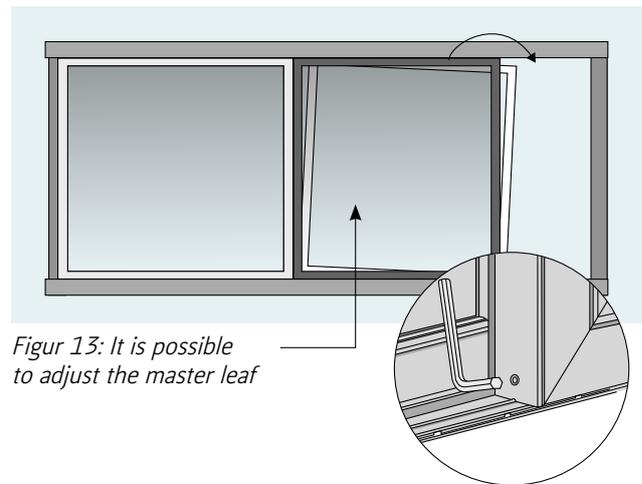
Adjustment of the Master Sash – single sliding door

Only necessary if the frame is not aligned with the threshold.

18. Remove the plug at the bottom of the master door using a socket screwdriver (figure 12).
19. Locate the adjustment screw behind the plug. Use a 10 mm Allen key to adjust the door by tilting the sash as needed (figure 13).
20. Reinstall the plug into the hole once the adjustment is complete.
21. Install the included aluminium part on the side frame by:
 - a. Starting by placing the aluminium part in the top frame (see figure 14, 15 and 16).
 - b. Then push the aluminium part in at the threshold (figure 17).
 - c. Finish the installation by gently tapping the aluminium part into place using a rubber mallet (figure 18).
22. The door is now fully adjusted and installed.



Figur 12: Master leaf



Figur 13: It is possible to adjust the master leaf

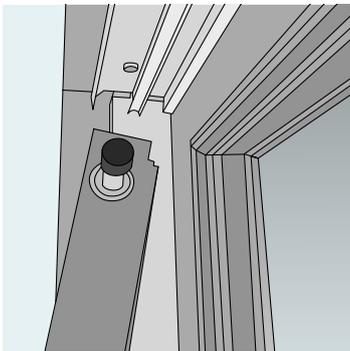


Figure 14

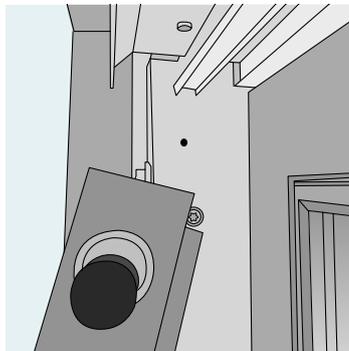


Figure 15

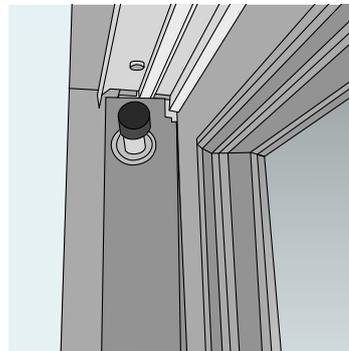


Figure 16

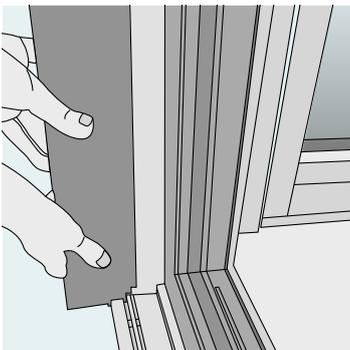


Figure 17

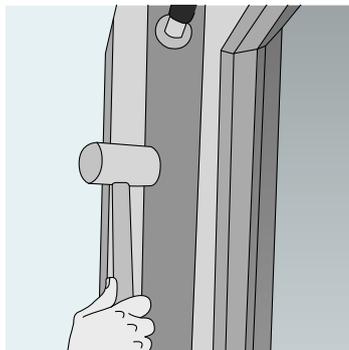
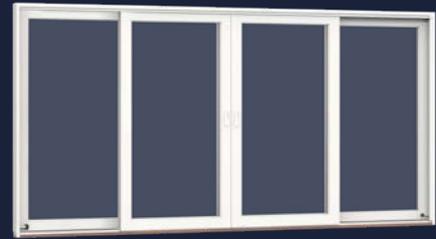


Figure 18

Double Sliding Door (HS25)



Installation kit – double sliding door:

Upon delivery, the double sliding door is partially assembled. Along with the door, you will receive an installation kit containing the following components:

- 2 pcs. 10 x 50 mm dowels (for frame assembly)
- 1 pc. assembly bracket for the wooden threshold
- 1 pc. assembly bracket with grub screws for the aluminium threshold
- 1 pc. assembly bracket for the top frame
- 1 pc. 20 ml narrow joint sealant – 509 Danalim (for frame joints)
- 1 pc. striking plate with 5.5 x 14 mm stainless steel screw

Removal of the Master Sash

– double sliding door:

1. Upon receiving the door on the pallet, the master sash must be removed
2. Grip the handle and move the door toward the closed position, while holding it back in the open position. This prevents marks on the mullion (figures 1 and 2).
3. Stop halfway and close the handle (figures 3 and 4).
4. Place suction cups on the glass of the master sash.
5. Lift off the sash and place it securely.



Figure 1

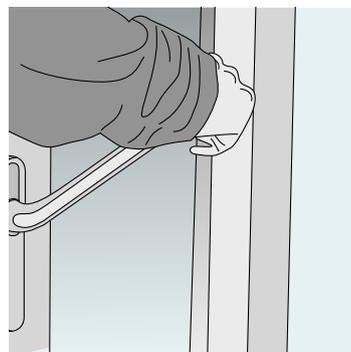


Figure 2

Important: Before lifting the frame off the pallet, the master sash must be removed. This is crucial, as the threshold may be damaged during transport from pallet to wall opening if the sash is not removed first.

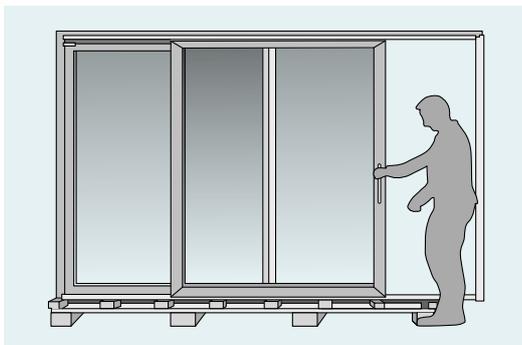


Figure 3

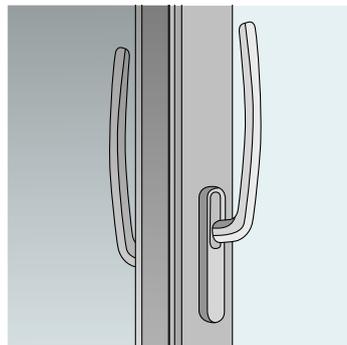


Figure 4

Assembly of threshold and top frame - double sliding door

1. Begin by releasing both frames from the pallet and support beams. Carefully place them on the ground – avoid scratching the frames. Alternatively, the frames can be leaned against a stable surface on a shim close to the wall opening.
2. Assembly of the threshold
 - a. Insert the assembly bracket and slide the bracket with grub screws into the groove on the aluminium threshold. Two screws must be mounted on each side of the joint (figure 5).
 - b. Apply narrow joint sealant by laying a continuous bead along the entire end profile – on both the wooden and aluminium parts (figure 6).
 - c. Assemble the threshold by inserting the assembly bracket into the wooden part and tightening it with a 4 mm Allen key (figure 7).
 - d. Then tighten the grub screws on the bracket in the aluminium part.
3. Remove excess sealant from the wooden part using a damp cloth.

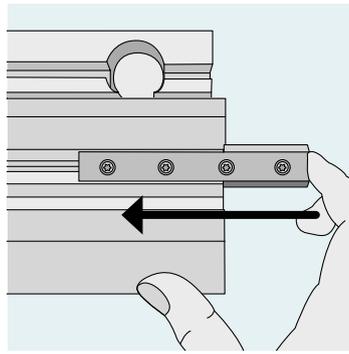


Figure 5: Underneath the threshold

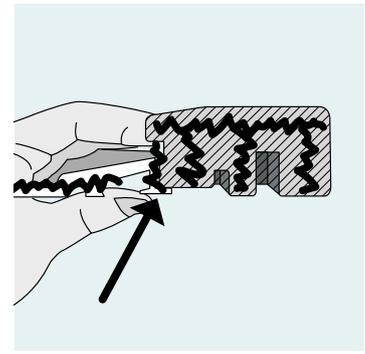


Figure 6: It's important to apply plenty of sealant in the groove

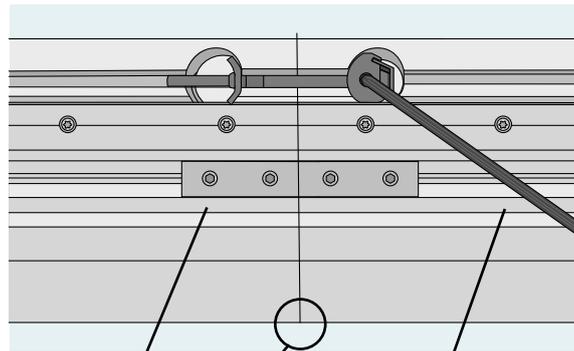


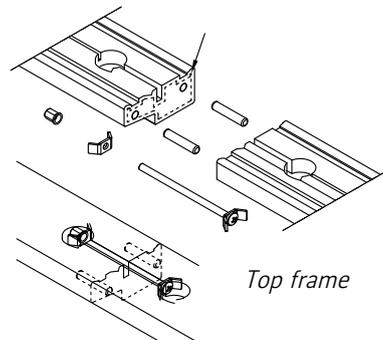
Figure 7

Grub screws

Joint between two frames

4 mm Allen key

4. Assembly of the top frame
 - a. Apply narrow joint sealant into the dowel holes.
 - b. Then apply a continuous bead of sealant around the entire end profile.
 - c. Insert the dowels into the holes and press the frame together.
 - d. Fasten the assembly bracket and tighten the locking nut to ensure the joint is completely sealed.
 - e. Remove excess sealant with a damp cloth.



Top frame

Note: When installing the top frame in a load-bearing structure, a frame screw must be used on each side of the frame joint. This ensures stability and proper load distribution within the construction

Continued on next page →

Installation of the double sliding door frame

5. Begin by loosely shimming the element in the wall opening using three shims: one under the mullion and one under each side frame (figure 7 with green shims).
6. Release the frame from the pallet and support boards, and carefully move it to its final position in the wall opening. Ensure that the front edge of the bottom rail track is placed inside the plinth.
7. Center the door in the wall opening, so the joints at the side frames are uniform. Temporarily fix the element at the top and bottom using win-bags or wedges.
8. Check that the door is plumb and level, and verify the diagonal measurement.
9. Fasten the side frames and top frame:
 - a. On the striking side, mount screws close to the bolts with a maximum spacing of 60 cm.
 - b. On the fixed side, screws should be placed with a maximum spacing of 90 cm. For wood/aluminium products, the included aluminium cover must be mounted at the end of the installation guide.
 - c. Also screw into the top rail track to secure the top frame.
10. Place shims under the threshold at every second drainage hole in the bottom rail track – corresponding to every 200 mm (figure 7 with red shims).

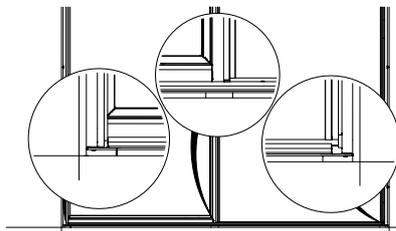
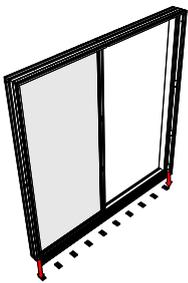


Figure 8: Threshold shimming Figure 9: Loosely shim element

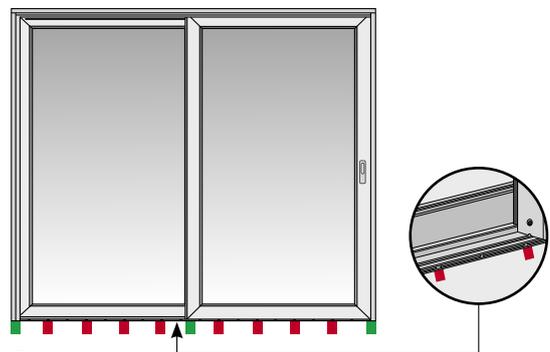


Figure 10

Installation of the master sash – double sliding door

11. Mount the aluminium bottom rail track by removing the protective film from the double-sided tape on the aluminium track.
12. Place the track on top of the aluminium threshold.
13. Fasten the striking plate by screwing in the two included screws. There is a groove in the aluminium threshold where the screws should be placed (figure 12).
14. Install the master sash by setting the handle in the open position.
15. Lift the sash into the top rail track.
16. Then slide the sash onto the bottom rail track.

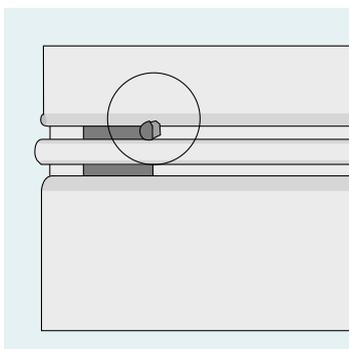


Figure 11: The top of the threshold has pre-drilled holes in the aluminium profile for securing the strike plate

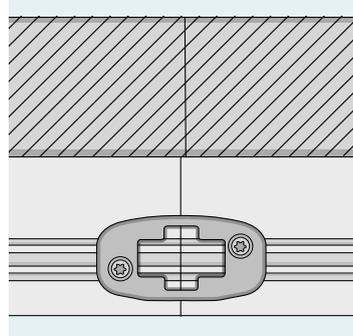


Figure 12: Illustrates how the strike plate secures the threshold on both sides of the joint

Important: Correct shimming of the sliding door is essential, as improper shimming may affect the door's functionality.

Adjustment of shimming

17. Start by setting up a laser outside, projecting across the full width of the frame – approximately 100 mm up on the glass.
18. Place vertical masking tape on the glass on both sides of the master sash, centered above the wheels, at a height that intersects the laser beam (figure 13).
19. Move the sash so the tape aligns with the mullion, and mark the laser line on the tape on both sides (figure 14).
20. Adjust each shim in height by sliding the sash back and forth so one of the tape pieces is directly above the shim. Repeat for all shims. The laser height must match the line on the tape (figure 15).
Shims on the opening side are adjusted using the tape near the handle.
Shims on the fixed side are adjusted using the tape opposite the handle (figure 16).

21. For wood/aluminium sliding doors, complete the following steps:
 - a. Remove the protective film from the tape on the underside of the aluminium cover.
 - b. Place the aluminium cover into the grooves on the threshold (figure 17).
22. Mount the included aluminium part onto the side frame.
 - a. Starting by placing the aluminium part in the top frame (figure 18, 19 and 20).
 - b. Then push the aluminium part in at the threshold (figure 21).
 - c. Finish the installation by gently tapping the aluminium part into place using a rubber mallet (figure 22).
23. The door is now fully adjusted and installed.

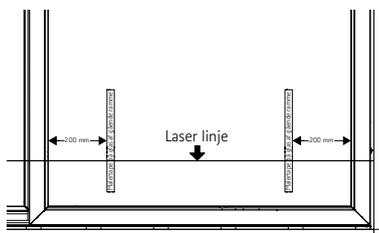


Figure 13: Laser position 0 – apply tape to sash

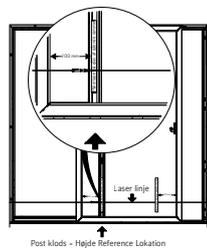


Figure 14: Laser position 1 – mark line on tape at laser height

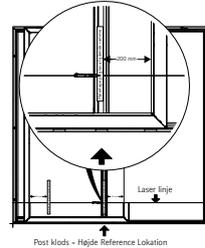


Figure 15: Laser position 2 – mark line on tape at laser height

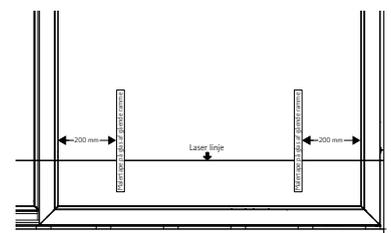


Figure 16: Laser position 3 – adjust all blocks so lines match laser

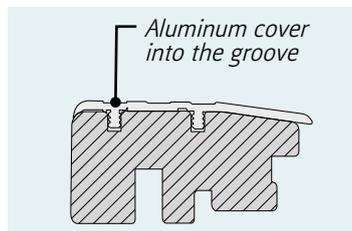


Figure 17: Threshold viewed from the side. Place the aluminium cover into the grooves on the threshold

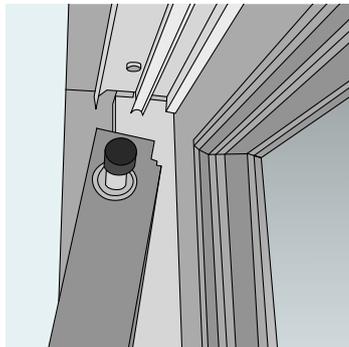


Figure 18

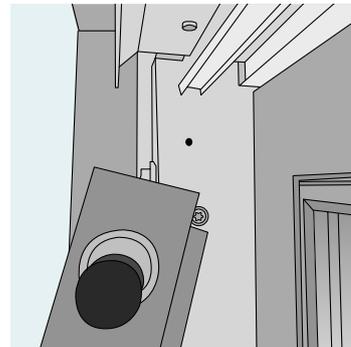


Figure 19

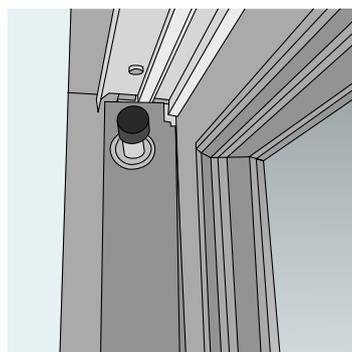


Figure 20



Figure 21

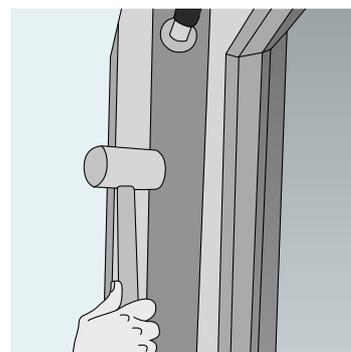


Figure 22

Folding Doors



Operation: A folding door is opened via the master leaf, like a terrace door. Then, each sash is operated one by one using the handle. This allows the sashes to be pushed aside.

Maintenance: Hardwood thresholds should be maintained with hardwood oil. Other maintenance of the folding door is the same as for standard windows and doors. Stainless steel hinge components should be protected with acid-free oil as needed. Apply acid-free oil using a lint-free cloth to create a thin film on the surface.

Adjustment: The drawing (figure 1) shows which hinges are adjustable.

All exterior hinges are adjustable vertically and sideways towards the hinge side.

All striking plates are adjustable inwards and outwards.

Note: The folding door is not designed to be self-supporting.

A load-bearing beam is required. It is very important that the top frame and track are installed level both lengthwise and across the top frame. Check the diagonal measurement of the frame before beginning sash installation.

Delivery of Folding Doors

3- and 4-leaf folding doors are delivered with sashes mounted. 5-leaf and larger are delivered with loose sashes. Frame widths over 4200 mm are delivered with a two-part frame and tracks. All sashes are delivered loose.

Installation of Folding Doors Over 4200 mm Frame Assembly (figure 2)

- Start by applying narrow sealant in the dowel holes.
- Then apply narrow sealant around the entire end profile.
- Insert dowels into the holes – and press the frame tightly together.

See
installation
video



CLICK HERE

Note: A clearance of 3–4 mm between sash and frame at the top is recommended for optimal function.

Exterior Hinges Are Side Adjustable. Use a 10 mm Allen Key.

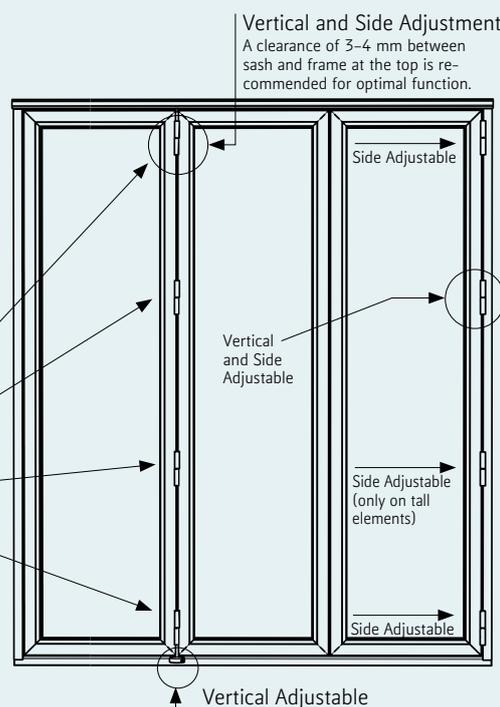


Figure 1

Our doors are made of wood, a natural and living material. This means that the wood can react to changes in its surroundings, such as temperature and humidity.

If the doors remain open for extended periods, they may warp. We therefore recommend keeping the doors closed when not in use to maintain their dimensional stability and functionality.

Continued on next page →

- Mount the assembly bracket and tension nut.
- Ensure the frame joint is completely sealed. Seal again with narrow sealant if necessary.
- Excess sealant must be removed with a damp cloth.
- Colour/texture differences may occur on the bottom frame.

Note: When installing the top frame in a load-bearing structure, a frame screw must be used on each side of the frame joint.

Assembly of Support and Track Rails (figure 2)

- It is important that the rail joint is positioned above the fixed door sash.
- Start by mounting the support rail. The support rail must be mounted in all screw holes.
- The track rail is assembled using the supplied connector block (figure 3).
- Then insert the wheels into the track rail – and finally mount the end cap, which locks the support and track rails together (figure 4).
- The track rail is mounted onto the support rail by hanging it in place.

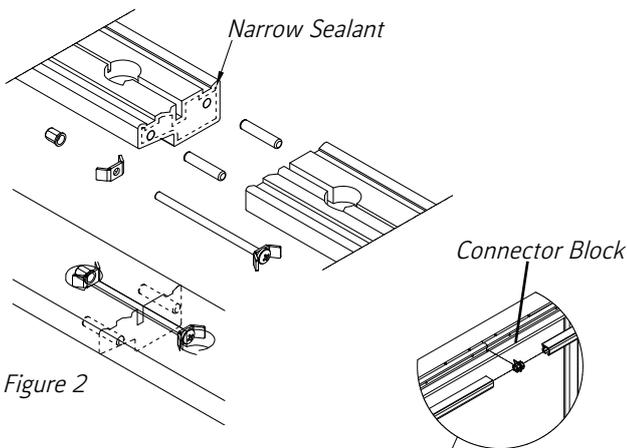
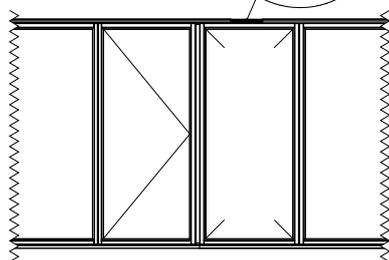


Figure 2

Figure 3



Screws must be applied both horizontally and vertically

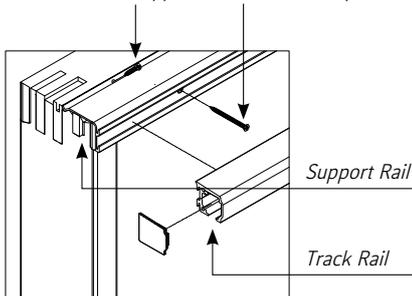


Figure 4

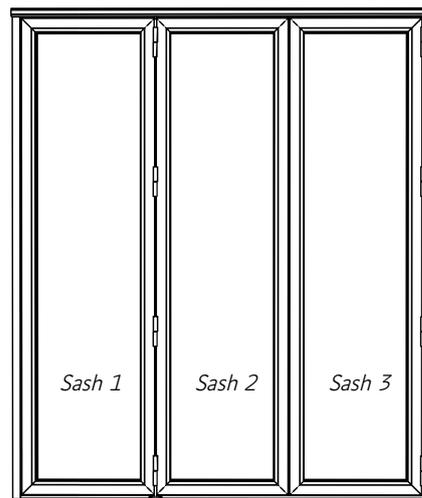
Installation of Folding Doors over 4200 mm: Continued

Installation of Folding Doors under 4200 mm: START HERE

- Shim the frame vertically and horizontally. Remember diagonal measurement.
- Ensure there is space around the frame in the wall opening for alignment, shimming, and sealing. Once the frame is correctly positioned, it must be fastened in the rebate using frame screws. The top frame is fastened at each factory-installed shim point.
- The bottom frame is shimmed every 500 mm.
- Side frames are fastened like doors every 900 mm.
- Remember shimming at fixing points.

Note: The top frame must be pre-drilled through the fitting groove and support rail. Expanding foam must not be used for installation of folding doors!

- Once the frame is correctly installed, begin mounting the sashes.
- The sashes are marked with a number in the fitting groove.
- Sashes hinged from the left start with number 1.
- Sashes hinged from the right start with the highest number.
- When mounting the first sash, remove the two top hinges from the frame and reattach them during sash installation.
- When mounting the next sash, remove the second-highest hinges before attaching the next sash.
- Hang the next sash and insert the rod into the wheel in the track rail.
- On the lower part of the hinge, tighten the grub screw to secure the rod.
- If the door needs to be adjusted in height later – remember to loosen the screw.
- Depending on the door model, repeat the process either from the current sash or from the opposite frame.



Adjustable door hinges

Adjustment: Front doors, stable doors, patio doors, window doors, and folding doors can be adjusted via the door hinges.

Ensure even spacing between the door frame and sash.

Vertical adjustment: The door sash can be adjusted in height using the hinge's grub screw, operated with a 6 mm Allen key.

Horizontal adjustment: The door sash can be adjusted sideways (+1.5 mm/-1 mm) via the door hinge using a 10 mm Allen key. The screws in the hinge must be loosened before adjusting the sash. After adjustment, the screws must be retightened.

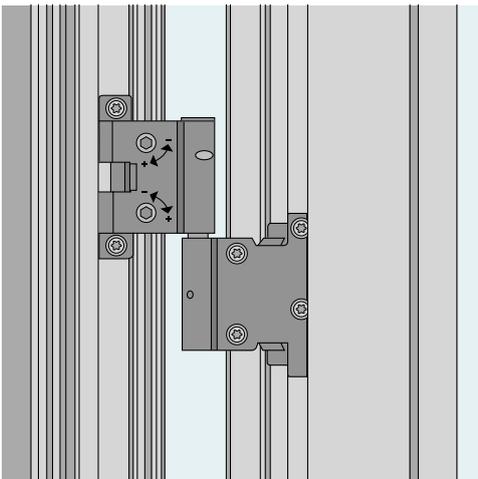


Figure 1: Insert a frame screw into the hole where one is missing

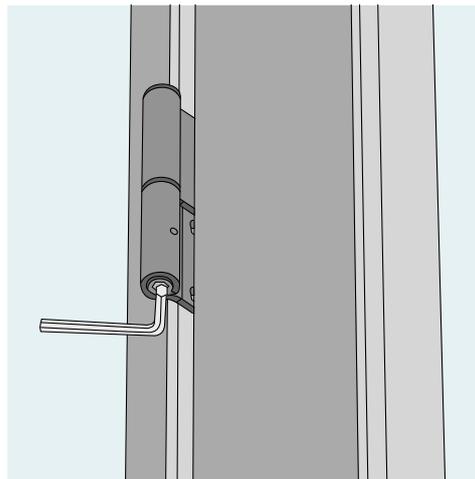


Figure 2: Use a 6 mm Allen key to adjust up and down

Sealing

Sealing must be carried out according to the guidelines provided by the Danish Sealant Industry Council (FSO).

For more information, visit www.fugebranchen.dk.

During placement of insulation material (backing), care must be taken to ensure that the material does not distort the frame.

Wood: Wood products may be sealed to the front edge of the wood (figure 1).

Wood/Alu: It is **recommended** to seal to the front edge of the wood, but sealing to the front edge of the aluminium is also possible at the sides and top (figure 2).

Always ensure that any drainage holes in the bottom frame are unobstructed.

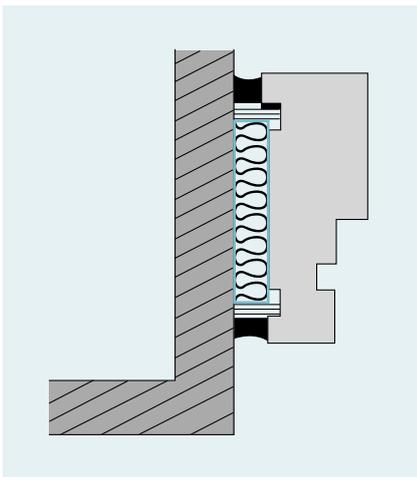


Figure 1: Wood

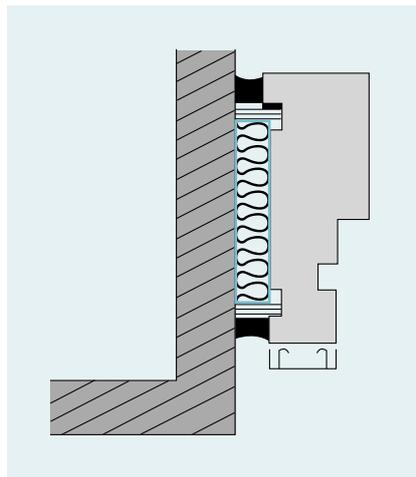


Figure 2: Wood/Alu

Assembly of Elements

There must be a minimum clearance of 12 mm between elements mounted side by side (figure 1), as shimming – e.g. behind hinges – is necessary. This applies to all sides.

There must be a minimum clearance of 12 mm between elements mounted on top of each other.

It is required to use a drip cill between elements mounted vertically to prevent water ingress or leakage at joints.

Elements are not load-bearing. When assembling vertically, drainage holes must be considered.

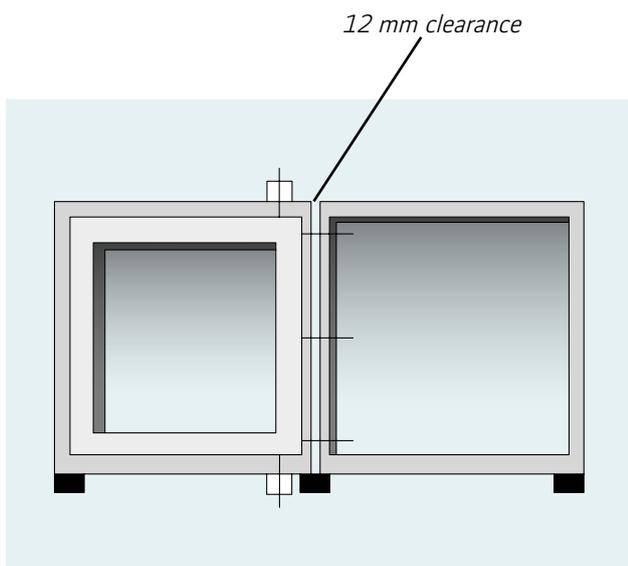


Figure 1

Increased Sealing for Entrance Doors

Follow this installation guide to improve sealing on entrance doors

Install the following gaskets:

1. Around the cylinder. It is important that the gasket fits tightly against the lockbox.
2. On the spindle and push it fully against the handle.
3. In the handle hole. It is important that the gasket fits tightly against the lockbox.

Gaskets are installed from the exterior side of the door.

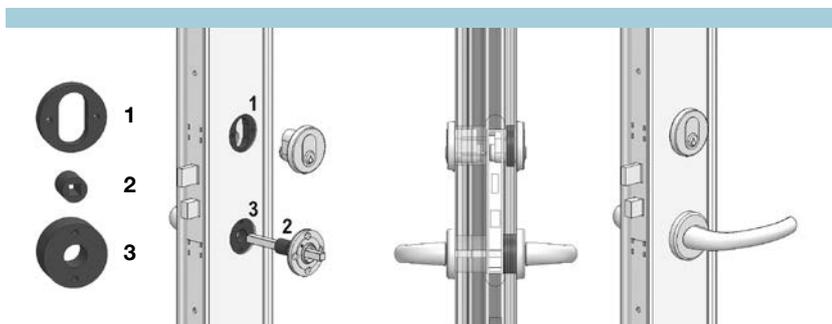


Figure 1: Oval Cylinder

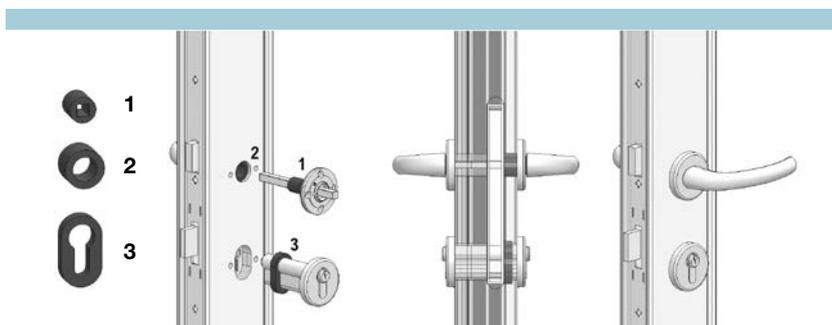


Figure 2: Profile Cylinder

Panels and Glass – Delivered Loose

General for Wood and Wood/Alu:

- Exterior panel plates and fully insulated panels are delivered loose.
- Remove glazing blocks and take out the panel to allow fastening of the frame to the masonry in the fitting groove.
- Reinsert the panel plate or panel.
- Shim the panel as shown (angled support block is factory-installed).
- Then mount side and top glazing beads. Nail with the same spacing as the bottom blocks.

For Wood Elements:

- First mount the bottom glazing bead with plastic block (fig. 1). The block must be placed max. 50 mm from the corner and max. 300 mm between each. Mount with 3 x 25 mm screws. Remember compression.

For Wood/Alu Elements:

- Protective film must be removed before installation.
- Loose aluminium is delivered mounted on raised glazing clips. Glazing clips and spacers must be removed before aluminium can be mounted.
- Mount bottom/side/top blocks with max. 50 mm from the corner and max. 300 mm between each. Mount with 3 x 25 mm screws. Remember compression.

On **Wood Elements**, the beads are fixed in the middle with a nail. Beads can be carefully removed as follows:

- First remove the side beads.
- Then remove the top and bottom beads.
- Bottom beads are held with a clip in the middle.
- Grip the bead at one end and gently pull it outward. Then pull the bead sideways until it is free from the clip.
- The panel/glass can now be removed.

On **Wood/Alu Elements**, the beads are pressed onto the central clip.

- First remove the side beads.
- Grip the bead at one end and gently pull it outward. Then pull the bead sideways until it is free from the clip.
- Same procedure applies for top and bottom beads.
- Unscrew the bead blocks and the panel/glass can now be removed.
- First mount bottom and top glazing beads, then side glazing beads.
- Glazing beads are tapped into place using a rubber mallet.

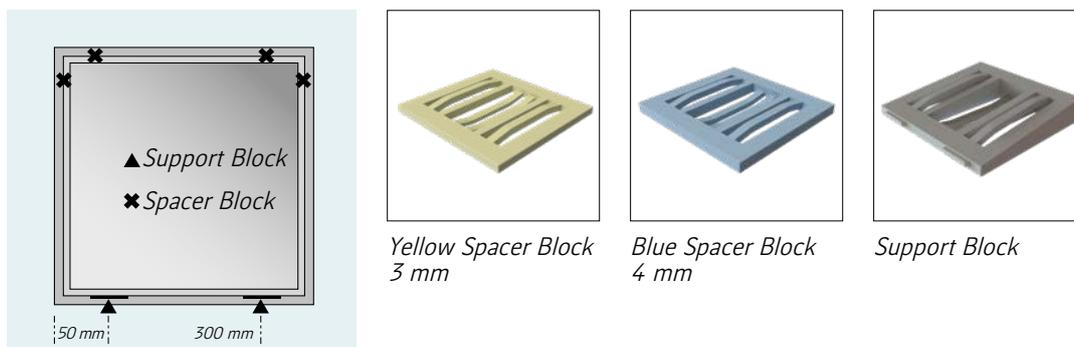


Figure 1: Fixed window



See our
Removal and
Installation
Videos



CLICK HERE

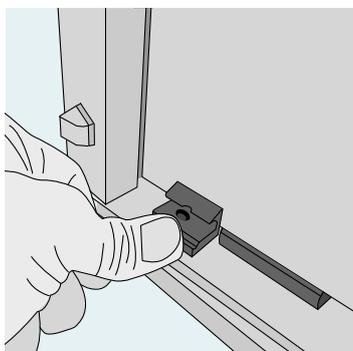


Figure 1

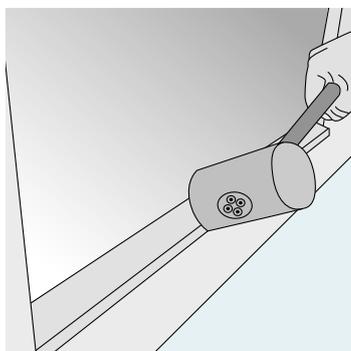


Figure 2



Figure 3: 2-layer Wood/
Alu block for sides + top



Figure 4: 3-layer Wood/
Alu block for sides + top



Figure 5: 3-layer Wood/
Alu block for bottom

It is important to place the correct glazing blocks at the top, sides, and bottom.

Note! For combination elements with a frame section below a sash section, an aluminium glazing bead with drainage holes must be mounted at the top of the frame section.



MAINTENANCE GENERAL



MAINTENANCE GENERAL

The surface of windows and doors should be regularly inspected so that any damage can be repaired as soon as it occurs.

Horizontal components are especially exposed to weather and wear, and therefore require more frequent maintenance than other surfaces.

Surface treatment – pine wood

All elements are delivered with an environmentally friendly surface treatment that protects against rot and fungus. Re-treatment can be done with suitable wood protection or paint. Before applying surface treatment, the elements must be thoroughly cleaned with a basic cleaning agent (not dish soap), then loose paint scraped off and the elements sanded with sandpaper. Remove sanding dust and apply primer oil/paint if needed. This should also be lightly sanded when dry, then sanding dust removed and the first coat applied. Handles, locking mechanisms, moving parts, glazing seals, gaskets, and DVV labels must not be painted. Openable sashes must not be closed until the element is completely dry. Surface treatment should be repeated when the most exposed areas show signs of deterioration.

Surface treatment – aluminium

Aluminium should be cleaned at the same time as the glass. Cleaning agents must have a neutral pH value (5–8).

Any damage to the aluminium surface should be repaired by sanding the damaged area smooth, removing sanding dust, and treating with metal lacquer/paint. Such treatment will always be visible. This treatment cannot be performed on elements with sable colours, as these aluminium profiles have a textured surface.

Surface Treatment – Hardwood Threshold and Oak Threshold

Elements are delivered pre-treated and should be finished with a suitable topcoat after installation. In the first year, elements should be re-treated twice. At regular intervals, and at least once a year, check whether the surface remains protected and water-repellent.

The wood should be re-treated as needed.

Maintenance intervals are indicative, as durability depends on exposure to sun and wind.

South- and west-facing sides are especially exposed. A good rule of thumb is that the wood is saturated when water forms “beads” on the surface. Use hardwood oil or find suitable oil in our webshop.

Wood treated with wood preservative

In accordance with the EU Biocidal Products Regulation (EU 528/2012) regarding the use and information of biocides: The wood is protected with wood preservative.

Manufacturer: Akzo Nobel, Aqua combi WA D20, approval number BPD, containing IPBC for protection against fungal attack.

Application area: Protection against rot and mould in use class 3.1 according to EN 335 (treatment of outdoor wood above ground in use class 2–3 according to DS/EN 335-1:1994, such as windows and doors).

Waste handling: Expired or deteriorated wood must be disposed of according to municipal guidelines.

Resin bleed

Wood is a living material. Resin bleed may occur on painted surfaces. Discoloration (especially with light colours) or visible resin can be gently removed with alcohol. Then re-treat the surface.

Gaskets

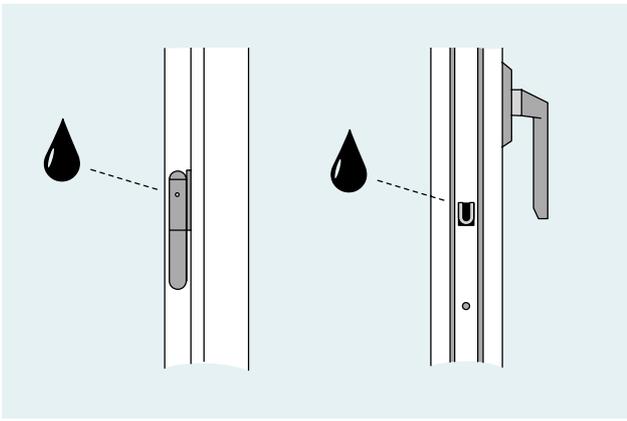
Elements are fitted with weather-resistant gaskets held in a groove in the sash. These should be cleaned with a damp cloth.

IMPORTANT: Gaskets must not be removed.

Glazing (Glazing tape and beads)

Glazing tape requires no maintenance, but it is recommended to inspect it annually, especially at the bottom. If there are leaks, the glazing tape should be replaced. It is recommended to replace the glazing beads at the same time. It is important that the surface treatment of the glazing beads is regularly maintained.

Continued on next page →



Lubrication

Hinges, handles, rivet joints, and any espagno-lettes, joints, locking rollers, slots, locks, or rod locks must be lubricated at least once a year, or as needed, using acid-free oil.

For sashes with friction brakes and/or concealed side-hung or side-swing fittings, it is important to keep the sliding track free of oil and dirt, and these components must not be painted.

Cylinders must be lubricated at least once a year with lock oil (e.g., from Ruko)

Maintenance and cleaning of stainless steel

Stainless steel is generally a very durable material, but it is still susceptible to surface corrosion. This can appear as flash rust – small metal particles that settle as red spots on the surface.

To prevent flash rust, it is important to seal the surface with a thin layer of acid-free oil. This should be done before the folding door is put into use, and we recommend repeating the treatment a few times a year. If you live in coastal areas, the products are particularly exposed, and treatment should be done more frequently for optimal protection.

Apply the acid-free oil with a lint-free cloth. Be careful not to overdose the oil, as the protective effect is achieved with a fine, thin film.

If flash rust occurs due to lack of maintenance, it can be removed using stainless steel cleaner commonly used in households. In addition, the folding door should be maintained like windows and doors.

Cleaning

Use plenty of water for the initial cleaning after construction is completed. Glass stickers can be removed by soaking with water. Any glue or silicone residue on the glass can be dissolved with petrol or thinner.

After window cleaning, wipe down sash and frame parts with a dry cloth. **IMPORTANT:** Painted surfaces must never be cleaned with petrol, thinner, or products containing ammonia.

Ventilation

Proper ventilation is important to prevent moisture damage and condensation, and to maintain a healthy indoor climate. It is recommended to ventilate at least 2 × 10 minutes daily or as needed.

If condensation forms on the inside of a double-glazed unit at an outdoor temperature around 0°C, it means the indoor air is too humid. This is not a fault in the glass.

Note:

- New windows are tighter than old ones, increasing the need for ventilation.
- Newly built or renovated houses should be ventilated more frequently during the first year.

Energy glass units

Energy glass refers to units where the innermost layer of glass is coated with a thin, invisible metal layer that reflects heat back into the room. To further reduce heat loss between the panes, the atmospheric air is replaced with a gas.

When the inner glass layer reflects heat back into the room, it warms up, while the outer glass layer remains cold due to minimal heat loss. Since condensation forms on cold surfaces, the temperature difference between the glass layers may cause temporary condensation on the outside.

This occurs especially when the air is still and will quickly disappear when air movement or temperature increases.

APPENDIX 14 IN THE WINDOW INDUSTRY'S TECHNICAL SPECIFICATIONS

Expected outcome of industrial surface-treated timber elements

Companies certified under the Technical Specifications for DVV perform surface treatment on timber elements that, as a minimum, provide the following outcomes: (Terminology according to the Painting Treatment Catalogue, Danish Technological Institute).

All surfaces are treated, but the layer thickness cannot be expected to be uniform throughout.

	Expected outcome	Functions class	Comments
Visible surfaces when element is closed	DLGU**	III*	Average layer thickness > 60 µm (80 µm)
Visible surfaces when element is open	DG***	III*	Surface must be non-absorbent
Non-visible surfaces (facing wall)			No requirement

* Function class III

South- and west-facing building components exposed to varying moisture or traffic pollution or other aggressive influences. See also supplementary outcome description.

** Covered, closed, smooth and filled surface (DLGU)
Surfaces, edges, and rebates appear uniform in colour and gloss and feel smooth. Pores are sealed. Holes, cracks, and joints are closed and filled. Irregularities from the substrate may occur. Hardwood is exempt from the requirement for filled surfaces.

*** Covered and smooth surface (DG)

Surfaces, edges, and rebates appear uniform in colour and gloss and feel smooth. Irregularities, open pores, holes, cracks, and joints from the substrate may occur.



Supplementary outcome description

It must be accepted that wood is a natural material and often highly inhomogeneous. Therefore, structural and gloss variations, wind cracks, and other normal wood characteristics may occur, such as irregularities around knots, where partial flaking, resin boil-out, and wrinkling may appear. Especially with light colours, colour bleed from knots may occur. Knots may be plugged or filled with suitable material, but visibility cannot be avoided.

Similar colour variations may appear as yellow-stained lamellas/surfaces.

Another irregularity in surface treatment may appear as resin blisters. These may be randomly distributed or follow the grain of the wood.

Resin may also penetrate the paint film and form small droplets on the surface.

Once crystallised, these droplets can be brushed or gently scraped off without compromising the surface treatment.

Wood components with high resin content may occur. In such cases, resin may cause more extensive bleed.

Production is industrial, offering the advantage of consistently high quality and treatment on all surfaces.

Unless otherwise agreed, it must be expected that, for example, glazing beads are mounted using a nail gun, which may break the surface treatment.

The durability of surface treatment on bottom glazing beads made of wood cannot be expected to match the durability of other surfaces.

For south-facing façades with intense sunlight and sea air, or where there is high indoor humidity, the maintenance interval should be adjusted accordingly.

For maintenance, refer to the "Painting Treatment Catalogue" (MBK) or the paint manufacturers.

OUTLINE 10-YEAR WARRANTY



The warranty statement applies to Outline Windows delivered and installed in Denmark (excluding the Faroe Islands and Greenland) from 1 September 2013.

Provided that the elements in your order are installed in accordance with Outline's installation instructions and maintained according to the guidelines in Outline's user manual, we offer a 10-year Outline Warranty as follows:

For Outline products marked with the DVV label, we offer a 10-year warranty consisting of 5 years DVV warranty according to the industry association, VinduesIndustrien, plus Outline's extended 5-year warranty. In other words, the Outline 10-Year Warranty covers Outline Wood, Outline Wood/Alu, and Outline Wood/Alu Daylight.

You can find the DVV warranty from VinduesIndustrien at <https://www.outline.dk/kontakt/reklamation/>

Please note that the above warranties do not cover:

- Damage and functional issues due to lack of lubrication, maintenance, or cleaning of the exterior powder-coated surface
- Products affected by external influences such as other building components, various foam types, extreme heat, moisture, chemical or climate exposure
- Wear parts within fittings (hinges, locks, handles) and gaskets that must be replaced due to daily use and operation

- Visual defects in glass units will be assessed according to VinduesIndustrien's Appendix 20: Visual Quality Deviations in Insulating Glass Units, available at the link above
Complaints regarding visual defects must be submitted no later than 1 year after delivery
- Tightness in doors delivered with single-point locks
- Water ingress at the threshold of inward-opening doors
- Functional stability in elements larger than those listed in Outline's price list
- Elements delivered with stain surface treatment – covered by 5-year DVV warranty
- Elements delivered with external wooden glazing bars – covered by 5-year DVV warranty
- For panelled doors and solid plank doors – 5-year DVV warranty applies as standard
- Electrical accessories – 2-year warranty applies

Due to the high insulation performance of low-energy products, temporary condensation may occur on the exterior side of the insulating glass in certain weather conditions.

In cases where bottom glazing beads or glazing bars are made of wood, or doors have wooden thresholds, the durability of the surface treatment on these parts cannot be expected to match the rest of the surface. Therefore, more frequent maintenance is required. Refer to the user manual section on "Expected Outcome of Industrial Surface-Treated Timber Elements".



Brief overview of insulating glass units



Replacement

If it becomes necessary to replace glass units, all replacement should be carried out by professionals. For units held in place with glazing beads, these must be carefully removed before the glass can be taken out. If the units are held with aluminium covers, these must be removed using special tools between the wood and aluminium before the glass can be taken out.

The glass unit

The insulating glass units used are manufactured according to the standards and warranties of the Danish Window Industry, including EN 1279 for insulating glass.

Below is an excerpt from the industry's guidelines and warranties.

Maintenance

The glass should be cleaned regularly depending on external influences.

Mounting materials must be maintained or replaced when signs of deterioration appear. This requires professional craftsmanship.

Glass warranty

The glass unit is guaranteed to remain free from condensation inside the unit for 10 years.

The warranty covers replacement glass and installation according to the Danish Window Industry's compensation table.

Visual defects

Glass units that deviate from the guidelines in Appendix 20: Visual Quality Deviations in Insulating Glass Units will be replaced with a new unit within 1 year of delivery.

Glass is an industrial product made from materials such as limestone, quartz, and soda.

Even though the raw materials are carefully purified, it cannot be completely avoided that small impurities and scratches may occur inside the insulating glass unit.

Complaints regarding impurities in the glass are assessed based on the procedure below, which determines whether they are insignificant and considered a natural part of the material (and therefore not covered by warranty), or significant enough to justify replacement.

Assessment criteria for visual defects

Glass units must be assessed from a minimum distance of 2 meters indoors under diffuse light (e.g., overcast sky), without direct sunlight or artificial lighting. Irregularities that cannot be seen from 2 meters are not considered defects. For reflection inspection, the viewing distance from outside must be at least 5 meters.

The following are not covered by warranty:

- Interference phenomena
- Double glazing effect
- Anisotropies
- Condensation on exterior and interior glass surfaces
- Marks on glass surfaces
- Tarnishing
- Thermal breakage (cracks on the inner side of the glass facing the room).

Fortsættes på næste side →



Claims

Any potential claim must be directed to the craftsman or dealer from whom you purchased the products.

If the reason for the claim is incorrect installation, the claim must be directed to the installer.

If the issue is due to incorrect operation or lack of maintenance, the warranty does not apply.

Read more about the DVW warranty at www.vinduesindustrien.dk

Excerpt from the DVW warranty terms

Read more about DVW at www.vinduesindustrien.dk, where you can also find all warranty terms

§ 3. Conditions for coverage under the Warranty Statement.

- 3.1 The warranty is provided under the following conditions:
- The element must be DWV-marked.
 - The element must be installed and maintained according to the manufacturer's installation and maintenance instructions, as well as the description "Expected Outcome of Industrial Surface-Treated Timber Elements," which is provided to the consumer.
 - The defect must not be caused by circumstances occurring after delivery by the manufacturer, including defects due to improper storage, transport, or installation by intermediaries/contractors.
 - The element must not be damaged by external influences such as impact, shock, movement in adjacent structures, etc.

- The element must not have been altered after delivery, e.g., sanding, sandblasting, etching, painting, adhesive application, or other surface treatments.
- The glass unit must not contain "attached" or "built-in elements" such as leaded glass, alarm systems, blinds, etc., that have caused condensation inside the unit.
- Adhesive "energy bars" on the glass do not affect the warranty.

§ 4. Scope of coverage under the Warranty Statement.

- 4.1 If a justified claim is made regarding manufacturing and/or material defects within the period stated in § 2.1 (for details, refer to the full DVW warranty terms), the manufacturer is obligated to repair the defect or alternatively deliver a new product free of charge.
- 4.2 However, the manufacturer does not cover, under this warranty, the costs of removing the old element or installing the new one, nor any consequential work related to the replacement.
- If the claimed element is no longer in production at the time of the claim, the manufacturer is entitled to deliver a similar equivalent element instead.
- If the manufacturing/material defect can be properly remedied through repair or partial replacement, the manufacturer may choose this solution instead.
- 4.3 Replacement of individual parts or repairs does not extend the original warranty period.

REFERANCE TO ADDITIONAL INFORMATION

Regarding ventilation

There are many relevant brochures available for loan at public libraries or for order from the Danish Building Research Institute (www.sbi.dk), for example:

Indeklimaet i boligen, Ole Valbjørn og Peter A. Nielsen.

SBI-anvisning nr. 179.

Bygningers fugtisolering, Nils Erik Andersen, Georg Christensen og Fleming Nielsen.
SBI-anvisning 178. 1993.

Småhuse, Isolering. Fugt. Lyd. Brand. Ventilation.

Styrke. SBI-anvisning 189. 2. udgave. 1999.





WE MAKE IT EASY TO CHOOSE, BECAUSE

- We offer lightning-fast delivery – from 4 days if something goes wrong
- We provide a 10-year warranty
- Danish windows must be produced in Denmark
- Standard burglary protection is, of course, included in the price
- We are actively working to contribute to the green transition