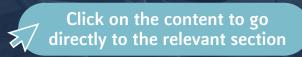
INSTALLATION & USER MANUAL

WINDOWS AND DOORS IN WOOD, WOOD/ALU AND DAYLIGHT







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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.





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.

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.



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.

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 dismounted.

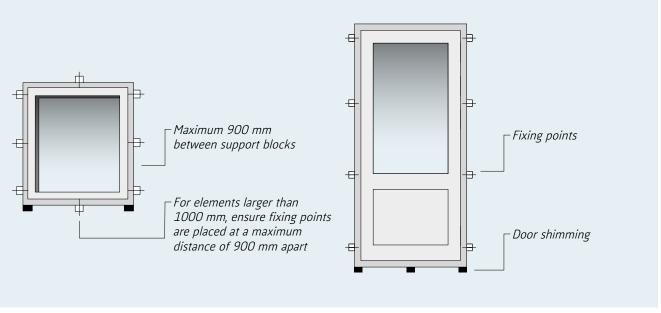
WHAT IS WHAT ON A WINDOW AND A DOOR...







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



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.



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.

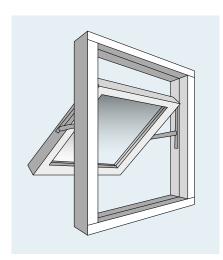


Figure 1: Viewed from inside

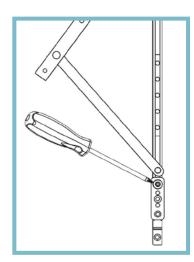


Figure 2: Adjustment of top-guided fitting up/down



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 <u>direction of the arrow</u> (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.

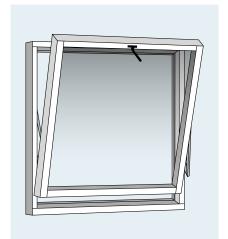


Figure 1: In some cases, the sash can be opened so high that it may touch the upper brick wall

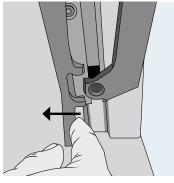


Figure 2: Deactivation of opening restrictor

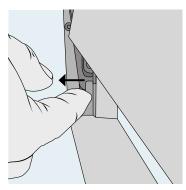


Figure 3: Cleaning position

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).

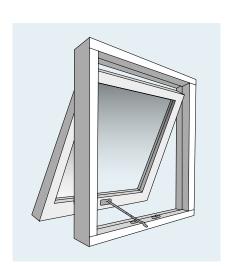


Figure 1: Viewed from inside

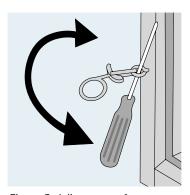


Figure 2: Adjustment of casement fasteners

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





Figure 2



Figure 3

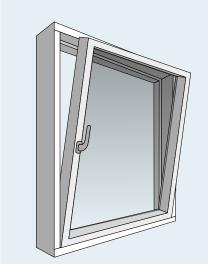


Figure 1: Viewed from inside



Figure 4

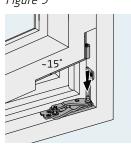


Figure 5

Foto copyright: SIEGENIA GRUPPE

Sidehung windows



Operation – standard: Sidehung windows in the standard version are fitted with stay bars and casement 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.

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.

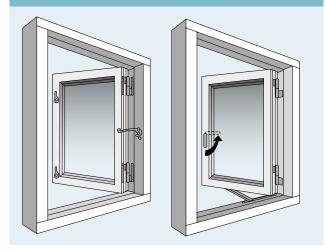


Figure 1: Viewed from inside

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).

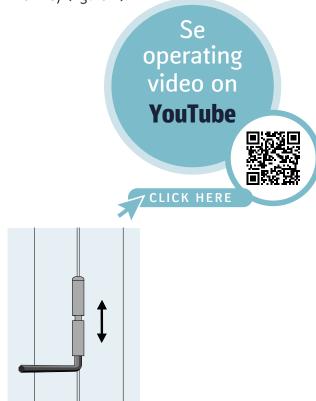


Figure 2: Adjustment of the hinge using a 5 mm Allen key

Sideguided windows



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

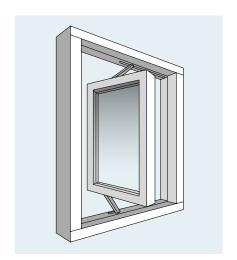
Sideguided windows have the advantage that the exterior side can be cleaned from the inside. They can be opened up to 90° , creating an opening of approx. 10-15 cm at the rear edge of the sash – enough to reach out and clean the exterior side of the glass (figure 1).

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.







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





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

See adjustment video

CLICK HERE

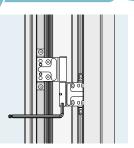


Figure 2: Use 6 mm Allen key



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.

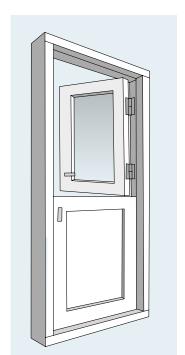


Figure 1: Viewed from inside

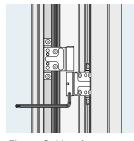


Figure 2: Use 6 mm Allen key

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)

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).



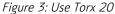




Figure 4: Use Torx 20

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.

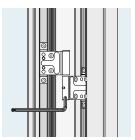


Figure 2: Use 6 mm Allen key

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.

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.

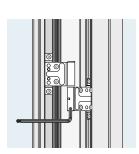


Figure 2: Use 6 mm Allen key

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.

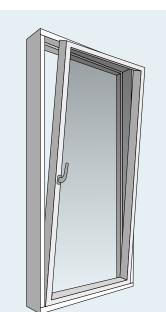


Figure 1: Viewed from inside

Figure 4

Figure 2



Figure 3

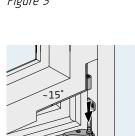
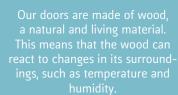


Figure 5

Note: The threshold must NOT be stepped on.



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.

Foto copyright: SIEGENIA GRUPPE

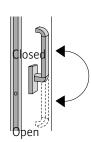
Sliding Doors



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.





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

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.



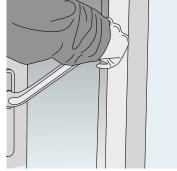
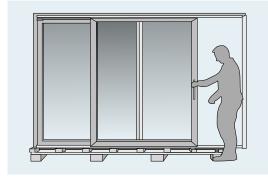


Figure 1

Figure 2



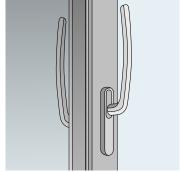


Figure 4

Correct Shimming Is Critical:

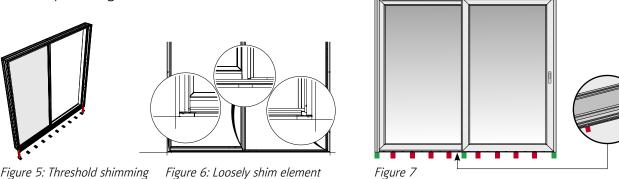
Figure 3

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.

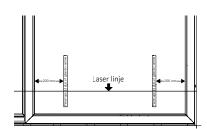


- a. On the striking side, mount screws close to the bolts with a maximum spacing of 60 cm.
- b. On the opposite side (fixed part), screws should be placed with a maximum spacing of 90 cm.
 For wood/aluminium products, the in
 - cluded aluminium cover must be mounted at the end of the installation guide.
- 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).

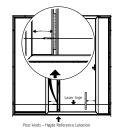


Adjustment of Shimming - single sliding door

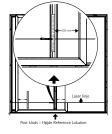
- 12. Before adjustment, the master sash must be mounted. Set the handle in the open position, lift the sash into the top rail track, and then push it onto the bottom rail track.
- 13. Set up a laser outside, projecting across the full width of the frame approximately 100 mm up on the glass (figure 8).
- 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.



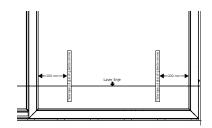
Figur 8: Laser position 0 – apply tape to sash



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



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

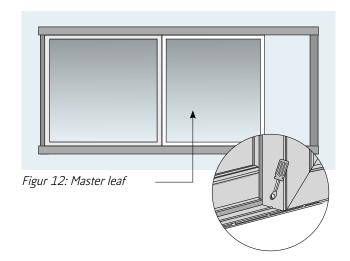


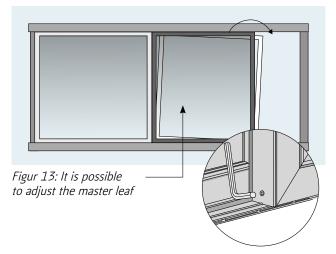
Figur 11: Laser position 3
- adjust all blocks so
lines match laser

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.





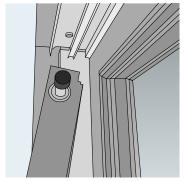


Figure 14

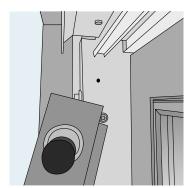


Figure 15

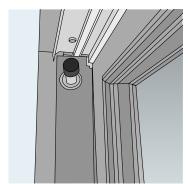


Figure 16

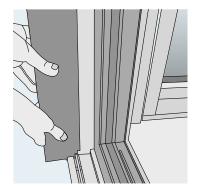


Figure 17

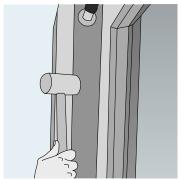


Figure 18

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).
- 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.

Important: Before lifting the frame

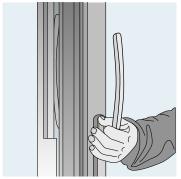
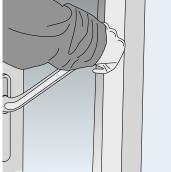
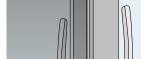
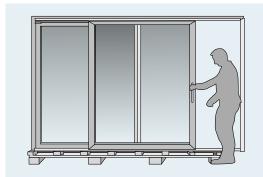


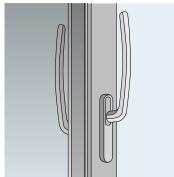
Figure 1 Figure 2











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.

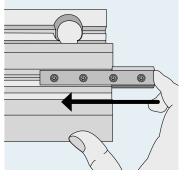


Figure 5: Underneath the threshold

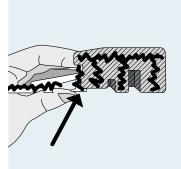
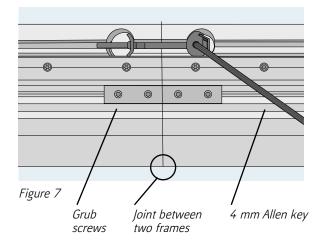
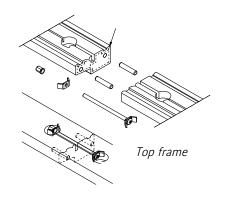


Figure 6: It's important to apply plenty of sealant in the groove



- 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.

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



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).

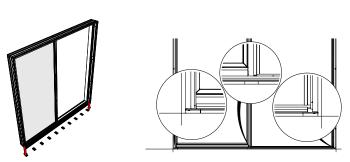
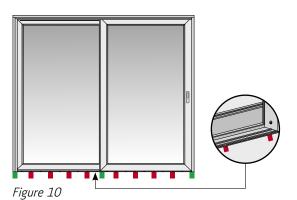


Figure 8: Threshold shimminge Figure 9: Loosely shim element



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.

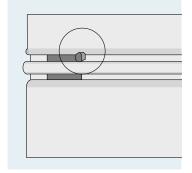


Figure 11: The top of the threshold has pre-drilled holes in the aluminium profile for securing the strike plate

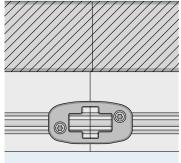
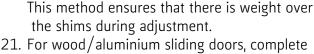


Figure 12: Illustrates how the strike plate secures the threshold on both sides of the joint

Important: Correct shimming of the sliding door is essential, asimproper 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).



- 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.

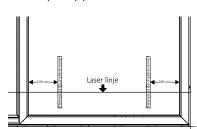


Figure 13: Laser position 0 - apply tape to sash

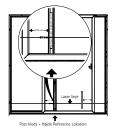


Figure 14: Laser position 1 – mark line on tape at laser height

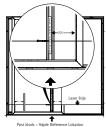


Figure 15: Laser position 2 – mark line on tape at laser height

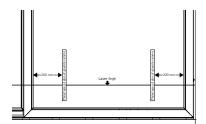


Figure 16: Laser position 3
- adjust all blocks so
lines match laser

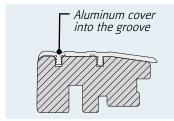


Figure 17: Threshold viewed from the side. Place the aluminium cover into the grooves on the threshold



Figure 18



Figure 19

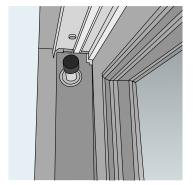


Figure 20



Figure 21

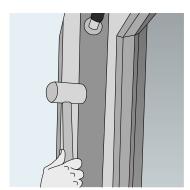


Figure 22

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.

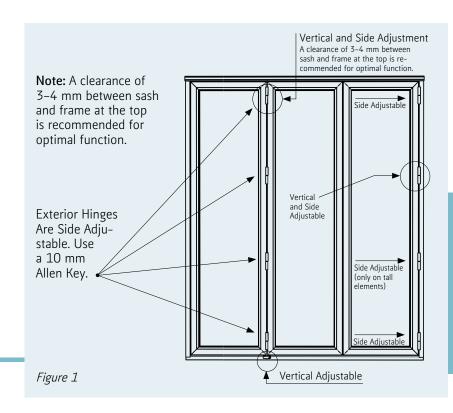
A load-bearing beam is required. It is very important that the top frame and track are installed level both lengthwise and across the top frame. Check the diagonal measurement of the frame before beginning sash installation

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.





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

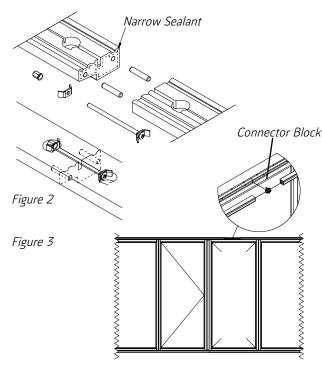
If the doors remain open for extended periods, they may warp. We therefore recommend keeping the doors closed when not in use to maintain their dimensional stability and functionality

- · 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.



Screws must be applied both horizontally and vertically

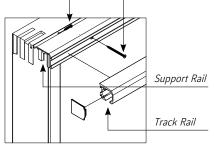


Figure 4

Installation of Folding Doors over 4200 mm: Continued

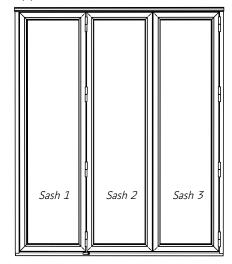
Installation of Folding Doors under 4200 mm: START HERE

- 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 factoryinstalled 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 secondhighest 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.

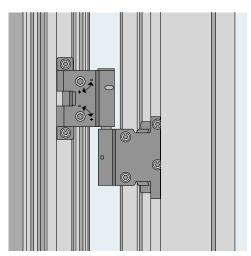


Figure 1: Insert a frame screw into the hole where one is missing

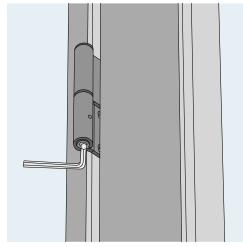


Figure 2: Use a 6 mm Allen key to adjust up and down

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.

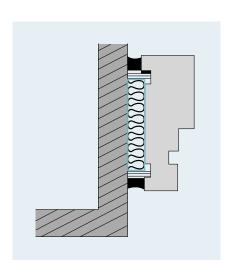


Figure 1: Wood

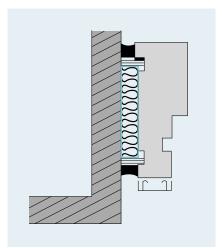


Figure 2: Wood/Alu

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.

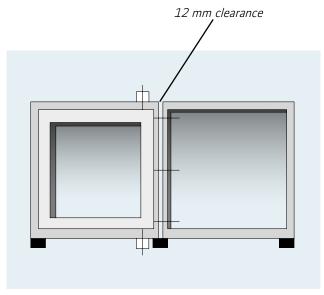


Figure 1

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.

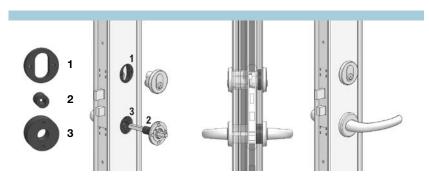


Figure 1: Oval Cylinder

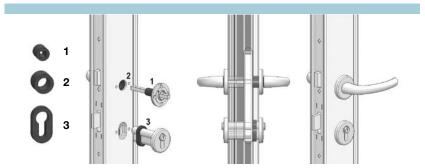


Figure 2: Profile Cylinder

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 heads
- 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.

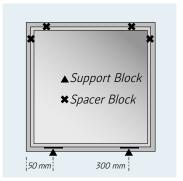


Figure 1: Fixed window



Yellow Spacer Block 3 mm



Blue Spacer Block 4 mm



Support Block





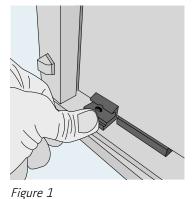


Figure 2

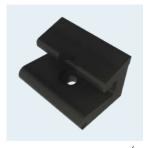


Figure 3: 2-layer Wood/ Alu block for sides + top

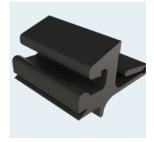


Figure 4: 3-layer Wood/ Alu block for sides + top

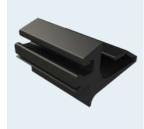


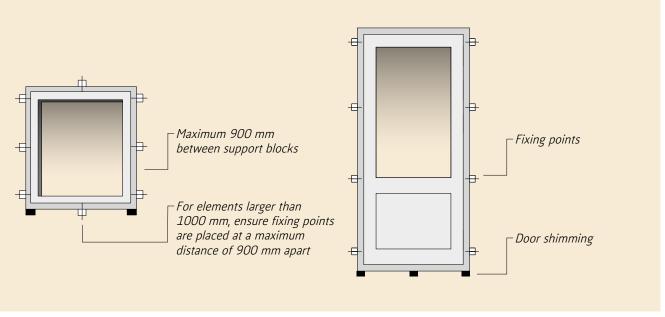
Figure 5: 3-layer Wood/ Alu block for bottom

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.



INSTALLATION AND FIXING **DAYLIGHT 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, acid, etc.

Special notes on windows

We recommend that fixed frame elements and combination elements with muntins are shimmed at the muntins both horizontally and vertically. The distance between two fastening points must not exceed 900 mm.

Two- or multi-area windows must have permanent shimming under mullions. For element heights under 1188 mm, the middle fastening in the side frames can be omitted, and for element widths under 1000 mm, fastening in the top and bottom frames can be omitted. At the outer ends of the bottom frame, permanent shimming must

Shimming and fixing points for doors

be placed. The best result is achieved by mounting screws in the frame rebate.

Special notes on doors

Fastening at the top and bottom of the side frames should be placed as close to the hinges as possible with permanent shimming. The distance between two fastening points must not exceed 900 mm.

Double-leaf doors must, in addition to the shown fastenings, also be fastened at least one point in the top and bottom frame. At the mullions of the bottom frame, there must be permanent shimming.

Shimming Bottom Frame/Threshold

Bottom frame/threshold must be shimmed every 300 mm for elements with fibre and alu thresholds. For hardwood thresholds, every 500 mm.

Note that the elements and posts are not load-bearing.

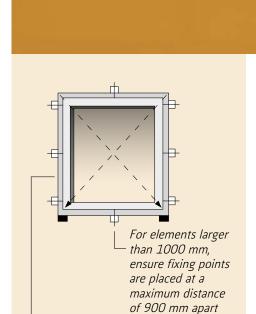


Figure 1: Diagonal measurement - tolerance +/- 2 mm

and fixing points

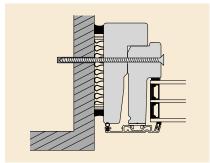


Figure 2: Installation of Daylight fixed frame

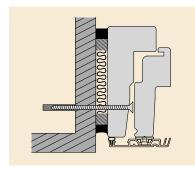


Figure 3: Daylight – openable window

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

Maximum 900 mm between shims

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

There must be a solid base at all fastening points. This, along with any additional shimming, must be of appropriate size to allow space for sealant material both externally and internally in the joint. The contact surface of the solid base must not be less than 25 cm², and the material must be pressure- and water-resistant.

Fastening is done with screws, the type depending on the wall structure. Frame screws with large heads are used. Fastening must be done in the rebate as shown in figure 2.

When installing a Daylight window with a master leaf, it is recommended to place the screw on the outer side of the fitting, as shown in figure 3.

First, fasten the frame on the hinge side. It is important that the frame is vertically aligned in both directions. Then insert the sash and adjust if necessary so that the sash closes precisely against the frame and the clearance – the gap between frame and sash – is even at the top and sides.

Since doors tend to sag slightly with use, it is important that the door leaf is adjusted as high as possible on the lock side during installation. Then fasten the frame on the lock side and check that the sash has contact with the frame and can open and close smoothly.

Elements fastened to the inner wall before facing brickwork must be shimmed and fastened to the facing wall after masonry work to ensure element stability.

Check/adjust any striking plates for bolts and flush bolts to ensure proper engagement.

Daylight Topguided Windows



Operation: The window is opened and closed using the handle located in the middle of the bottom rail. On the underside of this is an espagnolette, which 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).

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

Adjustment: The sash on topguided Daylight windows can be adjusted in height. This is done by loosening the screws in the fitting, and then using a 5 mm Allen key, as shown in the figure. Remember: Tighten the screws in the fitting again after adjustment (figure 2).

The bolts can be adjusted using a size 11 spanner. Adjustment is made on the disc at the base of the bolt, as these are conical for better engagement with the striking plate if needed.

Friction is adjusted by turning the screw in the sliding block on the sides of the element. This is done with a flathead screwdriver.





Figure 1: Viewed from outside

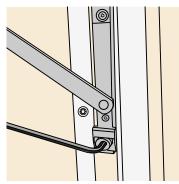


Figure 2: Height adjustment – topguided Daylight window



Daylight sidehung windows



Operation - with handle and espagnolette:

Sidehung windows can be supplied with espagnolette locks with or without handle-operated restrictor. Both the locking mechanism and friction brake are operated using a handle located in one of the sash's side rails.

The restrictor is mounted in the top rail of the sash and allows the window to be held open 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 (figure 1).

In strong winds, the restrictor cannot be expected to hold the sash in ventilation or open position. Do not leave your home with windows in the ventilation position.

Adjustment: Handle-operated restrictors cannot be adjusted. Hinges can be adjusted vertically and horizontally, and all adjustments are made by first opening the sash and using a 4 mm Allen key (figures 2, 3, and 4).

Separation of frame and sash:

- 1. Open the sash.
- 2. Turn the locking disc at the top of the sash. Note: The sash is now loose at the top.
- 3. Close the sash almost completely.
- 4. Lift the sash off the bottom fitting

Figure 2+3

Figure 1: Viewed from outside



Figure 2: Bottom adjustment

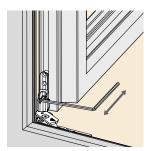


Figure 3: Bottom adjustment



REMEMBER:

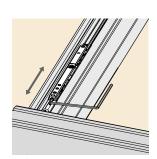


Figure 4: Top adjustment

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Daylight sideguided windows



Operation: Sideguided windows are fitted with espagnolettes and handles. They offer the advantage of allowing cleaning of the exterior side from inside. Sideguided windows 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: Frame and sash can only be separated by removing the screws that secure the stay 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 and bottom of the element.

This is done with a flathead screwdriver.

REMEMBER: For Daylight products, sealing must only be done to the rebate, as the aluminium part is part of the openable sash.

Figure 1: Viewed from inside

Daylight patio doors



Operation with handle and espagnolette: Patio doors can be supplied with espagnolette locks with or without handle-operated restrictor. Both the locking mechanism and friction brake are operated using a handle located in one of the sash's side rails.

The restrictor is mounted at the top of the sash and allows the patio door to be held open in any ventilation position up to a maximum of 90°. The patio door is braked by operating the handle. The patio door must never be operated with the handle in the activated position (figure 1).

In strong winds, the restrictor cannot be expected to hold the sash in ventilation or open position. Do not leave your home with patio doors in the ventilation position.

Adjustment: Handle-operated restrictors cannot be adjusted. Hinges can be adjusted vertically and horizontally, and all adjustments are made by first opening the sash and using a 4 mm Allen key (figures 2, 3, and 4).

Separation of frame and sash:

- 1. Open the sash.
- 2. Turn the locking disc at the top of the sash. Note: The sash is now loose at the top.

See

installation

video

CLICK HERE

3. Lift the sash off the bottom fitting

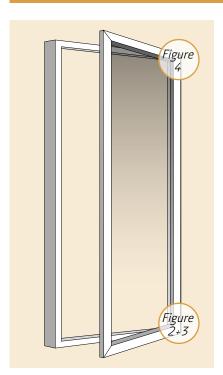


Figure 1: View from outside. Remember: Shimming under the bottom hinge

REMEMBER:

sealing must only be done to the rebate, as the aluminium part is part of the openable sash.

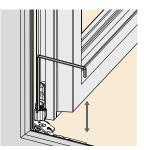


Figure 2: Bottom adjustment

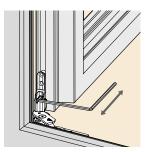


Figure 3: Bottom adjustment

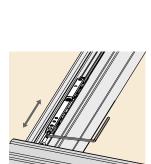


Figure 4: Top adjustment

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Daylight sliding doors

Delivered after week 48 in 2024

Support requirements

A Daylight sliding door has a frame depth of 184 mm. The exterior part of the threshold is made of aluminium, but it is not strong enough to support the sliding door without full support. A sill is required under the track to properly support the door.

Crane and/or unpacking of element

Follow this guide to avoid damaging the sliding door during unpacking and removal from the pallet.

Warning: When lifting or transporting without a pallet, the frame and sash must be lifted separately.

- 1. Slide the door toward the closed position, with the handle in the open position (figure 1).
- 2. Remove the cover on the back of the master sash (figure 2).
- 3. Remove the track lock at the mullion in the top frame. Open the door and remove the track lock on the master side (figures 3 + 4).
- 4. Place suction cups on the glass of the master sash to prepare for lifting it off.





- 5. Prepare a place where the master sash can be temporarily placed while the frame is being installed. Use a couple of battens to place the sash on, and protect it from scratches. Do not place directly on the aluminium sash.
 - Note: Be careful with the locking hardware and wheels under the sash.
- 5. Slide the sash to 90 mm from the closed position. The sash is now free and can be tilted out from the top and lifted off. Place the sash securely (figure 5).



Figure 1: Slide the door toward closed position with handle in open position



Figure 2: Remove sash cover

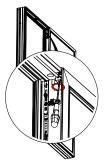


Figure 3: Remove track lock in centre



Figure 4: Remove track l ock on master side

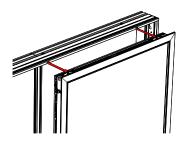


Figure 5: Tilt sash out at top and remove

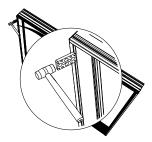


Figure 6: Remove f rame cover

Shimming of element: The sliding door must be properly supported to operate optimally. It is important that there is a level, loadbearing sill under the track (figure 11).

Note: The sliding door is prepared for hidden installation.

Note: The front edge of the track must be positioned within the sill.

Shimming of side frames and hidden fastening

- 7. Start by:
 - A: Removing the aluminium cover at the fixed part (figure 6)
 - B: Removing the strike plate (figure 7)
 - C: Removing the soft-close catch (figure 8)
 - D: Removing the cover cap (figure 9)
 - E: Removing the tread cover (figure 10)
- 8. Release the frame from the pallet and support boards and move it to the wall opening.
- 9. Loosely shim the element with blocks under the mullion and side frames (figure 12).
- 10. Determine the distance from the exterior frame to the outer wall in the wall opening.
- 11. Centre the door in the wall opening so that the joints at the side frames are uniform. Temporarily fix the element at the top and bottom using winbags or wedges between the element and the wall opening.

- 12. Fasten the frame in the centre with a suitable screw at the top of the mullion. Check that the mullion is vertical in both directions.

 Use a 20 mm pre-drilled hole for concealed installation.
- 13. Place blocks under the threshold at each drainage hole in the track (every 250 mm) (figure 13).
- 14. Install the master sash.
 - Start by positioning the wheels in the inner position. Magnets are used to hold the wheels in the correct position.
 - The handle must be in the open position.
 - Place the sash on the track and tilt it into the top.
 - The guide rollers at the top of the sash are inserted through the two holes from the track locks.
 - Important: Once the sash is in place, both track locks must be mounted in the frame to ensure the sash cannot fall out.

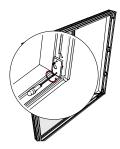


Figure 7: Remove strike plate



Figure 8: Remove soft-close catch

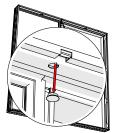


Figure 9: Remove cover cap

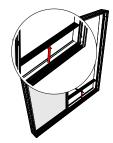


Figure 10: Remove tread cover



Figure 11: Threshold shimming

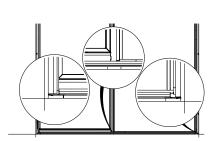


Figure 12: Loosely shim element

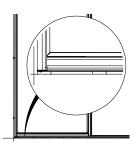


Figure 13: Shim element at all block points

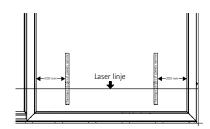


Figure 14: Laser position 0 – apply tape to sash

Important: It is very important that the threshold is shimmed correctly.

Shimming must be done under both side frames and the mullion.

There must be a maximum of 250 mm between each support block under the threshold. The threshold must be level in

the door's sliding direction.

- 15. Adjustment of blocks under the track using laser.
 - Set up the laser outside so it shines across the full width of the frame at a height of approx. 100 mm on the glass.
 - Apply painter's tape vertically on both sides of the master sash, centered over the wheels at a height that intersects the laser beam (figure 14).
 - Slide the sash so the tape aligns with the mullion and mark the laser line on the tape on both sides (figures 15 + 16).
 - Each block from step 13 is adjusted in height by sliding the sash back and forth so one of the tape pieces is directly above the block (repeat for all blocks) (figure 17).

The laser beam height must match the line on the tape. Blocks on the opening side are adjusted using the tape near the handle.

- Blocks on the fixed side are adjusted using the tape opposite the handle. This method ensures there is weight over the blocks during height adjustment.
- 16. Check diagonal measurements of the frame. Tolerance +/- 1 mm this is critical for the door to slide and close properly. Side frames are fastened every 900 mm and shimmed behind the fastening points (figure 18).
- 17. Fasten with screws under the tread cover with a maximum spacing of 900 mm (figure 19) at the mullion and center of the threshold.
- 18. Wait to install the tread cover until the door is fully installed and operating correctly. The tread is prepared for installation with double-sided tape.
- 19. The element is non-load-bearing, so there must be no weight load on the top frame, and it must not be sealed with mortar (figure 20).
- 20. Reinstall the frame cover.

 Important: The cover must be placed in the innermost groove before installation and tapped into place at the outer corner (figure 21).
- 21. Reinstall the sash cover (figure 22).

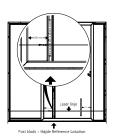


Figure 15: Laser position 1 - mark line on tape at laser height

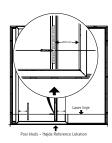


Figure 16: Laser position 2

– mark line on tape
at laser height

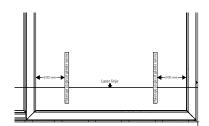


Figure 17: Laser position 3 – adjust all blocks so lines match laser



Figure 18: Drill in sides behind strike plate in aluminum groove

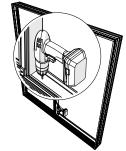


Figure 19: Drill in bottom in wooden part under aluminum cover

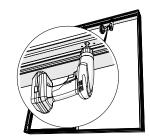


Figure 20: Drill in top in pre-drilled holes in aluminum, behind soft-close catches

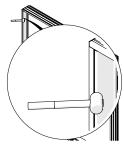


Figure 21

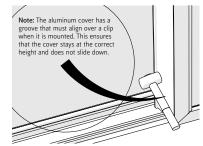


Figure 22

Soft-close in sliding door

The sliding door is equipped with soft-close mechanisms at both ends. One mechanism catches the master sash when closing, and the other catches it when opening.

Note: The first time the sash is operated, the softclose mechanisms may be inactive. Carefully slide the sash to the closed and open positions to activate the soft-close. You will hear a click when they engage. After that, they are active.

Adjustment: Adjustment shims are included and mounted on the back side of the master sash.

Maintenance: The openable sash runs on the exterior side. It is therefore important to clean the track of dirt, leaves, etc.

The espagnolette should be lubricated 1 to 2 times a year with acid-free oil to ensure smooth operation.

The track can be lubricated with silicone spray.

Operation: The handle can only be operated when the sash is in the closed position.

To unlock the door, turn the key, then lift the handle 90 degrees upward, allowing the door to slide out and be moved sideways.

Locking the door is done by pressing the key down (not by turning the key).

Important for Daylight sliding doors: Support must be provided under the track and under the fixed part.

IMPORTANT: For Daylight sliding doors, sealing must be done to the front edge of the frame aluminium. Note: Do not seal to the

Daylight sealing

Sealing must be carried out according to the guidelines provided by the Danish Sealant Industry Council. For more information, visit www.fugebranchen.dk.

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

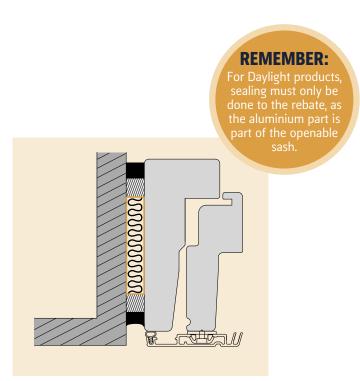


Figure 1



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.

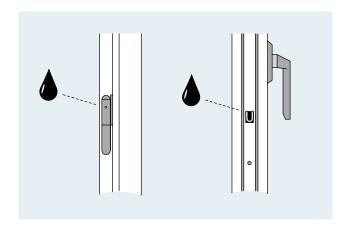
Gaskets

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.



Lubrication

Hinges, handles, rivet joints, and any espagnolettes, 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***	*	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 yellowstained 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 inwardopening 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 lowenergy 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

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).





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 DVV warranty at www.vinduesindustrien.dk

Excerpt from the DVV warranty terms

Read more about DVV 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 DVV-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 DVV 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

