

WARRANTY CONDITIONS, INSTALLATION AND MAINTENANCE GUIDE FOR WINDOWS AND DOORS

Delivery and storage

Make sure that windows and doors (hereinafter windows and doors) are not damaged during transportation, unloading and storing. Doors and windows are transported as packed units and they must be stored in the original package, in a dry room with normal humidity and good ventilation. The windows and doors should be stored in a vertical position, on a level ground so that no bending would occur, protected from mechanical damage and dirt. The products must not be stacked leaning against each other, as extra pressure might damage the surface of wooden parts. Storing the products outdoors must be avoided. However, if it is not possible, the products must be protected from rain and direct sunlight and it should be made sure that the wooden surfaces are ventilated.

Please note! The producer is not responsible for products that have been damaged due to wrong storage conditions and the faults or defects resulting from the mistakes during the installation of jambs.

General principles

The windows and doors are manufactured according to the external measurements of wall opening(s) provided by the client. The wall opening must be 20-60 mm larger than the jamb, e.g. the installed product must have at least 10 mm distance between the jamb and the wall for insulation. The position of the product in the wall's cross section should be chosen so that the sealed glass units and/or boarding with insulation align with the wall's insulation layer. The distance of the outer surface of the product from the surface of the building's exterior plane should be, according to the structure of the wall, in between 50 – 200 mm. The product installed exactly aligning with the exterior plane shall be directly influenced by weather conditions; in case the product is installed too deep inside the wall, not enough natural light will get in. Thermal bridges between the jamb and the wall must be avoided (e.g. do not install the window inside or out of insulation (layer), and avoid insufficient insulation between the wall and the jamb).

NB! Package covered with plastic may prevent the product from getting dirty but it could also create the so-called greenhouse climate; as a result, resin substances will activate in the wood. Long-term contact with plastic material creates a specific glow on the finished wooden surface which can be further increased by the sun.

Rekman OÜ manufactures windows and doors that have been finished with so-called breathable water-based wood paint for industrial use, (incl. stains and varnishes). This means that through the finishing layer, the humidity inside the wood is adjusted according to the environmental conditions. Excess humidity indoors during construction process has a damaging effect to wooden windows and doors, as the humidity of wood depends directly on the humidity of the surrounding environment. When it stays in a given environment for a long time, wood takes on the equilibrium humidity of that environment. If the ambient humidity changes, humidity in the wood changes, too, until a new equilibrium humidity is formed. As humidity in the wood changes, changes occur in the volume of the wooden details (cross-sectional expansion or shrinking).

In the manufacturing of windows and doors, wood intended for the use in dry indoor conditions is used. Windows and doors should be installed in the final stages of construction, in order to minimise construction humidity and other construction related stress which may affect the products. It is important that the floor surfaces such as parquet be installed before the installation of doors, as then it is possible to install the bottom edges of jambs and the threshold on the same level to the floor surface. When attaching the jambs, check that both edges of the jamb are levelled with the wall horizontally and vertically and that the header of the jamb is horizontal. Otherwise the door leaf may stuck to the floor and may not fit to the jambs, and the door may therefore not close properly.

Installation of windows

1. Clean the aperture from debris and dust and check the measurements. If necessary, correct the measurements of the aperture by widening or narrowing it.
2. Drill the holes for fixing screws into the jamb or use the attachment brackets. The distance of the attachment points on the side must be 200 mm from the corner and the distance between two attachment points should not exceed 900 mm. If the product is wider than 1000 mm, the jamb should be attached both at the top and the bottom.
3. Before installing the product, place supporting blocks onto the lower surface of the wall opening, max. 150 mm from the corners of the product, and level them.

Attention! Do not remove the supporting blocks and alignment wedges from the attachment points immediately after installation.

4. After mounting the product to supporting blocks, make sure that it is placed in the middle of the aperture. Support the product with alignment wedges from the side corners. Place the alignment wedges next to the attachment screw(s) or -bracket(s). Check the horizontality and verticality of the jambs with a level. Other parts of the building's structure may not add pressure to the product from above. It is possible to remove the frames of inward opening windows before installation.

Attention! The jamb must be attached to the wall either with screws through the jamb, or with special attachment brackets. Insulation foam (or any other sealing or insulation material) used between the jamb and the wall is not considered as a fastener in terms of its mechanical strength. When incorrect fastening materials have been used, the warranty will not be valid for the product! From the viewpoint of energy efficiency, it is not reasonable to align the product with the facade layer of the exterior wall. The product should be installed within the insulation layer; e.g. the reasonable distance from the wall's exterior plane should be between 50-200 mm.

5. When installing the external window sill, make sure that the edge of the sill fits into the special groove of the lower jamb of the window. The external window sills are attached with screws into the fixing fillet of the window sill.

6. When using the so-called jamb-to-jamb connections when products are placed next to each other, you should consult the manufacturer before confirming the final order and starting the installation works, in order to find the best solutions in terms of insulation and mechanical strength. When using the so-called jamb-to-jamb connections when products are installed on top of one another, the client must have an approved project from the building's designer before formalising the order, in order to ensure the adequate solution in terms of the mechanical strength of the assemblies as well as the stability and safety of the structure.

Attention! Windows and doors are not the bearing structures of external borders of the building, and the company presumes that the products are assembled in a way which prevents the application of vertically directed load to the products.

Installation of doors

1. For installing the door to the aperture, detach the door leaf from the jambs.
2. Then mount the jambs to the aperture while supporting the threshold and the lower ends of the jambs onto the floor or to a secure, levelled surface of the appropriate height. Fix the jambs with assembly wedges from both sides (as shown on Figure 1). The wedges must be approximately 20 mm shorter than the width of the jamb. The wedges must be installed directly under or above the attachment points of the jambs. Fix the jambs from 8 attachment points. The attachment points of jambs are shown on Figure 2
3. By using a long spirit level, level the alignment wedges on both vertical planes regulating the hinge jamb first, observing that the jamb shall not bend or twist. (see Figure 3).

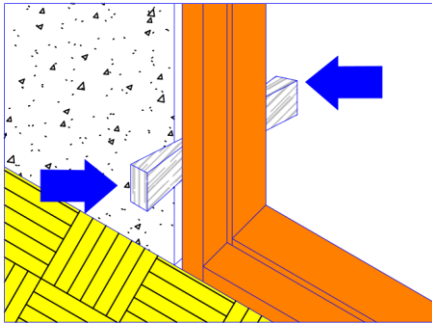


Figure 1.

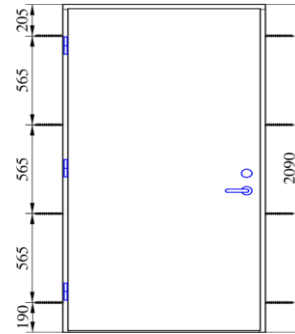


Figure 2.

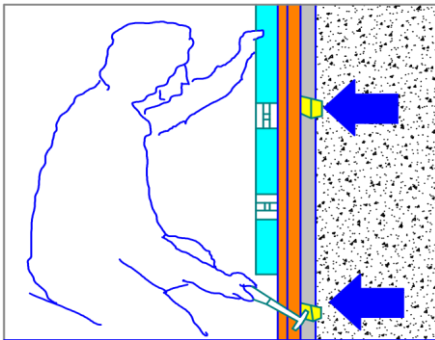


Figure 3.

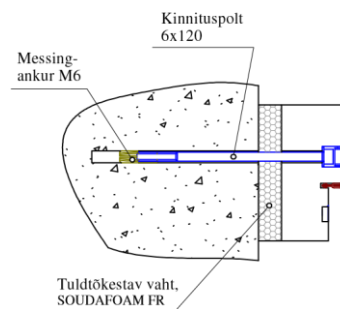


Figure 4.

4. Next, fix the jamb at the side of the hinges through the attachment points.

The choice of attachment fittings depends on the construction materials of the wall. No easily meltable metal or plastic dowels or screws should be used for attachment. In case of a concrete or a brick wall, wedge-anchors of steel, HL-anchors or brass anchors together with steel bolts can be used (see Figure 4).

In case of a light concrete wall, WMG-light-concrete anchor and wood screws should be used. In case of wood frame construction, wood screws with minimal circumference of 4 mm should be used that are screwed into the wall at least with a thread length of 30 mm. The user guides of attachment fittings can be obtained from the supplier or from the retailer of the fittings.

5. Mount the door leaf to the hinges and level the lock jamb. The door leaf should close and lock freely, being parallel to the jamb when closed.

6. Attach the lock jamb with attachment bolts (screws) while checking that the jamb is straight. If needed, adjust the position of the jamb with alignment wedges or attachment bolts. Make sure no gaps occur between the sides of the threshold and the jamb poles.

Sealing the installation gap

Before sealing, remove the unnecessary alignment wedges. Supporting blocks from under the jambs and/or alignment wedges next to attachment points must not be

removed. Supporting blocks and alignment wedges that remain inside the insulation are not considered a cold bridge if the thermal conductivity of their material is the same or less than that of the jamb material. Window or door must be fixed to the surrounding wall in an air- and moisture-tight manner. For this, dry and clean sealing material (e.g. insulation foam, wool, etc.) should be used. Sealing material should be protected from moisture and other weather conditions. For this, window tapes, self-expanding filler seals, and elastic filler sealant intended for external and internal conditions should be used. Insulation foam should be selected according to application temperature and purpose. Regular installation foam does not function adequately in the cold, therefore a product for cold (climate) must be chosen for this purpose. Note that there should be an adequate amount of the foam: too much foam can bend the jamb while not enough foam shall leave the installation gap “empty“. It is recommended to moisten the gap’s surfaces before using insulation foam. Insulation foam can be sprayed both from the inside and the outside of the door/window. Thermal insulation must be laid as evenly as possible within the depth of the entire jamb. Insulation foam can be “grown” - sprayed layer by layer; if necessary, foam can also be added on top of foam layer that was sprayed 48 hours ago. Excess foam should be cut off. Sealed gaps must be filled with sealing material from both sides within a few days. Moisture and UV-radiation can damage sealing materials and may thus also influence the filling of joints.

Sealing fireguard doors and windows

The gap between the threshold and the floor shall be sealed with fire-resistant sealant FIRECRYL FR. For this, remove the threshold and spray the sealant under the threshold at least in two rows. Then put the threshold back in its place and avoid stepping onto the threshold for at least 20 minutes.

The gaps between the jambs and wall shall be sealed with the certified fire-resistant foam SOUDAFOAM FR, and stone wool. Stone wool is placed in the middle and the insulation foam onto the edges (covering 30 mm) (see Figure 4). Use supporting packers between the jambs in order to prevent the distortion of the frame due to foam expansion. Remove the excess foam mechanically after it has dried. In the end, install the necessary bordering slats and the plastic covers of fixing holes.

Attention! When using fire-resistant sealant and foam, follow the instruction manual by the manufacturer of the foam/sealant. Note that that the fire-resistance class of the door also depends on the measures of the joint between the wall and the jambs. The wider the joint, the smaller the class of fire-resistance.

Installing automatic closing system to fireguard doors and windows

In general, fireguard doors are kept closed. Fireguard doors are supplied with a closing mechanism that automatically closes and locks the doors in case of fire. The preferred indicators for giving the closing impulse are smoke detectors. Closing mechanisms are not used on the exterior doors of apartments and on the locked doors on the walls that divide the fire protection zone (into

different parts), such as the doors of guestrooms. Automated closing mechanisms or systems are chosen and installed according to the location of the door and the installation manual of the manufactured mechanism/system.

Warranty

Rekman OÜ ensures the quality of their products in compliance with the norms (and regulations) stipulated by the Estonian law. The warranty period for Rekman products is 24 months starting from the delivery of the products to the Client based on the instrument of delivery and receipt.

Please notify the manufacturer about the deficiencies or defects of the products occurred during the warranty period immediately. Please send us the detailed description of the default(s) in writing, adding the time when the default occurred or when you first noticed the default. Please send the e-mail to: rekman@rekman.com. Please do not forget to add your contact information (name, phone number, e-mail address). The time for fixing the faults or defects occurred during warranty period shall be agreed with the Client.

The manufacturer shall not be responsible for the faults or defects that have been caused by ignoring the rules of use and maintenance or by the abnormal use or poor exploitation of the windows and doors during the Warranty period.

When the Client fails to inform the manufacturer about the faults/defects of the products immediately, it shall be considered as reckless use and the Warranty will not be valid for the product. Ignoring the user and maintenance guide of the products is also considered as reckless use.

In case the Warranty does not apply for the fault/damage, the Client has to pay for the cost of repairs and the service fee for specialist's visit, according to the sent invoice. Disputes shall be settled according to law.

Safe ventilation

For ventilating the rooms safely, please observe that the windows would not slam in case of draught, as slamming may cause the breaking of the window glass. Do not apply extra strength for opening/closing the windows and use only the appropriate appliances/mechanism for opening/closing the doors.

Attention! The windows belonging to fire-resistance class EI-30 may only be opened for cleaning, as when opened, the windows do not comply with the requirements of fire-resistance.

Large window blocks (the height/width of window sash being more than 1500 mm) should be opened only for cleaning.

Control and maintenance

In order to maximise the lifespan and performance of the products, windows and doors should be, in addition to regular cleaning, checked at least once a year (for possible damage or faults).

The brass furniture of windows and doors (hinges and espagnolettes) may tarnish over time (due to natural oxidation).

Due to the characteristics of the structure of top swing windows, moisture may get between the inner and outer sash in the event of a strong rain. Therefore, the area between the inner and outer frame should be dried after rain.

Frame and jambs – check if the frame and jambs have preserved their shape, i.e. whether there are any deformations and whether the surfaces have been damaged.

Surface finishing – industrially painted wooden surfaces should be repainted with the interval of 4 – 5 years.

The damages to the surface should be repaired immediately.

Seals – injured or loosened seals should be exchanged to new original seals. The seals should be cleaned simultaneously with the cleaning of the other surfaces of the window.

Hinges – regular lubrication of hinges with a lubricant for locks considerably lengthens the reliability and longevity of hinges.

Closing devices – the locks must be lubricated regularly. Use lubricants that do not contain acids or resins. To avoid extra dirt, remove excess lubrication with a clean cloth.

All metal fittings – check if the metal fittings (hinges, corners, hooks, shutters, edge latches, espagnolettes) that are installed to the window are secure. Due to wood being the so-called “living material”, it is important to check (in the first year of use) whether the attachment screws of the fittings have been fastened tight.

Glazing – in case of breakage of a glazed unit we recommend you turn to a competent glazing repair service provider.

Cleaning

For cleaning glazing units, sashes/frames and jambs, only use special suitable cleaning products. Please read the user manual of cleaning product carefully before use and make sure it does not cause damage to the cleaned surface. Please follow the instruction manual of the manufacturer.

Never clean windows or doors with sharp, surface-damaging objects (knives, metal putty knives, steel wool, etc.), abrasive cleaning agents or strong solvents (nitro solvent, acetone, etc.) Avoid using excess water. Do not forget to clean the jambs, the side surfaces of frames and the seals of the windows.

Never use chemically active or abrasive mixtures for cleaning the metal fittings of windows and doors or use other appliances that may cause scratches or mechanical damage to surfaces.

Attention! The windows belonging to fire-resistance class EI-30 may only be opened for cleaning, as when opened, the windows do not comply with the requirements of fire-resistance.

WHEN OPENED, THE SASH OF A FIREGUARD WINDOW MUST BE SUPPORTED! We recommend to use the cleaning support for that.

Everyday use

Do not apply excess strength to the espagnolettes and window latches (side lockers) for opening/closing the windows – the windows should open/close smoothly.

Please use only the appropriate appliances for opening/closing the windows. Please note that a window that is open or on a ventilation regime does not comply with the requirements for water resistance, sound resistance, insulation, air tightness nor burglary resistance. No extra weight should be hung to an open window sash or door leaf. Do not push or press the window sash against the window reveal. Do not place objects between the sash and the jamb. Avoid draught when windows are opened – as a window slamming shut may cause injury to glazing unit. To ensure the safety of children, use opening restrictors or locked handles.

Repainting

Please observe the following instructions when repainting industrially painted surfaces. The processed surface must be dry. The humidity level of wood should not exceed 20% of the wood mass in dry conditions. During the painting and drying process, the temperature of the paint, air and surface must be above +5°C, and the relative humidity must be less than 80%. Painting should not be done in direct sunlight.

To ensure the even shade of colour, be sure to have enough paint for colouring. Spread one or two layers of paint with a brush or a spray paint according to need.

SURFACES IN GOOD CONDITION

Remove dirt and dust from the surface. If the surface has been painted repeatedly, remove the previous layer(s) of paint completely so that the new paint could adhere to the surface. Clean the surfaces with PELTIPESU cleaning agent.

SURFACES DAMAGED BY MOLD

Before painting, process the surfaces with mould-resistant cleaning agent HOMEPESULIUOS, then clean carefully with the solvent SOLVO 1 and size with paint TEKNOLIN-PRAIME.

RUSTY SURFACES

Clean the surface with a steel brush and size with paint TEKNOLIN-PRAIME. Remove galvanisation, grease and dirt with PELTIPESU cleaning agent. Process rusty surfaces with steel brush and size with KIRJO or FERREX.

Let the pre-processed surface to for 1-3 days.

Please contact the importer of the painting products for additional information: Remmers Baltica OÜ, address Mäealuse 10, Tallinn, phone: (+372) 655 65 71, e-mail remmers@remmers.ee, www.remmers.ee.

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