

ABAKUS

TECHNOLOGY INSPIRED BY WARMTH

Warranty conditions for uPVC and Aluminum joinery

Warranty card for production order no.

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§ 1. General provisions

1. The guarantor in the meaning of „Warranty conditions for uPVC and Aluminum joinery“ is ABAKUS OKNA S.A. 00-694 Warsaw, ul. Wierzbowa 9/11, Production Plant in Choroszcz: 16-070 Choroszcz, ul. Mickiewicza 76.
2. Rights and obligations of the Guarantor and the Purchaser are established based on the provisions of the Civil Code.
3. In case of problems either questions, it is necessary to contact the sales point, where the purchase was made.
4. The Guarantor provides guarantees in both cases: of direct purchase from the Guarantor and the purchase made through the sales point.
5. The warranty covers the uPVC and Aluminum joinery. Using the warranty is possible upon presentation of the purchase document and warranty card.
6. In the case of an unjustified complaint notification, the Purchaser shall be obliged to cover all costs resulting from this.
7. This warranty does not exclude, limit or suspend the Purchaser's rights resulting from the provisions of the warranty for defects in the goods sold.
8. Warranty for consumer goods sold does not exclude, limit or suspend the rights of the Purchaser arising from the provisions of the warranty for defects in the goods sold.
9. The guarantor reserves the right to make technical changes that do not affect the functioning of the product.

§ 2. Warranty period

1. The warranty for PVC joinery is granted for a period of 5 years from the date of purchase in the case of rectangular windows, for a period of 2 years from the date of purchase in the case of non-rectangular windows and external, transitional, tilt-sliding, lift-sliding doors.
2. The warranty for aluminum joinery is granted for a period of 2 years from the date of purchase.
3. All additional elements for which the holder has received a separate warranty card are subject to a guarantee in accordance with its conditions.

§ 3. The scope of the warranty.

1. The warranty covers defects in things that arose during production or resulting from defects in the material from which the subject of the warranty was made. The guarantor undertakes to repair the defective product, reduce the price of the product or replace it with a new one, when repair is not possible.
2. The guarantor shall be liable under the guarantee to the value of the purchase object of the guarantee.

§ 4. The warranty does not cover defects arising as a result

1. design and construction changes,
2. repairs by unauthorized and other than the Guarantor,
3. the application and use of the article incorrectly,
4. the external factors such as fire, salts, alkalis, acids and other chemicals,
5. natural disasters,
6. the use of components from other manufacturers,
7. of when frame or sash is violated due to roller shutters or blinds installation,
8. the assembly contrary to the rules of the trade or technical standards applicable to the place of assembly,
9. the use of cleaning agents which adversely affect the coating of the PVC and aluminum fittings, shaft and seals causing them to scratch or pitting.

§ 5. Warranty does not cover (Disclaimer)

1. regulation and maintenance of hardware, arising from the operation of the windows,
2. mechanical damage caused during improper transport or assembly carried out by the Customer on their own,
3. the glass defects allowed by the PN / B-13079,
4. mechanical damage to glass, cracks in glass resulting from operation,
5. the components subject to wear and tear,
6. defects and damages due to which the price was lowered,
7. defects and quantitative and qualitative deficiencies that were not found upon receipt of the joinery on "Confirmation of receipt of PVC joinery", eg scratches on the profile, glazing, cracks, dents,
8. water vapor condensation on the outside of the glass unit,
9. defects that remain invisible after installation and do not affect the value in use of the product, e.g. inside frame scratchings,
10. the insulating glass tone difference in the contracts carried out in stages, sequels or complaints.

§ 6. Lead time

1. Making the warranty repair is to take place immediately, but no later than within 14 days from the day of the written notification of the complaint to the Guarantor containing the production order number given by the Guarantor and making the subject of the guarantee available to the Guarantor.
2. The time of repair or replacement may be extended, in this case the Guarantor will notify the person entitled to the guarantee or seller about the obstacle and will set a second date for repair or replacement.

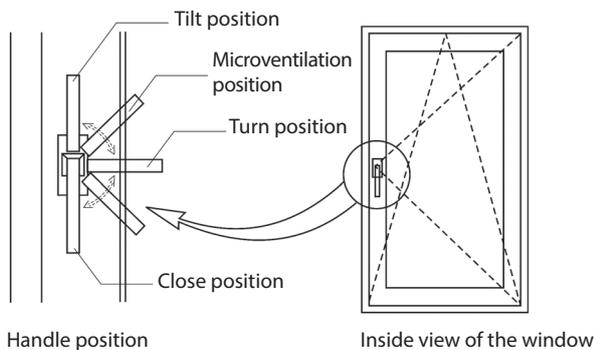
§ 7. Window maintenance and operation

1. Until the window is installed, it should be stored in a place not exposed to direct sunlight and so as not to cause damage.
2. Protective films should be removed not later than 3 months from the date of sale by ABAKUS OKNA S.A. regardless of the time of their assembly.
3. Window frame dirt should be cleaned with lukewarm water with the addition of mild household cleaning agents or agents intended for cleaning window joinery. Do not use scouring powders, wire brushes or chemicals with aggressive components, because they adversely affect the surface of window frames.
4. Seals do not require maintenance. They can be oiled with Vaseline. In the event of mechanical damage, the gasket must be replaced with a new one.

§ 8. Hardware

1. Maintenance: Manufactured by ABAKUS OKNA S.A. windows are equipped with the highest quality ROTO NT fittings. This means high operating comfort, reliable operation and wear resistance. The light operation of the hardware mechanism is best checked by moving the window handle.

§ 9. Window function operation using the handle



ATTENTION!!!

The above diagram applies to tilt and turn sashes. In the case of turn-only sashes, do not try to place the handle further than to the turn position (90° up from the close position), as it may damage the fitting and window.

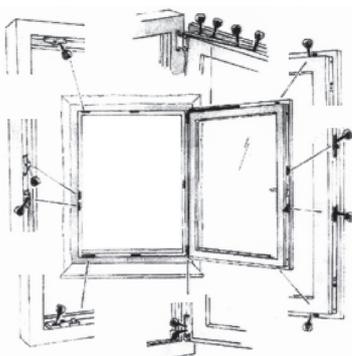
The lightness of hardware mechanism operation can be improved by lubricating, oiling or adjusting the fittings.

§ 10. Lubrication and technical supervision

Regular lubrication and oiling * (once per year at least) of all essential, from the point of view of functioning, elements of the door and frame hardware will ensure the lightness of ROTO NT fittings and protect them against previous wear.

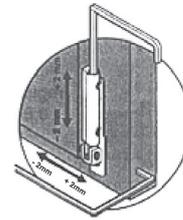
* - Use grease or machine oil available in specialized dealers without resin and acid content.

The lightness of hardware mechanism operation can be improved by lubricating, oiling or adjusting the fittings. Do not use aggressive cleaning agents containing acids, as they may damage the fittings.

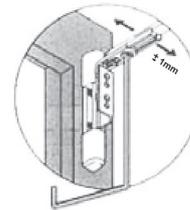


§ 11. Adjustment

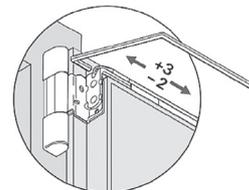
1. It is recommended to make the first adjustment immediately after installing the windows.
2. When making adjustments, check the stability of screw connections and, if necessary, tighten the loose screws or replace the broken screws immediately.
3. For ROTO fittings it is possible to adjust according to the drawing



- a. Adjustment of the wing position - up and down



- right / left



- b. Adjustment of the wing position right / left
- c. Adjustment of the wing pressure force relative to the frame

Adjustment of locking rollers

Locking rollers	Regulation direction angle	Tightening sash regulation	Locking rollers	Regulation direction angle	Tightening sash regulation
8	Primary position	-	9	Primary position	-
	90°	1, 0,8		90°	1, 0,8

Diagram showing the adjustment of locking rollers for two different window types (8 and 9). The diagram includes a table with regulation directions and tightening sash regulation values, and a visual representation of the rollers and their adjustment points.

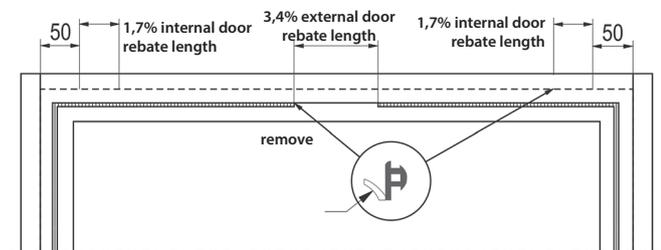
§ 12. Climatic conditions of rooms with PVC joinery installed

The use of modern joinery causes the retention of heat and water vapor in the room. This can cause the occurrence of condensation on the glass panes from the inside of the room. The way to avoid this phenomenon is short-term, intensive ventilation or use of premises microventilation function, which will enable the exchange of humid air to dry. During ventilation, the heating should be turned off, but the temperature inside the room should not be allowed to fall below 15°C. In order to ensure the necessary air exchange needed to obtain adequate thermal comfort in the rooms, an inflow of fresh air should be provided.

This can be done by:

- airing the room three or four times a day for about 10 minutes. (necessarily in the morning),

- depressurizing the tilt & turn sash (ROTO NT fittings), setting the handle in the microventilation position,
- application of independent air vents, regulating its permeation, through closing and opening gaps,
- the necessary amount of air, which should be exchanged in the room within 1 hour, is specified in PN-83/B-03430:
 - for kitchen with gas stoves 70m³/hour,
 - living quarters 20m³/hour for 1 person,
- for windows built-in to rooms that do not have air supply other than through windows, do unsealing windows according to the picture.



The most reliable indicator of a properly functioning ventilation is the relative humidity of the air. It is recommended that it ranges from 40% to 60%. In the case of inefficient ventilation, there is a rapid increase in humidity, this is due to cooking, washing, bathing, etc. Hence, the humidity in the room increases not due to the penetration of water vapor from the outside, but mainly the mentioned sources of moisture in the room. The most dangerous is the condensation of water vapor on the windows and walls. Low-temperature rooms are especially exposed, where in extreme cases frost may even occur. In these rooms, in addition to providing ventilation, it is necessary to raise the internal temperature and force the air movement at cold walls and windows. It should be remembered that the condensation of water vapor on the window or on the wall depends on the following factors:

- indoor temperature at the partition (window, wall),
- temperatures outside the room near the partition,
- relative humidity of the vapor at the partition,
- the value of the permeation coefficient K, which is a constant value characterizing its thermal insulation.

The occurrence of fogging on the room side glass is in no case a disadvantage, but only a physical phenomenon, while the condensation effect does not indicate a defect, but confirms the high quality of insulating glass.

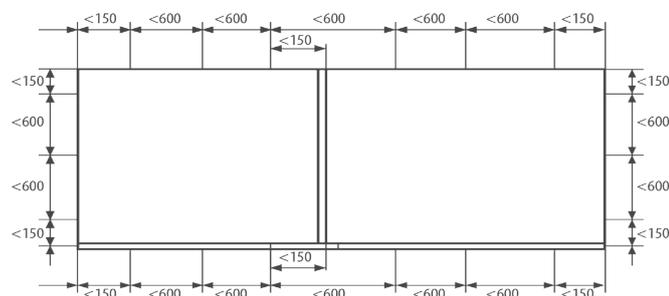
§ 13. Installation of window joinery

Fixing windows in the frame can be done in two ways:

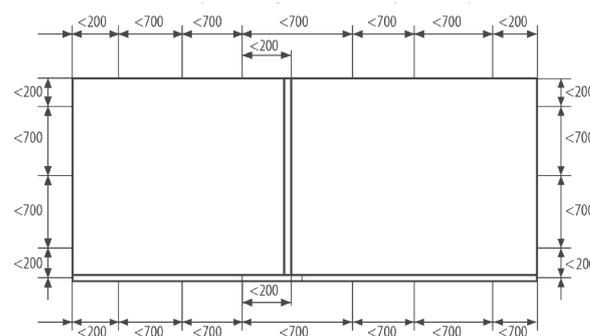
- using anchors,
- using dowels.

When starting to assemble the window, one must remember a few basic rules, the observance of which guarantees the proper functioning of the window and full satisfaction with the purchase made and its use.

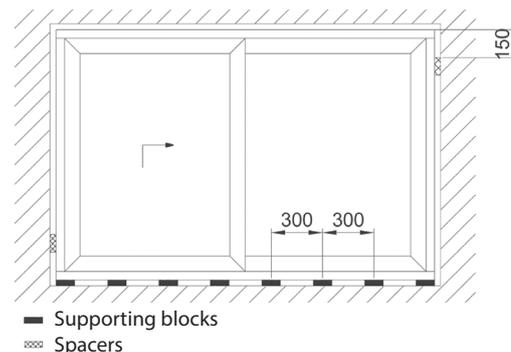
1. Between the window frame and the opening in which the window will be mounted, must be maintained the so-called circumferential clearance within 10-20 mm on each side of the window.
2. Fixing of anchors or dowels must not exceed a mutual spacing of 700 mm.
 - a. in the white uPVC and aluminum window, the distance of the anchors from the corners of the upper and lower window is approx. 150 mm,



- b. in a colored window, the distance from the window corners is approx. 200 mm,



- c. HS



Installation with anchors on the perimeter and on both sides of the frame. The bottom of the frame is mounted on standard AD anchors, vertical sides and top is mounted on Salamander anchors. Spacing of anchors as when installing windows.

3. The frame placed in the masonry must have the vertical and level preserved, and any acceptable deviations are 1 mm per 1 meter of the length of the frame, but not more than 3 mm on its entire length.
4. The difference in length of diagonals should not exceed 3 mm.
5. The frame can not be embedded in relation to the face of the wall deeper than 5 mm.
6. When assembling a set of windows, it is recommended that the mutual assembly takes place in min. 3 places.
7. When sealing joints with foam, fill all the spaces between the window and the wall with care, while the window frame can not be deformed. Similarly, after removing the wedges, the holes are also filled with foam.
8. In the case of jambs, it is recommended expansion gap is filled with assembly foam.
9. When fixing external window sills, pay attention not to cover the drainage holes.
10. In order to avoid blocking faults (scraping the fittings), make sure that none of the parts are contaminated with cement, lime or mortar residues.
11. Foams used to fill joints must not be allowed to react chemically or release harmful substances.

ATTENTION!!!

The ABAKUS Window Factory recommends window installation only by professional and trained technical staff.

This product is approved for marketing and general use in construction.