

User and maintenance manual of PVC windows

1. Cleaning after the installation

The windows must be cleaned immediately after installation. Any dirt, plaster or mortar particles must be removed carefully using a sponge and water, loose gypsum and mortar particles and milling residues must be removed with a vacuum cleaner. Hardened plaster and mortar particles must be removed carefully using a plastic scraper. Remove protective films from the profiles.

Important

The window must remain closed for 24 hours after installation.

The window must remain closed during the finishing works of window reveals in order to keep the moving parts clean of the residues of finishing materials. Failure to adhere to this requirement voids the customer's warranty for the windows.

2. Opening and closing the window

The handle features **4 positions**:

1. The window is closed (handle is vertical and points downwards)
2. The window is open (handle is horizontal)
3. The window is slightly open (microventilation—the handle is 45° from vertical position. The handle is between two opened positions)
4. The window is open in tilted position (handle is vertical and points upwards)

It is not allowed to change the position of the handle while the window is open.

In case the handle is turned upwards and the window „falls” out its upper hinge while open horizontally, it must be immediately and carefully pushed back to the hinge socket on the hinge side corner and the handle must be turned to horizontal position.

3. Maintenance

Profile

PVC windows are well-known for their easy maintenance. Use glass window cleaners or warm soapy water to clean the profile. The best cleaning agent for PVC profiles is the special cleaning agent for plastic. They allow removing almost all dirt.

Important

It is strictly forbidden to use for cleaning:

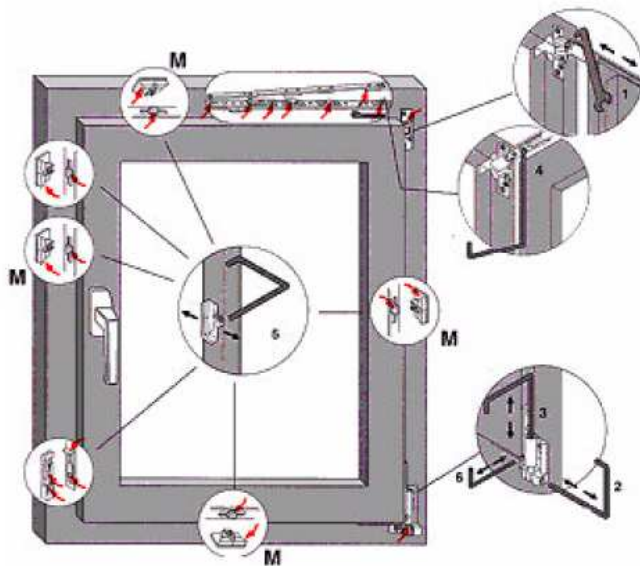
- Sharp objects (metal palette knives, knives, steel brushes, etc) which will damage the window's surface
- Abrasive cleaning agents or solvents (nitro solvents, nail polish removers, etc.) which will react with PVC and cause permanent damage to the surface of the elements.

Seals

At least **once a year** (in autumn), the seals must be lubricated in order to ensure they remain elastic and to avoid their deterioration. Use only recommended agents for lubricating (e.g., silicone oil, vaseline).

Closing system

Anyone can clean and lubricate the closing system. Lubricate only the moving parts and their counterparts. We recommend using acid-free and resin-free greases or oils (e.g., sewing machine oil). It is forbidden to use regular engine oil.



Important

The windows must be lubricated once a year according to the user's manual. This ensures the long life and easy use of the windows.

4. In order to ensure the long life of the windows and their safe use, the following recommendations should be adhered to.



- Do not place extra weights on the window frame
- Do not push or force the window frame towards the window reveal
- Do not place objects between the frame and the jamb
- In order to ensure the safety of children, it is recommended to limit the opening range of the window with window limiter or lockable handle.
- Do not leave the window horizontally open when draughts are possible

- Caution! A quickly closing window may cause injuries. Please be careful not to leave hands between the window and the jamb when closing the window.

5. Adjusting the Window Frame

Your window is a high quality window manufactured by professionals. Therefore, the closing mechanism does not usually need adjustment. However, as the building's structural elements slowly deform and when the window is used for a long time, the functioning of the windows may worsen, which can be solved by adjusting the closing system. If any problems arise, please contact our sales agent.

6. Maintenance of the glass packet

Use a clean window cleaning cloth and sufficient amount of clean water to remove dirt from the glass surface, if necessary, use light window cleaning agents. If certain dirt cannot be removed with the abovementioned procedures, it can be exceptionally removed from **float glass** by fine wire sponge. The latter is strictly forbidden for removing dirt from glasses with metal oxide coating.

For cleaning glass it is strictly forbidden to use materials and tools which may scratch the glass surface (dirty cloth, metal objects, etc.)

Splashes of cement and liquid materials used in construction (stains) must be removed from the glass immediately; otherwise these may corrode the glass surface and leave a frosty spot. If solvents are used for removing the stains of construction materials from float glass, then solvents must be kept away from the mastic of glass packets.

For cleaning glass packets it is forbidden to use strong alkaline or acid cleaning agents that damage the glass surface.

7. Other possible problems

Condensate formation, cracks and other problems with glass packets;

Formation of condensate

It is natural for condensate to appear on all surfaces of the glass packets and window frames.

Some real-life examples

Take a bottle out of a refrigerator and place it on a table. You will see that within short time it will become foggy. Eyeglasses become foggy immediately after you enter from cold to a heated room. The reason is that warm air absorbs considerably more moisture than cold air. As air comes into contact with cold surface, it cools and moisture that cannot be absorbed at lower temperature will fall on the glass surface as condensate. This phenomenon is especially apparent in situations of high moisture and low temperature. Depending on the room's purpose and use, high moisture levels can be found in bathrooms, kitchens, bedrooms and also living rooms with lots of plants. If the warm air ascending from the heating radiators does not reach the glass directly due to protruding window sills, then condensate is formed on mostly the lower part of the glass packet. In order to avoid the possible formation of condensate, the rooms must be ventilated properly.

How to ventilate the rooms properly

According to the principle of energy conservation, new windows must be hermetic. There is no continuous ventilation through window gaps which was common to old windows. Our windows fully conform to the normative requirements. Therefore, the rooms must be ventilated more often. This also allows you to adjust air humidity. It does not matter whether you started to live in a new building or you have renovated an old building. Masonry and plaster works, wallpaper hanging, etc, increase the air humidity levels. When you wash yourself, take a bath or shower, wash dishes, etc., moisture emerges which raises the relative air humidity. Every breathing and sweating person discharges moisture. Therefore, it is important to ventilate the rooms on a regular basis. This also helps against the formation of moulds. Rooms must be ventilated 3–4 times a day depending on the room's purpose and level of usage. The most effective way of ventilating is using draught. Open all windows for 1–5 minutes depending on the outdoor temperature. Windows that are open continuously, even in the microventilation position, increase heat loss and may become quite expensive. You should ventilate with fresh air from outdoors. Wet air should be ventilated only to the outside (under no conditions to other rooms). Heating and regular ventilation is an important prerequisite for the optimal microclimate of the rooms. A misty window is a clear sign that the room needs to be ventilated.

Another tip

In winter you can easily control the ventilation period. When you open the window, the outer glass will become instantly misty. As soon as the condensate has disappeared, you may close the window. During this time, the air composition has already changed, however, furniture and walls have not yet given away their heat.

Important

Dry and fresh air can be heated more quickly than heavy and wet air, therefore, by ventilating the room you will conserve energy and improve interior climate.

Condensate on the outer surface of the glass packet

Formation of condensate on the outer surface of the glass packet usually cannot be stopped; however, this phenomenon is not dangerous and it is usually short-termed. The risk of condensate can be reduced when the glass is protected from radiating cold, for example, using large eaves, trees, neighbouring buildings, etc.

Condensate between the glasses

If condensate can be seen in the space between the glass surfaces, then this is a sign that the side seal of the glass packet has started to leak. The outdoor moisture has intruded the packet and the drying agent has gradually lost its ability to keep the air space dry and free of condensate.

Cracks in the glass

The glass of the glass packet may be exposed to great fluctuations of temperature. When the glass is heated or cooled in one zone, an internal stress sufficient for cracking the glass may arise. This is called thermal breakage. In order to avoid thermal breakage, please adhere to the following suggestions:

Do not glue posters, films, etc. on the inner and outer sides of the glass as this voids the warranty. It is not recommended to install Venetian blinds and roller blinds on the window frame as these interfere with the window's heat exchange, which in turn may lead to the thermal breakage of the glass.

Further information about the maintenance and adjustment of PVC windows can be obtained from the nearest Koduaken office.