



OPERATION AND MAINTENANCE MANUAL





Congratulations on the purchase of the premium Słowińscy windows and doors!

You have purchased a high quality product that has been produced in accordance with our very strict quality control norms. The information contained in this document is important to guarantee that your windows and doors will function impeccably for many years. Professional installation of your windows and doors will ensure the finest functionality including ensuring they are clean and free from all dirt. This will enable the installer to fully adjust all units and ensure they are ready for many years of use. Finally, it is important that you check this, and maintain the windows and doors correctly to ensure trouble-free operation over many years. Thank you for choosing Słowińscy as your supplier. We hope that you will enjoy the benefits of your new windows and doors.

Yours faithfully, Słowińscy Sp.J.

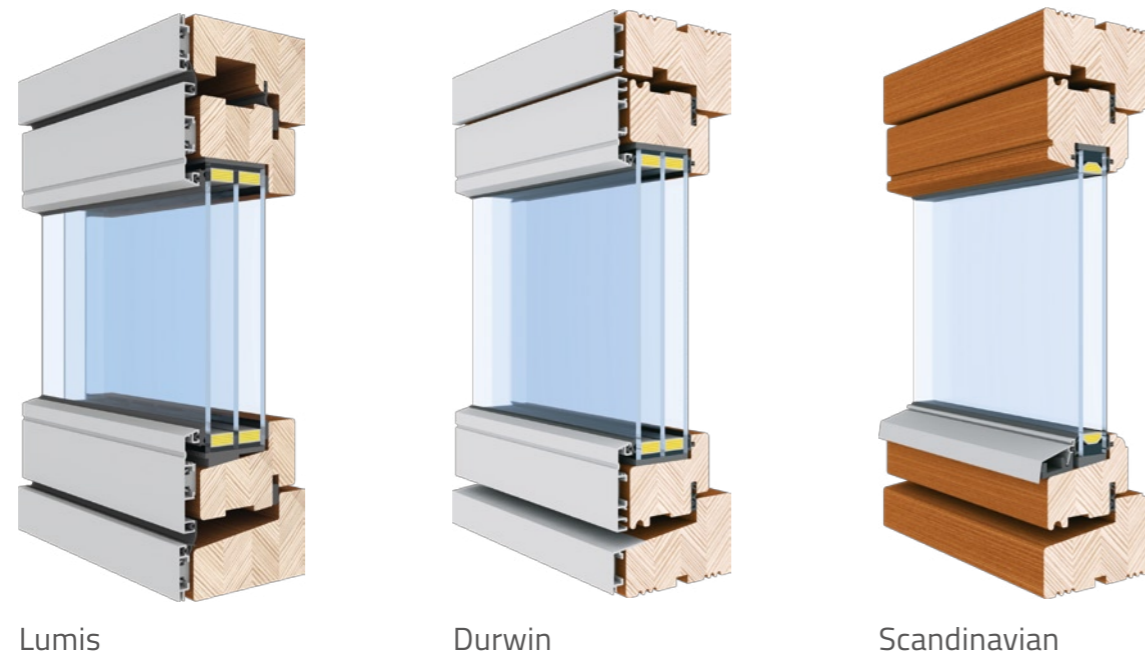
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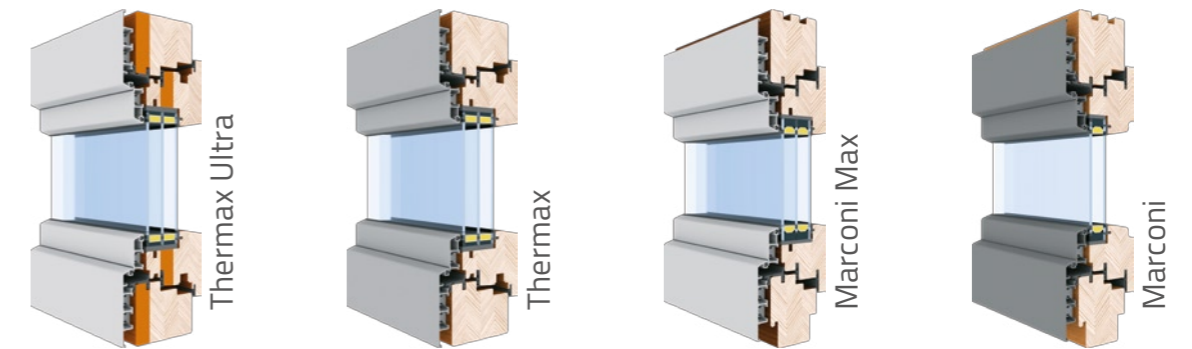


I. Product range

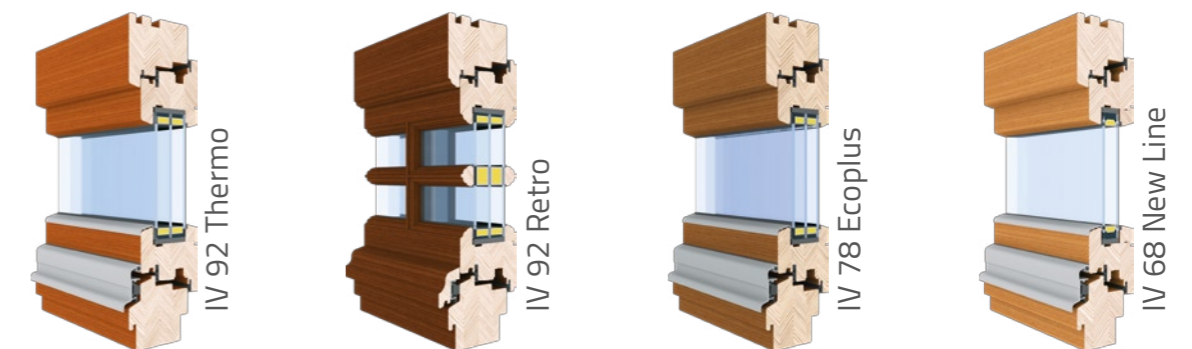


The offer of our outswing windows is addressed mainly to customers in the UK, Ireland and Scandinavian countries, where due to historical conditions outward opening windows are common. Alu-clad windows combine positive features of wood that is naturally beautiful and perfect construction material and aluminum resistant to external conditions. Clever design and appropriate combination of these two different materials give excellent results. Lumis and Durwin windows - nature inside and indestructible aluminum cladding outside. Alu-clad windows virtually require no maintenance and are an investment for future generations. They are perfect for buildings that are more exposed to weathering: mountain areas, coastal zones.

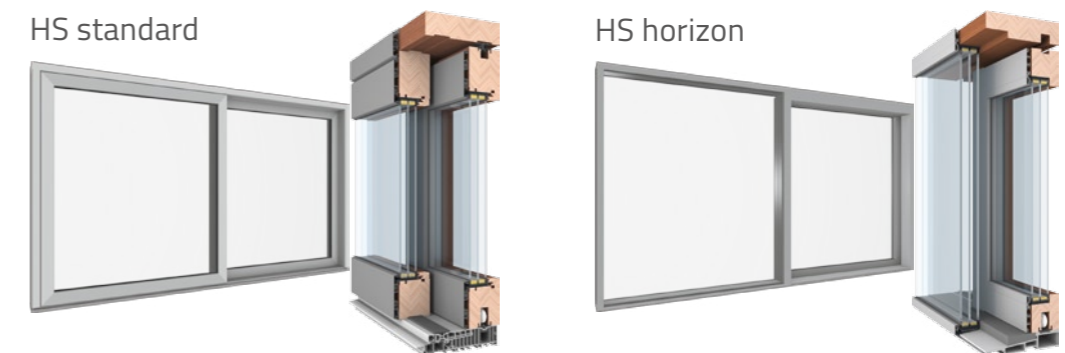
Lumis triple glazed, 48mm thick ($U_g=0,5$ W/m²K) glazing package and skillfully designed construction with three gaskets between the frame and sash allow achieving thermal parameter $U_w = 0,76$ W/m²K for a reference window.



Inswing alu-clad windows are the nature inside and very resistant aluminum cladding outside. Alu-clad windows combine positive features of wood that is naturally beautiful and perfect construction material, and aluminum resistant to external conditions. Clever design and appropriate combination of these two different materials give excellent results.



Inswing all-wood windows combine perfect performance parameters and a very low heat transfer coefficient. They are high quality products available in many different transparent colors or opaque RAL or NCS colors.



Sliding non-threshold balcony door HS Portal is ideal for people who value the proximity of the surrounding nature and want to have as much light as possible in their houses. With the unique fitting system by Siegenia, we are able to produce sliding balcony doors with a width of up to 18 meters and a maximum height of 2.7 m. Despite such large dimensions, the HS balcony leaf opens and closes very easily.



II. Care & Maintenance

To ensure your Slowinsky windows/doors a long life and problem free functionality, products must be maintained on a regular basis as per guidelines shown below.

1. RECEIVING GOODS

Please inspect the condition of the package immediately after the delivery. In case you notice signs of transportation damage, report the damage clearly in the bill of lading. The transport company and Słowińscy are not responsible for any transportation damages which have not been mentioned in the delivery note. In case the transportation damage is hidden (the damage which does not show on the outside of the package), you must report this in writing to the transportation company within 3 days of receiving the product. Please make sure that the goods correspond to the order confirmation and that all items mentioned in the covering letter are included. Missing items must be reported in writing within 3 days. Defective or incorrect delivery and potential transportation damages must be accounted for in the delivery note and reported immediately to Słowińscy or the distributor.

2. PRODUCT STORAGE

The doors and windows must be stored in dry and well-ventilated facilities, protected from soiling and mechanical damage. The products should not be stored outdoors. If the floor or the storage room is humid or the products are stored on the ground, the packages must be lifted onto supports out of range of humidity (min. height of pallet approx. 20 cm). Once the plastic covering is removed, any loose parts, such as lever handles, should be collected and preserved. In case the product is defective due to the manufacturer, the manufacturer will repair the defect or deliver a new product or a new part to replace the broken one. The buyer is not allowed to repair any perceived defects themselves on behalf of the manufacturer without first consulting the manufacturer. Please note! Humidity occurring in particularly during the construction of stone houses must be removed from the surface of the products.

3. INSTALLATION

We recommend that you employ a professional installation team for installing your doors and windows. Damages caused to the product or the surrounding structures by the incorrect installation are not included in the product warranty. Doors and windows must not be used as supporting structures. When installing, always consider the controllable removal of water from the structure. The windows must always be fastened with screws, e.g. AMO III mounting screws (Würth). The window must never be installed with mere foam. Please note! Do not install defect products!

4. PROTECTING THE PRODUCTS WITH TAPE

In case of alu-clad windows and doors, please remove the tape that protects the cladding right after the installation of the products, or right after the delivery in case of delayed installation. It does not apply to cladding in structural colors (no protecting tape is used in such cases).

If it is necessary to protect the products with tape during the construction period, you must make sure that the tape you use is suitable for this purpose. In some tapes, the adherence agent may be too strong for painted surfaces. The tape covered with large amounts of plastering the tape might snap when it is pulled off. Yellow plastering tape (used mainly when painting walls) must not be used on our products at all! All kinds of tape must be removed as soon as possible once the plastering is finished, at the latest one week later. We also recommend that you tape the door or window frames, thus making it easier to repair any potential damages. Słowińscy is not responsible for damages caused by disregarding these instructions. If damage arises we recommend that you contact the supplier of the tape. Damages caused by tape can be repaired by gentle polishing the edge of the damaged area, or touching up the paint twice.

5. EXTERNAL MAINTENANCE OF TIMBER

We recommend that you wash the frames and sashes at least twice a year to remove dirt and other kinds of contaminants. Use water, mixed with a mild household cleaning product.

A visual inspection should also be carried out at least once a year, to make sure the external surfaces are free from any splits or cracks in the paintwork or timber. UV rays from the sun can also effect the surface treatment – especially South and West facing elevations.

Properties without overhanging eaves will also be more exposed to the UV rays. Any cracks in the paintwork or timber will allow moisture to penetrate into the product and over time cause decay of the timber.

When carrying out remedial works to your windows and doors make sure that the humidity of the timber is between 15% to 18% and the ambient temperature between 10-20 degrees C. to avoid the effect of dew also avoid early mornings and later in the day, to enable paintwork to dry.

How to carry out remedial works:

*sand the outside surfaces (sashes and frames) with 200-240 grit sanding paper or sponge.

*thoroughly brush off sanded elements and wipe them with a damp cloth

*when dry, paint twice with SIGMA Acrylic paint (or equivalent) in a selected colour.

Avoid getting weather strips (rubber gaskets) painted as they will lose their flexibility and compromise the tightness of the window when closed.

Słowiński use finger-jointed timber to produce windows and doors. That means that all significant knots are removed from the timber to minimize resin extract.

As timber is a natural living material there may be further resin extract occurring after manufacture.

Resin extract can be removed in the following ways:

- Use a soft cloth wet with white spirit to remove the extract - wipe it off gently.

Wash the area with clean water afterward.

- Resin that have crystallized can be removed with a brush or scraped away gently.

If the painted surface has been damaged during this process, sand the area and apply the new paint with a soft brush.

6. EXTERNAL MAINTENANCE OF ALUMINIUM CLADDING

Windows with external aluminum cladding require minimal maintenance and cleaning externally twice a year. If the window has been subject to vandalism or any other kind of physical damage, small scratches can be repaired using a polish. In cases of deep scratches, oxidation will automatically close "the wound" and prevent corrosion. Damage like this can be difficult to repair without leaving a "scar", so the advice is to leave the scratch; it will not affect the life span of your window.

7. GLASS

Glass labels on new windows can be removed by soaking them in water. Label residues on the glass can be removed by gently using a cleaner designed for glass surfaces or ceramic hobs. Although your windows may be cleaned at regular intervals, as a minimum the glass should be cleaned approx. 4 times per annum. When cleaning we recommend using a soft brush, a squeegee and some mild soapy water. Add some rinse aid to prevent chalky marks.

The evaluation criteria for insulating glass units are contained in Pressglass Company Standard Edition 7.1 / November 2021

8. HARDWARE

We recommend you clean all dowels, catch bolts, hinges and other moveable parts using oil or grease (WD40, Silicone spray or similar) at least once a year. However frictional parts must not be oiled.

Over time, dirt may gather in the bottom track of your lift and slide door. Remember to clean out the track monthly, use appropriate Hoover attachment to pick up any dirt or dust which would obstruct the movement of your doors.

Check the drainage holes in the track to make sure they are not blocked.

Windows situated in exposed areas, particularly coastal locations (within 5 miles) should be oiled more often. It is also recommended that a check to see if the hardware is still fully functional is carried out more regularly.

8.1. INTERNAL MAINTENANCE OF TIMBER

The internal part of the window is virtually maintenance free although it may be necessary to wash grease or smoke off the frame and sash from time to time. Clean the frame with a cloth and soapy water.

8.2. WEATHER STRIPS

Weather strips should be inspected for flexibility/durability annually. Water penetration and draught is only prevented with clean and durable weather strips.

8.3. RUBBER GASKETS

Rubber gaskets are maintenance free apart from ordinary cleaning, with a cloth and soapy water.

8.4. VENTILATION

Your new Slowinsky windows are highly insulated and seal very tightly, ensuring you and your family a good and pleasant indoor climate. It is therefore imperative that you ventilate sufficiently and correctly.

Leave a window or door wide open – it is ideal with a little draught. This way you replace the warm and moist air in the home with cold and dry air from the outside in less than 10 minutes. During this short period of time there will be no cooling of heating items like furniture, floors and ceilings and the loss of energy will be at a minimum.

Proper ventilation is especially important in new buildings. Damp from new wall and floors can stay in the home for up to two years.

If you make sure your home is thoroughly ventilated a couple of times every day – e.g. bedroom and bathrooms in the morning and kitchen, dining room and living room in the evening – you will ensure that.

9. CONDENSATION

Water condensation on panes can be a sign of incorrect ventilation, but not always.

9.1. CONDENSATION ON THE OUTSIDE OF THE WINDOW

When condensation appears on the outside of the window, it means that it is an energy pane and that it is working the way it should.

In some certain types of weather - for example, on a clear and frosty night, where there is a large heat dissipation from the earth into the air - there can be times in the morning where the outside surface of the pane is colder than the air outside. This can result in external condensation in the middle of the pane. This type of condensation will disappear when the temperature outside rises during the day. This type of condensation is caused by the energy pane. The inner piece of glass has a non-visible coating that reflects the heat back into the room. The space between the two pieces of glass is filled with argon gas. This means that heat from the house cannot touch the outer piece of glass and heat it up. That is why it is possible for the outside of the energy pane to become colder than the air outside. Condensation on the outside of the pane cannot arise on old traditional panes. On old types of panes, there will always be some heat transferred through the glass to heat up the outer piece of glass.

9.2. CONDENSATION ON THE INSIDE OF THE WINDOW

If condensation is placed on the inside of the IGU it is a sign that the relative humidity in the room is too high. The humidity should be brought down if you want to avoid rot, damage caused by a damp and unhealthy indoor climate.

9.2. CONDENSATION BETWEEN THE TWO PIECES OF GLASS

If condensation appears between the panes it means it was punctured and is no longer air-tight. Such an IGU needs to be replaced.

10. WARRANTY

All Słowiński products are ISO-certified. The warranty covers manufacturing or material defects on windows and doors, and the warranty is valid for 5 years from the date of production. The panes are covered by the Glass Industry's warranty for punctured panes (5 years) and visual defects (1 year).

Please note the warranty of insulation glass elements concerning thermal stress becomes invalid if dark blinds or other dark blackout implements are used with the glass elements. Using such equipment in the close vicinity of the insulation glass elements increases the risk of thermal shock due to rising temperature. A thermal shock can break the glass.

Please also note that any external faults (i.e. existing on the external surface of the IGU packet) will not be accepted as warranty issues.

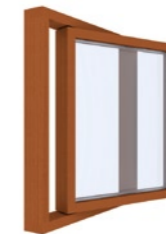
Windows and doors installed 2000m or less from the coast are not covered by the guarantee. Please contact our salespeople to find out how to prevent issues when installing our products in coastal zones.

Please state the order number for the defective window or door when contacting Słowiński.



III. Operation and adjustment of Slowinsky Windows and Doors

1. SIDE HUNG (SWING) PROJECTION WINDOW (REVERSIBLE)



OPERATION

The window handle can be used to carry out the following functions:

1. Open the window
2. Close the window
3. Secure the window in the ventilation position

The side guided window has a built-in adjustable friction. The window can be kept open in any desired position. (Note: not usable in strong winds).

You can also use the ventilation position by turning the handle to the horizontal position. The closing mechanism must catch the outer of the two holes in the receiver plate located in the jamb. The window is secured and can be locked in this position but allows fresh air into the room.

Concerns the reversible hardware version (only Lumis):

The sash can be fully reversed for easy, safe cleaning from the inside. The sash reversal takes place outside of the building to avoid damage to interior curtains or blinds. To allow the full reverse position, please remove the security bolt above the stay arm with an Allen key. For security purposes, please install the security bolt when the cleaning is finished.

ADJUSTMENT

If required, the friction can be adjusted by tightening or loosening the screw in the hinge arm in the sill and head of the frame. You will need a T-20 Allen key for this purpose (only in the Durwin and Scandinavian systems). It is important that the screws are turned evenly to avoid distortion.

2. TOP HUNG (SLIDE) PROJECTION WINDOW (REVERSIBLE)



OPERATION

The window handle can be used to carry out the following functions:

1. Open the window
2. Close the window
3. Secure the window in the ventilation position

The top slide window has a built-in adjustable friction. The window can be kept open in any desired position. (Note: not usable in strong winds).

Concerns the reversible hardware version (only Lumis):

The sash can be fully reversed for easy, safe cleaning from the inside. The sash reversal takes place outside of the building to avoid damage to interior curtains or blinds. To allow the full reverse position, please remove the security bolt above the stay arm with an Allen key. For security purposes, please install the security bolt when the cleaning is finished.

ADJUSTMENT

If required, the friction can be adjusted by tightening or loosening the screw in the hinge arm on the sash. You will need a T-20 Allen key for this purpose (only in the Durwin and Scandinavian systems).

The screws should be turned evenly to avoid distortion.

3. INWARD OPENING/TILT & TURN



OPERATION

The window handle can be used to carry out the following functions:

1. 90 degrees (turn) position when the handle is turned to a horizontal position – the sash opens inwards making it possible to clean the outside of the window from the inside. It is not recommended to open the window fully in strong winds as the sash may get damaged.

2. 180 degrees (tilt) position: when the handle is turned to a vertical upwards position, the sash can be opened approx. 10cm inwards at the top, allowing for sufficient ventilation.

3. Closed position: the windows is closed when the handle is in the vertical downwards position.

ADJUSTMENT

The closing pressure is adjusted by turning the back screw in the horizontal hinge at the bottom corner by using an Allen key.

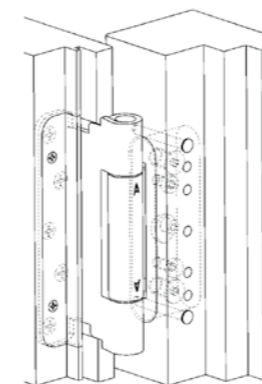
4. INSWING ENTRY DOORS

OPERATION

To open (turn) the door when in un-locked position, press the handle on the inside or outside. In case there is a pull handle outside, pull it to open. In case an electro (automatic) latch is used, you should use the key on the outside to unlock.

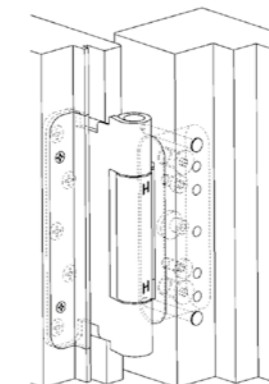
To engage the latch and bolts, twist (clockwise) the thumb turn lock (or keylock) on the inside or turn the keylock on the outside. Such operation turns the door into a closed position. To unlock the door, perform the same action counterclockwise.

ADJUSTMENT (HINGES)



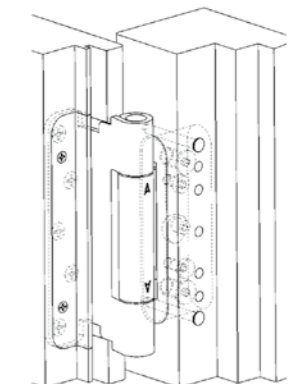
Lateral adjustment

Turn both adjustment screws equally (max. one turn) in relevant direction. Avoid tilt knuckles and tension on the axis. Proper alignment is crucial!



Height adjustment

Slightly loosen the clamping screws in the frame part of all hinges. Adjust the height by turning the eccentric adjustments of the middle hinge in the desired direction. Tighten the clamping screws of upper and lower hinge to relieve the central hinge. Then retighten the clamping screws in all frame parts firmly.



Compression adjustment

Slightly loosen the clamping screws in the frame part of all hinges. Adjust the compression by turning the eccentric adjustments of the upper and the lower hinge in the desired direction. Retighten the clamping screws.

5. OUTSWING ENTRY DOORS

OPERATION

To open (turn) the door when in un-locked position, press the handle on the inside or outside. In case there is a pull handle outside, pull it to open. In case an electro (automatic) latch is used, you should use the key on the outside to unlock.

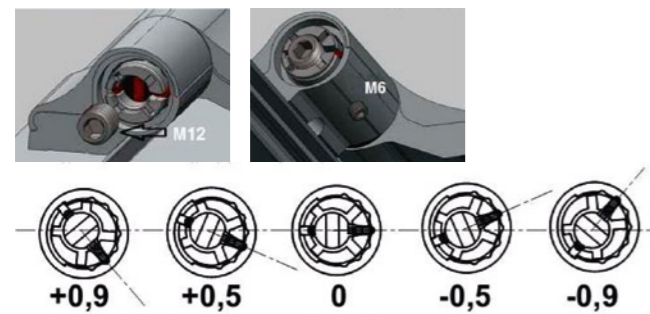
To engage the latch and bolts, twist (clockwise) the thumb turn lock (or keylock) on the inside or turn the keylock on the outside. Such operation turns the door into a closed position. To unlock the door, perform the same action counterclockwise.

ADJUSTMENT (HINGES)

Gasket adjustment

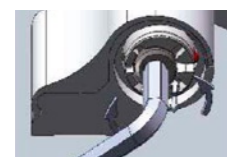
When the door is in an open position, loosen the M6x5 grub screw and unscrew the M12 grub screw.

The following gasket compression options are possible:



When the adjustment is finished, tighten the M12 screw just until you feel resistance, then tighten the M6x5 screw.

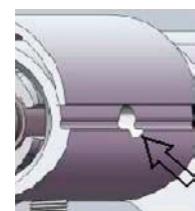
Vertical adjustment



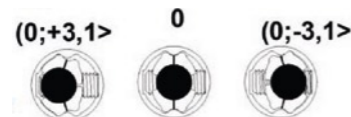
By tightening/loosening the M12 grub screw you can adjust the sash vertically (+ 4mm)

Sash-frame gap adjustment

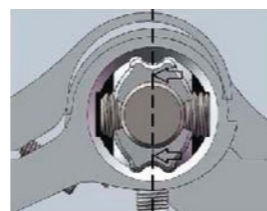
When the door is open, loosen the M4 screw that blocks the cover and loosen the M6x5 screw.



Using the presented hole adjust the gap using a 4mm



Allen key.



When the adjustment is finished, tighten the M6x5 screw, apply the cover and tighten the M4 screw.



6. LS DOORS

OPERATION

To open the sash, unlock the door and turn the handle 180 degrees so it points downwards (sliding position), the door will be raised by several millimeters making it easier to slide open. To close the door slide it back shut, and turn the handle back 180 degrees to point upwards. The door will go into its lower position now.

ADJUSTMENT

The adjustment of the lift-slide door should be performed by a professional. In case your LS door needs adjustment, please contact an experienced technician or Słowiński for help.

7. BI-FOLD DOORS (CENTOR)

OPERATION

To open the door, press on the handle located on the main door or unlock the drop-bolt on the active sash. Next, depending on the diagram, unlock the other dropbolts by pulling them down to unlock the remaining sashes and fold all the sashes to the side(s).

ADJUSTMENT

In order to adjust a bi-fold door, use an 8mm Allen key. To raise or lower the panels, simply insert the Allen key into the end of the carrier to depress the pin and wind up or down. Once adjusted, the new setting is locked into place as the Allen key is removed.

Independent top and bottom lateral adjustment of +/-5mm is possible using a Phillips screwdriver.



Full installation and adjustment instruction is included in the documents shipped with the project.



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