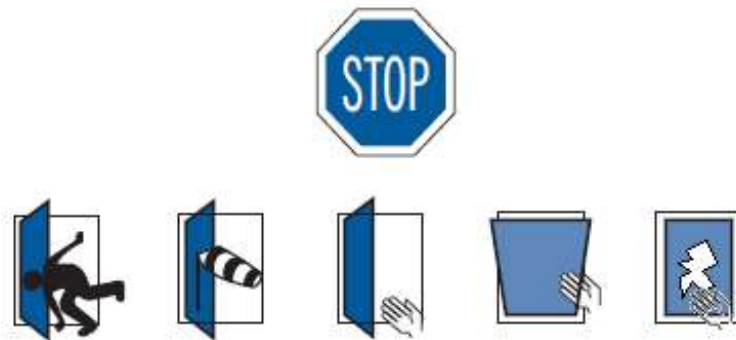
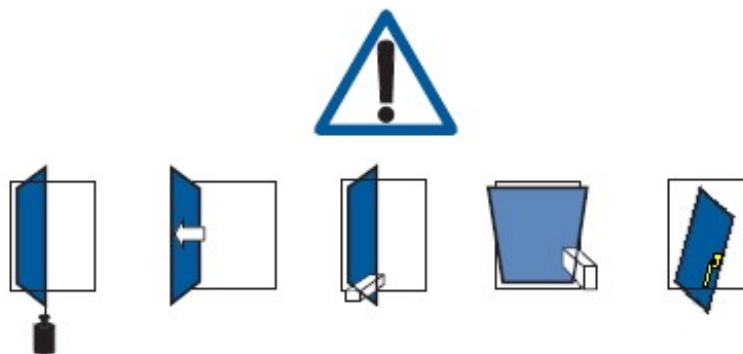


## SAFETY



1. Hazard of falling out of the window.
2. Hazard of impact by open casement during strong wind.
3. Hazard of crushing between the casement and the frame.
4. Hazard of injury by broken glass.



5. Do not exert any load on the casements.
6. Do not strike the casement against the reveal.
7. Do not place any object between the casement and the frame.
8. Do not operate the handle if the casement does not fully meet the frame.

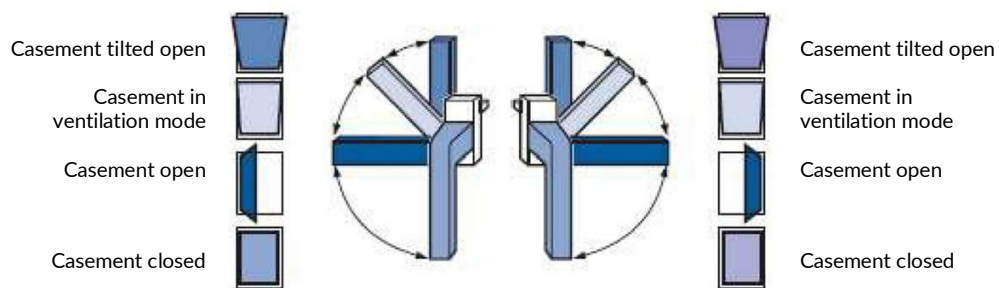
## CLEANING AND PROTECTION

Before construction work, refurbishment, or similar project, protect the window against dirt. Use covers (tape, plastic film, etc.) which will not damage the profiles, glass, or hardware. If wrapped in plastic film for protection, the window periodically requires venting by unsealing the wrap to prevent damage from overheating and condensation. Immediately remove all dirt from construction work. Remove dirt only with detergents and polishing products suitable for the materials of the window. Do not scrub or scrape the profiles or the glass. Use a soft cloth and standard home detergents (which are free of solvents, gasoline, acids, alkalis, or similar aggressive chemicals). Remove all protective tape and films immediately after installation. The factory-applied protective film must be removed from the profiles in 3 months after installation.

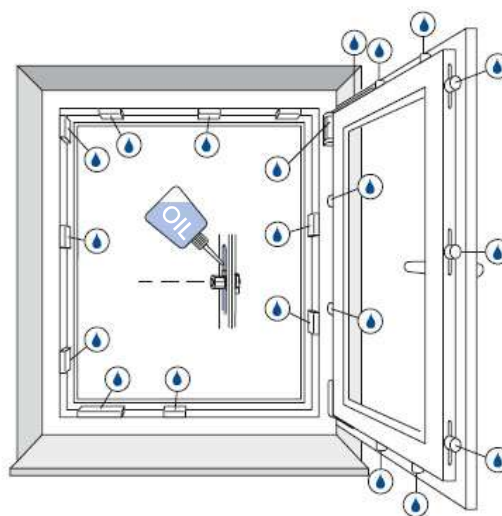
PVC windows have an internal venting and drainage system. The lower part of the window frame features drainage holes. The upper part of the frame features depressurization vents. The drains evacuate water which might penetrate into the window during rain or snow. The user of the window must keep the drains unclogged (and clean) and the outer drain openings must not obstruct the discharge of water to the window sill. Do not install the outer sill above the drains.

**OPERATION AND MAINTENANCE**

Depending on the model and option, windows and balcony doors may feature swing opening, tilting and ventilation mode. **CAUTION:** Operate the window handle between each position with the casement firmly pressed to the frame!



The quality of materials and precision of manufacturing ensure a long and reliable service with a high convenience of operation. Nevertheless, the user is still required to have the windows periodically inspected and maintained. Periodically inspect the locking fixture hardware for fastening strength and wear. If any mechanical damage is found (e.g. cracks or breaks), stop using the window and immediately report the issue to the manufacturer. Lubricate all moving parts of the locking fixture with oil at least once a year to ensure smooth operation and prevent premature wear. Cleaning and care should be done only with products safe to the anti-corrosion treatment of the hardware.



## ADJUSTMENT

### *How and when to adjust the window*

Even the best plastic windows may require adjustment of the locking fixtures from time to time. The adjustment improves the force of holding the casement to the frame or realigns the casement properly, as applicable. Adjustment is highly recommended when the windows seem to leak air, become hard to open or close, or simply before the summer or winter season. The adjustment of windows and balcony doors requires no professionals. This Manual, a set of basic tools, and a little patience will suffice for correct adjustment.

### *How to adjust a PVC window before summer or winter*

Changes in temperature cause materials of the window to contract or expand. The window expands when hot in summer. Combined with too much force of holding the casement to the frame, the casement may rub against the frame when opened. The window can become 'too airtight' and compromise indoor ventilation. It is exactly the opposite in winter, where low temperatures cause the window to contract and lose seal over the weatherstripping, and consequently, cause loss of indoor heat. The solution to the problem is to adjust the holding force between the casement and the frame as required.

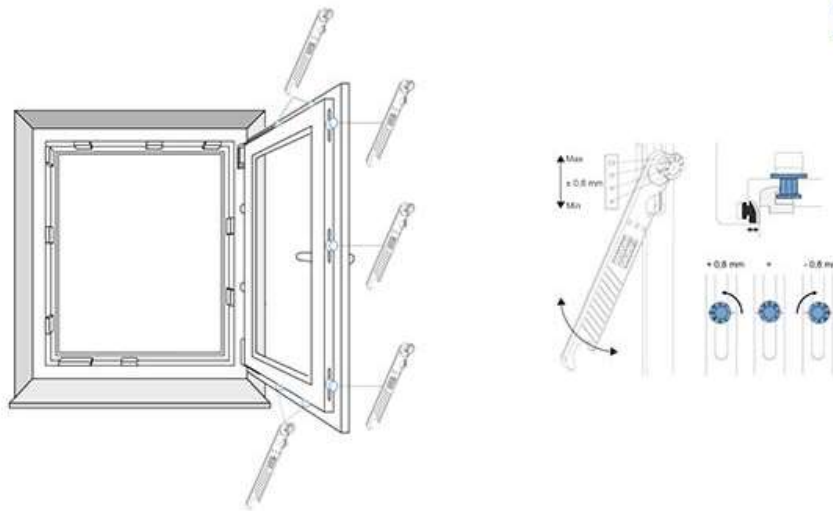
The Winkhaus locking fixtures feature octagonal adjustment bolts called activPilot to reduce the holding force in summer and increase it in winter. The bolts work like cams (where one end of the activPilot ring is thicker and the other one is thinner, with several variations of thickness in between).

The summer adjustment is to operate the activPilot ring with a dedicated key to have the thinnest end directed toward the closing face (toward the interior). This reduces the holding force. The winter adjustment is to operate the activPilot ring so that its thickest end directed towards toward the closing face (toward the interior). This improves the weatherstrip seal and prevents loss of heat from the room.



*Setting of the activPilot cam bolt for summer and winter*

NOTE: Each window has several cam bolts (which are the lock bolts). Proper adjustment requires setting EACH bolt.



*Example arrangement of the lock bolts.*

*How to adjust a window when the casement rubs against the frame*

If the casement resists too much when opening or closing, the casement might have sagged on its fixtures or it is otherwise misaligned with the frame and requires some adjustment. This is very likely to happen if the casement is large and heavy, like in balcony doors.

First try to identify where the misplacement or sag is. Close the window and verify alignment of the casement with the frame all around the edge of the window. If you cannot identify where the casement rubs against the frame or where the misalignment is, you can mark out the outline of the closed casement on the frame with a pencil (or just mark out some prominent features along the casement edge) and measure the spacing of the line / marks from the inner edge of the frame (the correct overlap should be 7-8 mm). Each misalignment will require adjustment of the casement (which is often called 'bolting down' of the window) according to the procedure explained further in this Manual.

The window hinges with the Winkhaus locking fixtures are adjusted with a 4 mm Allen key. If you need to lift or lower the casement, open it, remove the bottom hinge cover and rotate the adjustment bolt clockwise (to lift the casement) or counter-clockwise (to lower the casement) until the casement is adjusted to the frame.



*Height adjustment on the casement hinge*

There are some hinge models which also feature adjustment of the holding force. This adjustment requires a 2.5 mm Allen key.



*Adjustment of the holding force on the left-hand casement*

The frame-side hinge bolt adjusts the position of the casement bottom in the horizontal plane (to the right or the left):



*Horizontal adjustment of the frame-side hinge*

The adjustment of the top hinge (the scissor hinge) is the adjustment of the casement top in the horizontal plane (to the right or the left):



*Horizontal adjustment of the scissor hinge*

Adjustment of the window locking fixtures does not always require realignment of every hinge. This depends on the direction of maladjustment between the casement and the frame. Having adjusted the casement, check that the window opens and closes properly. You can also measure the casement overlap on the frame.

See the fixture adjustment procedure in this video tutorial: „Adjustment of the Winkhaus activPilot fixtures”.

NOTE: The adjustment procedure applies to tilt-and-turn and turn windows and balcony doors with Winkhaus locking fixtures. Tilt windows usually require no adjustment of alignment. The hinges are at the bottom of the window and prevent the casement from sagging.

#### *Why adjust windows?*

With a set of simple tools and the know-how and understanding provided in this Manual, you can easily and properly adjust your windows and balcony doors. Proper adjustment of window casement is the easiest way to ensure the maximum, lasting convenience of operation. Benefit from the performance of the latest window locking fixtures and adjust the seal of your windows to your preferences and the season of the year.

**The manufacturer of the windows shall not be liable for non-compliance with the procedures.  
Always comply with the prevailing health and safety regulations when installing windows.  
Improper installation of joinery may result in its detachment and fall, which can be a hazard of injury or death.**