

MAINTENANCE MANUAL AND SERVICE REPORT



CUSTOMER DETAILS

Name:

Address:

Post code, Town:

Phone number:

Building Site Address:

Quotation number:

Handover date:

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Installation (if provided)

Date:

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Technician:

Customer Signature:

REPAIRS OR MAINTENANCE REPORT

Date:

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Technician:

Customer Signature:

Complaint sent date:

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Complaint received date:

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Received by:

Description:

All fields above have to be filled in otherwise the claim will not be accepted.

REPAIRS OR MAINTENANCE REPORT

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Complaint received date:

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Received by:

Description:

All fields above have to be filled in otherwise the claim will not be accepted.

Dear customers,

We are grateful that you have decided to buy windows and doors supplied by UNI WINDOWS Ltd. We believe that you will be fully satisfied with the purchase and installation of windows, doors and other fittings. We hope that you will also be satisfied when using our products and this is why we have written this "Service and Maintenance Manual". We believe that you will find many useful tips here. Keep this "Service and Maintenance Manual" for future reference



Information



Please note



Read the Service and Maintenance Manual, Complaint Procedure Rules, its Amendment, and Guarantee and Warranty Conditions very carefully, please.



Follow all instructions included in this booklet, otherwise the warranty is void.

General instructions

- Use the windows and doors only for the intended purpose.
- Follow the instructions stated in the manual.
- When using, maintaining and cleaning windows and doors, health and safety requirements.
- Complex adjustment, repairs and replacement of glazing may only be performed by a professional approved by the Manufacturer



Risk of injury arises mainly in the following cases:

- Injury caused by broken glass,
- Fall of broken off or loose sash from the frame,
- Parts of body being jammed between the sash and the frame when closed or shut by draught,
- Struck by the sash caused by sudden and quick opening, draught or wind,
- Do not hang on or swing on window and door sashes, or overload them in any other way, as this may result in dislocating a sash from the hinges, its falling down and subsequent personal injury,
- Do not lean out of windows and doors - danger of falling down.



Windows, doors, fittings, and interior furnishings may become damaged mainly in the following cases:

- When forcibly opening a window or a door,
- **When windows, doors and fittings are stained with mortar, plaster, concrete, paint or other aggressive material,**
- When hardware is contaminated or operated without proper lubrication,
- When windows, doors and fittings are exposed to high temperatures,
- If the surface coating is not treated in compliance with the specified methods,
- When cleaning windows, doors and fittings by solvents, abrasive agents, and hard and sharp tools,
- If a sash is locked in open position by stops, pins, etc., it may be dislocated from hinges, or a window or a door may be damaged when shut or shut by draught,
- Do not close cables, strings, etc. in windows and doors, as the sash profile becomes bent and the sealing becomes damaged, which may result in impaired tightness or damage to the sash, frame or glazing,
- When the installation is completed, do not remove the installation blocks located around the frame, do not open or use the windows and doors until the PU foam has hardened, as this could result in a deflection of the frames,
- Do not leave heavy or large sashes open for a long time, as this can lead to their hanging down, rubbing and subsequent damage.



Ensure proper ventilation.

Function and lifetime of doors is impaired by high air humidity exceeding 60 % (construction work, swimming pools, high interior humidity and other sources of humidity). Regular ventilation reducing humidity is essential for the correct functioning and long life of windows and doors. Proper ventilation protects coating against damage, wooden material against swelling and damage, hardware against corrosion and damage, masonry around the window or door against dampening, room corners against dampening, also prevents the generation of mould.



Defects arising from excessive humidity are not covered by the guarantee.

Correct use of windows and balcony doors:

Tilt & Turn



closed



tilting (ventilation)



microventilation



open

Turn & Tilt



closed



open



microventilation

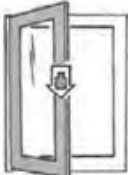


tilting (ventilation)

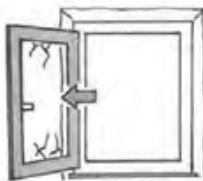


Turn the handle only when the sash is completely closed to the frame!

Other Notes:



Window and door sashes must not be exposed to additional load.



Do not bang or push sashes on the edge of the window opening.



Do not place any objects between the sash and the frame.



If you wish to protect your children, the sashes may be secured against opening by a lockable handle.



Do not leave the sash in open position in strong wind.



A sash banged shut may cause injury. Always hold on the handle when closing sashes.



The customer is obliged to remove the protective foils and all stickers from the products within 30 days of the purchase of the goods.



Leave all expert maintenance work to professionals.



Information on use and maintenance can be found on the following pages.

Use of products and their description

UNI WIN windows and balcony doors are commonly used in family houses, flats, residential and office buildings or schools. We recommend that wooden entrance doors are not mounted in areas with high movement of persons (offices, schools,), as they become significantly damaged, which shortens their life-time. Wooden windows and doors are not suitable for spaces with high humidity, aggressive environment, etc., where rapid deterioration of the surface finish and other exposed parts takes place.



Defects caused by unsuitable conditions, excessive and rough use are not covered by the guarantee.

UNI WINDOWS Ltd. timber and timber alu-clad windows and doors are made of laminated wooden scantlings.

Windows and balcony doors are fitted with ROTO NT edge hardware, entrance doors are equipped with ROTO automatic multi point locks and Simonswerk adjustable hinges.



Window profiles IV 68 mm and door profiles are commonly glazed with double glazing 4-16-4 with heat transfer coefficient of $U_g=1.1 \text{ W/m}^2\text{K}$. Window profiles IV 78 mm and IV 92 mm are commonly glazed with triple glazing 4-12-4-12-4 or 4-16-4-16-4 with heat transfer coefficient of $U_g=0.5 \text{ W/m}^2\text{K}$. All kinds of insulation glazing have a warm edge spacer reducing heat transfer, fogging and icing of the glazing edges. The space between the glasses is filled with Argon.

UNI WIN windows and doors profiles are sealed with up to four gaskets to provide the best airtightness result. All UNI WIN timber profiles are supplied with anodized aluminium or RAL painted drain caps for draining water. Entrance doors and balcony doors with low aluminium threshold have interrupted thermal bridge as standard.

Wood treatment for timber and timber alu-clad windows and doors

Here is the detailed technological process how the windows and doors are treated:

UNI WIN use Sigma coatings and the profiles are coated with anti-fungal and anti-bacterial varnish before manufacturing. Then after cutting to profile they're poured over once more, and after the frame is pressed together it goes for a bath soak for even deeper penetration. On top of all that goes four layers of coating adding to overall 300 microns of paint, which is very good standard. The timber frames should last for decades, especially when covered by aluminium cladding.

For more information about Sigma coatings, you can follow this [link](#) to find out more about their products and technologies. If you want to know more about the treatment process, let us know.

Powder coating for the aluminum cladding

In regards of the aluminium cladding we use aluminium profiles from Aluron which are prepared and treated in the factory. They use three layers of powder coating which adds up to 260 microns of paint. For extreme coastal areas we recommend to use so called 'marine finish' where on top of the powder coating (or below to be more precise) the material is treated with an extra layer of special primal coating. For extra added strength and durability the connections and corners can be welded opposed to the standard punched connection.

Correct use of windows and balcony doors

Variants of windows and balcony doors:

UNI WIN windows and balcony doors are designed to be fixed, tilting, opening, opening + tilting (also with micro-ventilation), sliding and combinations of these variants plus sash & case and flush casement

Hardware and its functions

Windows and balcony doors are fitted with ROTO NT hardware. This is state-of-the-art hardware with two, three or four positions according to the respective version and type of a window or door. The hardware is a mechanical system installed in edge grooves in the frame and sashes. The hardware is operated by a handle and there are several positions for opening, closing, tilting, sliding and micro-ventilation of a window or a door.

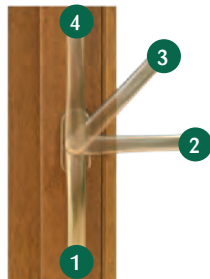
Hardware positions of windows and balcony doors

- 1 closed** – a sash is closed to the frame with the use of latches situated on its edge
- 2 tilt** – the top part of the sash is tilted inside, ventilation.
- 3 micro-ventilation** – slight distance between the frame and the sash, so called slot ventilation
- 4 opened** – a window is opened sideways

The micro-ventilation position is available only in windows with hardware enabling opening and tilting (T&T), except for windows smaller than 600x600 mm, custom-type windows and special windows where this hardware cannot be used for a reason.



door handle



hardware positions



Operate the handle only when a sash is closed, so that the safety catch locking the handle is activated!

A catch locking a handle

Windows higher than 1000 mm have a catch locking the handle, so that the hardware is not used wrongly with a window opened.

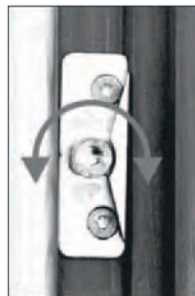
The catch stops the handle from turning if the sash is not closed to the frame (it is in position opened, micro-ventilation, tilt). When the sash is closed, the catch is pushed against its counterpart on the frame, and the handle is released and can be used for positioning the hardware.

The catch is situated on the sash edge hardware and, when correctly set, it also has the function of a lifter, lifting the sash when it is being closed and in closed position and thus saves the hardware hinges and increases their life-time.

If a sash is closed and still the handle cannot be turned, the catch is not correctly released by its counterpart on the frame and the handle is blocked. The window or balcony door must then be readjusted or the hardware must be repaired.



catch securing the handle against turning



catch frame counterpart

Closing a slave sash with small hidden pull-up handle

The hardware of the slave sash with a small pull up handle on a double window or a balcony door with a flying mullion (without a fixed window post) is operated by an espagnolette. You can unlock the sash and open it by pulling out the lever. When the lever is closed with the window sash closed, the espagnolette becomes locked at the top and bottom in the counterparts on the frame securing the window in closed position.



small pull up handle



espagnolette frame counterpart

The frame counterparts of the espagnolette can be adjusted by eccentrics, so that the sash fits tight against the frame.

Fitting and dismantling a sash of a window or a balcony door

When performing construction work, cleaning and maintenance, the sash may be removed from the frame. This can be done by pulling out the top hinge securing bolt.

With the sash closed push/pull the bolt down, place the handle in horizontal position (open), hold the bottom side, open it and then remove from the bottom hinge. When placing the sash back, the handle must be in horizontal position (open). Place the sash in the bottom hinge, close the sash to the frame and insert the part of the top sash hinge into the respective part of the top frame hinge. Adjust the sash and frame parts of the top hinge and insert the securing bolt upwards. The bolt must be inserted smoothly and it should be done with care.



removing bolt



removed bolt



placing bolt back

Balcony latch

The balcony door is not commonly fitted with a double handle but as an option the so-called balcony (anti-draught) latch may be delivered.

When going out through a balcony door, open it from the inside using the handle, go through and close the door using the pull from the outside. The sash and frame parts of the latch snap in and the door remains shut (not locked!).



sash pull



sash part




frame part

When coming back inside, just push the door sash, the latch is released and the door opens. The balcony latch is used instead of a double handle with a lock.



If the latch is not working, adjust the hinges.

 The balcony latch is included in the optional equipment, it can be ordered and installed later.

Lockable handle

Windows and balcony doors may be fitted with a lockable handle, which is secured in closed position by a lock and a key, without which the door or window cannot be opened. The lockable handle is used, if you want to prevent undesirable opening of a window or a balcony door. It can also be used, if you want to lock the window or door so that it cannot be opened by children, who could pass through and fall out from the opened window or door.



lockable handle


 The lockable handle is included in the optional equipment, it can be ordered and installed later.

Double balcony handle with a lock

Balcony doors may be fitted with a double lockable handle (see fig.), which is secured in closed position by a cylinder lock and a key. It can be locked from both sides.

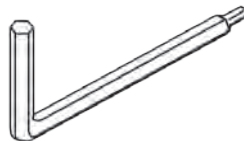


double balcony handle with a lock

 Double balcony handle with a lock is included in the optional equipment. The handle with a lock is fitted in the factory and cannot be installed later! A balcony latch may be used instead.

Adjusting windows and balcony doors

Windows and doors may sometimes “settle”, i.e. the wing hangs down and parts of the edge hardware may rub against the frame (depending on size, weight and design of the door or window, and temperature conditions); - therefore, **readjustment should be performed after some time and must only be performed by a professional approved by the Manufacturer or the seller**



The adjustment is performed with an Allen wrench No. 4. Carry out adjustment only with the sash opened and consider thermal expansion – clearance must be left between the sash and the frame.

You can move the sash with adjustment screws on the top and bottom hinges up and down, its bottom side left and right, its top side left and right and set pressure of the sash on the frame. Required position of the sash in the frame may be reached by careful combination of adjustment in all these directions which will ensure correct function of a door or window in most cases. Following the adjustment, check that it was performed correctly and the problem was solved together with the door or window functioning.

i Readjustment of window or balcony door hardware is not deemed as a defect within the warranty period.

Adjustment of the top hinge of opening and opening/tilting wings operated by a handle:

Fig. 1: Shifting wing left-right. Open a wing to the maximum (90 – 180°), insert the enclosed Allen wrench into the adjustment screw and set the wing in the required position.

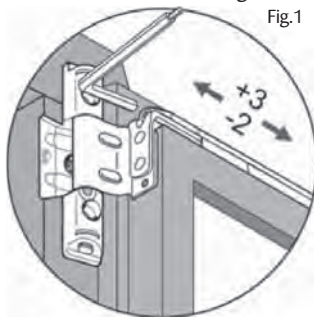


Fig. 1

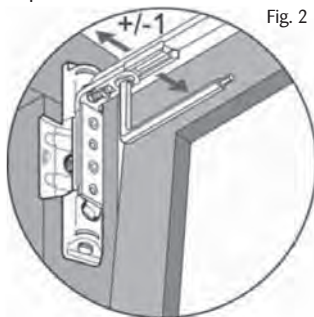


Fig. 2

Fig. 2: Pressure of the top sash corner on the frame. Open the sash (90°), push the securing catch locking the handle and set position No. 4 – tilting (ventilation) and tilt the sash, so that you can reach the adjusting screw on the bottom side of the hardware. Insert the supplied Allen wrench into the adjustment screw and set the sash in the required position. After adjustment press the catch again, level the sash and set in position No. 2 – open.

Adjustment of the top hinge of opening slave sashes with a pull-up handle:

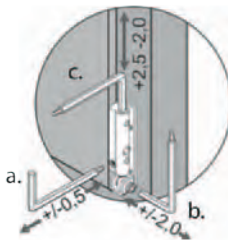
Fig. 1- Shifting sash left-right.

Fig. 2 - Pressure of the top sash corner forward-back (to the frame and from the frame)



Adjustment of the bottom hinge:

- a. pressure of the lower corner forward-back
- b. shifting sash left-right
- c. lifting sash up-down



bottom hinge

Adjusting pressure and tightness SASH- FRAME

The sash-frame pressure can be adjusted in windows and balcony doors with the use of eccentric element on the sash catches located on the sash hardware which snap in frame catches, thus fastening the sash to the frame in closed position. Use the enclosed Allen wrench for adjustment.



The pressure force affects the force required for turning the handle.

If the wing eccentric element rubs against the frame latch when opening and closing the wing, the frame latch may be screwed upwards/downwards. Remember to adjust the window on the hinges first.



sash latch



frame counterpart

Adjustment of micro-ventilation

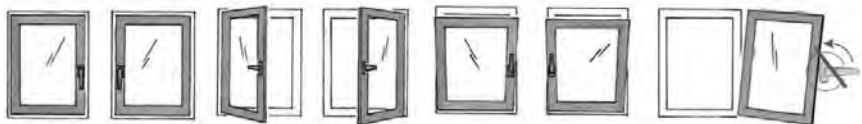
In the case of incorrect functioning of the micro-ventilation position, the wing must be readjusted on the top and bottom hinges, or the wing latch must be adjusted (according to the procedure described above). In the case of utmost necessity, when the readjustment does not help, the frame part of micro-ventilation can be moved and screwed left or right, so that micro-ventilation works correctly.



micro-ventilation frame counterpart

Concealed window hardware

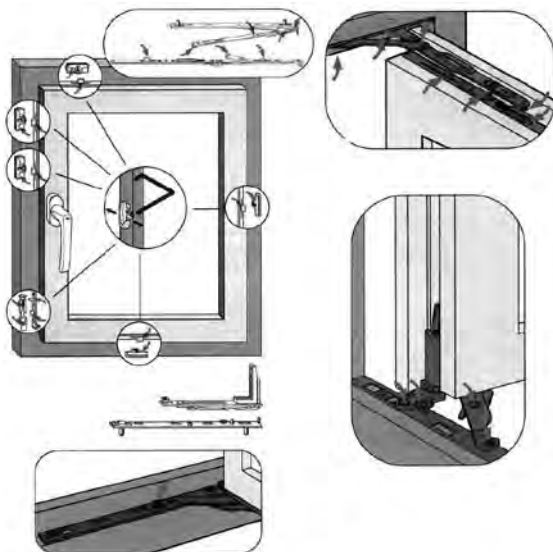
Siegenia concealed hinges



As a window may close in open position due to draught, it can be fitted with special equipment. Undesirable turning of a handle in open position may be prevented by the use of the surface and control arrester. Follow the instructions below if you want to achieve long life-time and safe operation of your windows.

Maintenance

With regular maintenance (grease, oil – min. once a year) of all parts affecting the operation of individual components you can ensure smooth movement of Siegenia hardware while preventing the hardware against excessive wear and tear. Special attention must be paid to lubrication of the steel frame latches so that they do not wear out. Tightness of all screws must also be checked. Loose screws must be retightened and broken-off heads replaced.



Do not use acid or resin-containing grease for lubrication. Use only lubricant from manufacturer or seller.

Should you have any doubts, please contact UNI WINDOWS Ltd.

Use of entrance door

UNI WIN entrance doors are only made in opening version. They are equipped with Winkhouse multipoint automatic locks enabling locking at three points at the same time. The door is equipped with handle/handle or handle/knob, aluminium doorstep, three adjustable door hinges, and cylinder lock with three keys.

Standard Guard cylinder locks and keys are used with entrance doors; a different brand can also be used. It is on customers responsibility to replace standard Guard cylinder locks for any higher security locks (class A) required by insurance company



standard cylinder lock

Entrance door hardware

The hardware is a mechanical system installed in edge grooves of the frame and sash enabling a door to be locked and unlocked. This system is operated by a handle and a cylinder lock. The entrance door lock has two positions.



pull up handle

i Do not press the handle when closing the entrance door, the edge sealing forces the sash away. Close the door by pressing or pulling the sash to the frame, the catches will slip in the frame counterparts and the door is locked.

Opening and locking of the second sash of a double door without a handle is ensured by pull up handle. When the sash is closed, the top and bottom espagnolette will snap in the frame and doorstep catches and the sash is secured in closed position. You can unlock the sash and open it by pulling out the pull up handle. The frame counterparts of the espagnolette can be adjusted using the eccentric elements so that the sash fits tight against the frame.

Unhinging entrance door sash

When performing construction work, cleaning and maintenance, the sash may be removed from the frame pulling out the hinge pins.

Open the door sash and support it in the corners. For UNI WIN timber and timber alu-clad windows and doors loose the safety screws from each hinge, then push the hinge pins out of all the three hinges, you can use an iron rod and a hammer for instance. Take hold of the sash and pulling it sideways remove it from the hinges. Lean the unhinged sash against the wall in horizontal position and support it properly so that it does not become damaged, and secure it against falling. When fitting the sash back, place the sash parts of hinges into frame parts, perform aligning and insert hinge pins.

Adjusting entrance door

The entrance door may sometimes “settle”, i.e. the sash hangs down and it may rub against the frame or it is difficult to lock (depending on the size, weight and design of the door and temperature conditions), therefore readjustment should be performed after some time. Adjustment is performed with an Allen head screw No. 4. Adjusting screws are located on the door hinges. Our entrance doors are commonly delivered with three door hinges Simonswerk Baka 3D.



When performing the adjustment, consider material thermal expansion – clearance must be left between the sash and the frame. Adjustment shall be carried out by a professional approved by the Manufacturer or the seller

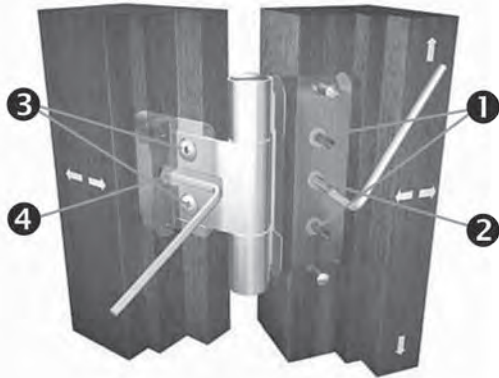


Readjustment of the entrance door hardware is not deemed as a defect within the warranty period.

Adjustment of a door sash fitted with hinges Simonswerk Baka 3D:

1. Adjustment of frame hinge parts

Open the door sash at least 90°, there are three openings on the hinges in the frame part next to the sealing. Hinge fastening screws (1) and an adjusting screw (2) are located in the openings. Prior to adjustment, the fastening screws (1) of all the door hinges must be loosened by an Allen wrench. When the screws are loosened, the door sash can be adjusted by an adjusting screw (2) according to the A and B procedures described below.




adjusting an entrance door hinge

A. Shifting the door sash up and down:

Insert the Allen wrench in the adjustment screw (2) in the central opening of the middle hinge. Turning the wrench left or right the door sash moves up or down and that is how its height is set.

B. Shifting the door sash to the door frame or from the door frame (adjusting sash – frame pressure):


Insert the Allen wrench in the adjustment screw (2) in the central opening of the top or bottom hinge. Turning it left or right the distance of the sash from the frame is adjusted (pressure of the sash on the frame) the door sash being shifted to the frame or from the frame. Pressure of the top corner is adjusted on the top hinge and pressure of the door sash bottom corner on the bottom hinge.

 When the adjustment is completed, the fastening screws (1) of all the three hinges must be tightened!

2. Adjustment of sash - hinge - movement of sash left and right


Shifting the door sash left or right (to the lock or hinges):

Open the door sash at least 90° and remove the sealing at the sash hinges. The fastening screws (3) of all the three hinges must be loosened by an Allen wrench. Insert the wrench into the adjusting screw (4) and turning it to the left or to the right gradually set the position of the door sash equally at all the three hinges.

 When the adjustment is completed, the fastening screws (3) of all the three hinges must be tightened and the sealing replaced!

Adjustment of the lock latch

Correct adjustment of the lock latch counterpart in the frame is essential for a tight contact of the door sash and frame. It is achieved by positioning the counterpart so that the sash fits tight in the frame, the catches snap in and it can be locked easily. There should be no clearance when the sash is closed. Loosen the tightening screws (1) and set the counterpart (2); then, after the adjustment, tighten the fastening screws (1) once again.

 Adjustment of the counterpart affects the force needed for turning the cylinder lock and thus the force for locking the door!

 Leave all the door adjustment to a professional approved by the manufacturer or the seller

Adjusting pressure SASH – FRAME on the lock side

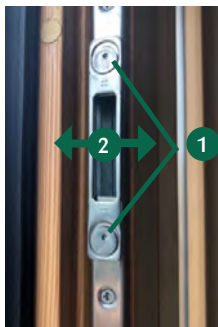
Sash-frame pressure on the lock side of the entrance door can be adjusted with the use of the eccentric elements on the frame counterpart, where the top and bottom sash catches slip in. Insert the Star key TX15 into the eccentric adjustment screws (1) and, turning these to the left or to the right, set the required position of the counterpart (2) equally at both screws.

Pressure of the door sash top edge is adjusted on the top counterpart and pressure of the door sash bottom edge on the bottom counterpart.

 The pressure force affects the force needed for turning the cylinder lock.



adjusting lock counterpart



adjusting counterparts of top and bottom catches

Sliding glass wall

Your window/balcony door is fitted with quality hardware Siegenia Portal HS. In order to maintain its long life-time and fault-free operation, the maintenance or inspection described below shall be carried out.



- **All residual plaster, concrete and mortar must be cleaned from all parts of hardware**, in order to prevent defects caused by the blockage of movable parts of hardware. The supporting (bottom) rail must be kept clean.
- **All movable parts and all closing points must be treated with recommended lubricant or grease at least once a year.**
- The Lift & Slide door handle must not be loose otherwise it will snap hexagon inside of the handle. **Please check the handle is always tight by tightening of the screw (1) showing on the picture below** (3 mm Allen key required)
- Gaskets cleaning and protection - Clean the gasket with clean water and detergent. After cleaning, lubricate the sealing with silicon oil and wipe off with a cloth.

Adjustment of moveable hardware may only be performed by a qualified professional.



When closing Siegenia Portal HS sliding door, make sure that no objects get jammed between the sash and the frame. Watch for little children and pets.



1. Slide position



2. Slide position



3. Fully closed position



PATIO Tilt & Slide door

Your window/balcony door is fitted with high quality Tilt & Slide door hardware. In order to maintain its fault-free operation, **the maintenance or inspection work described below shall be carried out by a professional approved by the manufacturer or the seller.**



All residual plaster, concrete and dust must be cleaned from the hardware, in order to prevent defects caused by blockage of the parts of hardware. The supporting (bottom) rail must be kept clean at all times.

All movable parts and all closing points must be treated with oil or grease at least once a year. Do not use acid-based oil or grease!

Special care should be taken when maintaining the following parts:

- scissors, guide rail and locking pins



Adjusting sash pressure: The sash pressure on the frame can be set adjusting the pins.



1. Slide position



2. Tilt position

Moving handle down to six o'clock slide position



3. Closed position

Fully up closed position. Moving handle down to one 1/3 to tilt position

Bi-folding door



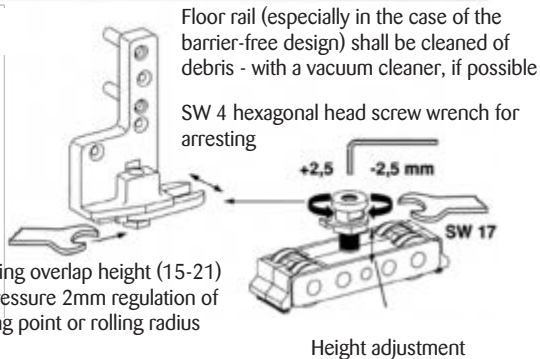
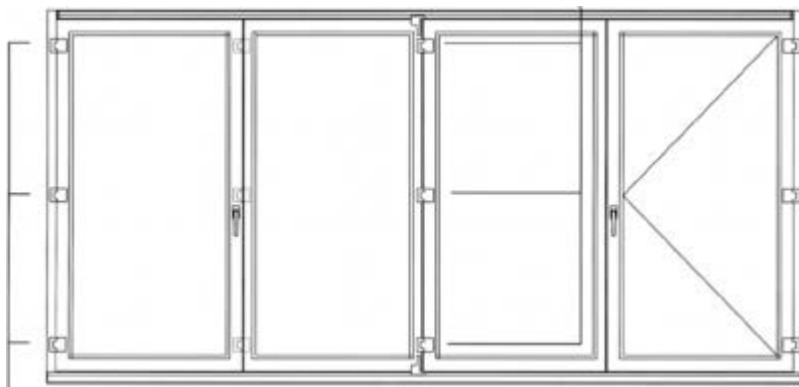
All adjustment of Bi-folding door is must be carried out by a professional approved by the manufacturer or the seller



All residual plaster, concrete and dust must be cleaned from the hardware, in order to prevent defects caused by blockage of the parts of hardware. The supporting (bottom) rail must be kept clean at all times. All movable parts and all closing points must be treated with oil or grease at least once a year. Do not use acid-based oil or grease!

Special care should be taken when maintaining the following parts:

- hinge with runner
- threshold track – channel required regular vacuum cleaning to remove dust and debris



For fully detailed instruction follow the manufacturer's documents available on www.uniwin.co.uk

Common panel layouts **CENTOR timber and CENTOR timber alu-clad**
Any panel combination up to 8 in each direction is possible

CODE	OPENING CONFIGURATION	HARDWARE
2L	WPS, PS not accessible from exterior 	1 x pivot set 1 x wall pivot set* 1 x right carrier set 1 x hinge set 2 x dropbolt or 1 x twinpoint lock
2L1R	WPS, PS WPS, PS 	2 x pivot set 2 x wall pivot set* 1 x right carrier set 1 x hinge set 2 x dropbolt or 1 x twinpoint lock
3L	WPS, PS ICS 	1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 2 x dropbolt or 1 x twinpoint lock
3L1R	WPS, PS ICS WPS, PS 	2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 4 x dropbolt
4L	WPS, PS ICS RCS not accessible from exterior 	1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x right carrier set 2 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
4L1R	WPS, PS ICS RCS WPS, PS 	2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x right carrier set 2 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
3L2R	WPS, PS ICS LCS WPS, PS 	2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x left carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
5L	WPS, PS ICS ICS 	1 x pivot set 1 x wall pivot set* 2 x intermediate carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
3L3R	WPS, PS ICS may be reversed ICS WPS, PS 	2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 2 x half offset hinge set 6 x dropbolt
7L	WPS, PS ICS ICS ICS 	1 x pivot set 1 x wall pivot set* 3 x intermediate carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
4L3R	WPS, PS ICS RCS ICS WPS, PS 	2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 1 x right carrier set 3 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
5L2R	WPS, PS ICS ICS LCS WPS, PS 	2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 1 x left carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
5L3R	WPS, PS ICS ICS ICS WPS, PS 	2 x pivot set 2 x wall pivot set* 3 x intermediate carrier set 1 x hinge set 2 x half offset hinge set 8 x dropbolt

*Wall Pivot Set recommended for doors over 4' 11" (1500mm) high and required for doors over 7' 4" (2250mm)

ROTO Patio hardware common panel layouts

DIAGRAM 330

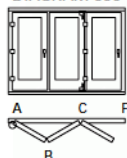
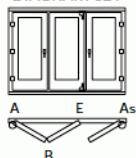


DIAGRAM 321



Example - Explanation of the numeric sequence

Quantity of sashes
that open to the left

DIAGRAM 532

Quantity of sashes
that open to the right

Sash total
quantity

DIAGRAM 431

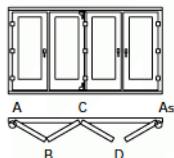


DIAGRAM 532

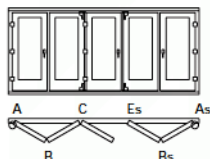


DIAGRAM 541

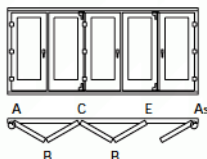


DIAGRAM 550

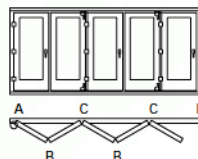


DIAGRAM 633

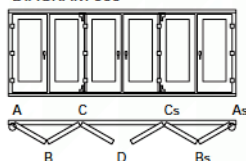
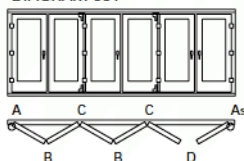


DIAGRAM 651



Only applicable on timber designs

DIAGRAM 743

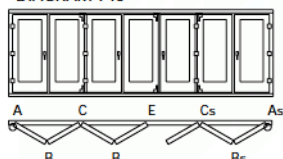


DIAGRAM 761

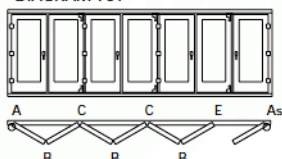


DIAGRAM 770

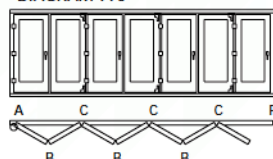
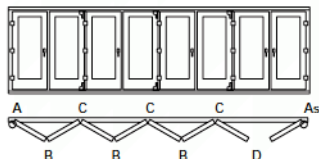


DIAGRAM 871



Protection, cleaning and maintenance of windows, doors and fittings

Protection prior to construction work and other activities

Before applying plaster, cover all frames, sashes, glazing and fittings with a plastic sheet. If you use adhesive tapes, choose those that are intended for acrylic paints; otherwise the coating may be damaged or stained with the adhesive, when tearing it off. The tapes must be removed within one week from their application; otherwise the paint may become damaged or stained with the adhesive.



Take extra care when protecting and covering timber windows, aluminium cladding, drip caps of timber windows, aluminium window sills. If the drip caps or drainage on alu-clad frame become stained with render during construction work, they must be cleaned and washed immediately with clear water; otherwise their surface finish will be damaged (etched) and warranty void.

Windows and doors fitted with aluminium cladding should be washed at least twice per year with clear water to avoid paint damage.



Contact with plaster, render, mortar or concrete mixtures may also cause damage to the surface finish and impair the functioning of all parts of windows, doors, glazing, sealing and wooden material. The products and their parts must not come into contact with petroleum products, organic solvents, acids, bases and other materials that may damage them. Take care that no debris and plaster enters the hardware and locks as this could lead to their malfunctioning.

The rules for the protection during construction work also apply to decoration and other activities.



If you use a grinder or another such tool emitting sparks near the windows and doors, cover the windows, doors and glazing entirely, so that they do not get burned and damaged.



Damage caused by incorrect protection, cleaning and maintenance of the products are not covered by the guarantee.

Cleaning after construction work



When the construction work is completed, remove all residual plaster, debris, mortar from windows, doors, glazing and sills immediately. Cleaning must be performed very carefully with sufficient amount of water. Never clean the products dry and do not use aggressive materials, solvents, acids, bases and abrasive agents. Do not perform mechanical cleaning to avoid damage to the surface finish.

Remove all plaster from the hardware paying special attention to the upper parts of sashes and frames, where it can be easily overlooked. Debris from masonry work and other soiling in the window and balcony door hardware and the entrance door lock may cause defective operation, premature wear and malfunctioning. It can also lead to blockage and damage of the hardware or lock, therefore keep it clean at all times. Hardware must be lubricated as needed using vaseline or other suitable lubricant (clear vaseline, silicon oil or another type of thin oil).



Do not use aggressive cleaning agents causing metal corrosion (bleach etc.) when cleaning hardware.



The adhesive tapes used for protecting windows and doors must be removed within one week from their application; otherwise the paint may become damaged or stained with the adhesive. Never use sharp or pointed tools for removing tape from windows and doors, as they could damage the product surface finish. Never use solvents or abrasive agents for removing residual adhesive, as they could damage the product surface finish.

If the window drainage holes or drip caps or drainage on alu-clad frame become filled with mortar, debris, plaster or dust it must be cleaned and unblocked immediately. Clean these and flush them with water occasionally.



Clean the glazing following the steps below.

Window and door frames and sashes stained with PU foam can only be cleaned mechanically by grinding and subsequent application of new surface finish. Glazing, drip caps and sills stained with PU foam can only be cleaned mechanically or replaced.

Perform inspection of the surface finish and its maintenance using maintenance agents supplied by the manufacturer or seller after the completion of building works and then at least twice a year after cleaning windows or doors (especially timber windows).

Cleaning and maintenance of windows and doors

Regular maintenance is fast and simple; it prevents major damage, ensures longer product life-time and lower frequency of their renovation. Clean windows, doors and fittings very carefully at least twice a year. Clean the surface of wooden windows, doors, glazing and fittings with clean water and common detergent.

Never clean the products and their parts dry and do not use aggressive materials, solvents, acids, bases and abrasive agents. Do not perform mechanical cleaning, so that the surface finish does not become damaged.

Remove dust and dirt from the sash edge hardware regularly, at least twice a year, and oil the hardware as needed. Do not use aggressive cleaning agents causing metal corrosion (bleach etc.), when cleaning edge hardware, splash-board and sills.

If the window drainage holes or drip caps or drainage on alu-clad frame become filled with mortar, debris, plaster or dust it must be cleaned and unblocked immediately.



We recommend that the windows and doors are treated with maintenance agents immediately after the completion of construction work and then at least twice a year (timber windows) after their cleaning.

This will contribute to a longer life-time of the surface finish.

To achieve a long life-time of our products it is necessary to check hardware, sealing and glazing silicon, perform regular maintenance and ensure proper ventilation. Thus you will achieve long-term high performance of the windows and doors.

We recommend that correct functioning of our products is checked at least once a year. If adjustment or repair is required, ensure of professional servicing will be provided and signed into maintenance manual or contact UNI WINDOWS Ltd. to arrange maintenance visit.

Glazing cleaning

Glazing labels must be removed immediately after the installation.

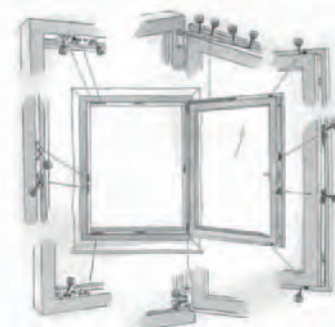
The first three cleans should be done only with clean water and then with an alcohol-based agent. De-greasing agents containing grease (Fairy washing up liquid, etc.) shall not be used, as grease spots may appear on glazing. After the first three cleans the common cleaning agents may be used.

Gaskets cleaning and protection

Clean the gaskets with clean water and detergent. After cleaning, lubricate the sealing with silicon oil and wipe off with a cloth.

Hardware lubrication

The window and door hardware includes three friction parts. All movable parts must be lubricated after previous cleaning of the hardware twice a year or as needed. Open the window, push the pin locking the handle and then turn the handle left right and lubricate all movable parts of hardware (see picture). In this way you can also lubricate concealed parts. Perform lubrication using suitable lubricant (clear vaseline, silicon oil or another type of thin oil). Make sure that when lubricating hardware no lubricant runs down the hardware surface staining the product surface. Wipe the excessive lubricant off with a dry cloth. When oiling hardware, do not use lubricants causing corrosion.




lubrication scheme




lubricating vaseline supplied and

Glazing replacement

If the glazing is broken or damaged in some way, it will be replaced at the customers cost. If any imperfections of glass falling under manufacturer's guarantee terms the glass will be supplied for free but the replacement service will be chargeable

 If glazing is broken or damaged in another way, it is not deemed a latent defect and such damage is not covered by the guarantee.

 Remove all product labels from the glazing after the installation

Manufacture of duplicate keys Our entrance doors are commonly delivered with a cylinder lock and three keys. Our company does not arrange for the manufacture of duplicate keys after the ordered windows and doors have been delivered.



FAB key



If the duplicate keys are made of soft metal, a part of theirs may break away and get stuck inside the cylinder lock. Consequent damage or blockage of the cylinder lock will not be acknowledged as a justified complaint. Therefore, only keys made of hard metal must be used.

Ventilation

Regular ventilation – reducing humidity – is necessary for correct functioning and long lifetime of windows. Proper ventilation protects coating against damage, wooden material against swelling and damage, hardware against corrosion and damage, masonry around the window or door against dampening, room corners against dampening, preventing also the generation of mould.



A clear evidence of insufficient ventilation is the generation of condensation on the inner side of glazing, frames and sashes.

Good ventilation is important mainly in rooms where water vapour (kitchen, bathroom, laundry or drying rooms) is formed. A significant source of humidity is also expired water vapour (an adult person produces 1-1.5 l of water a night). Humidity is also increased by cleaning and watering plants.

With respect to high window tightness it is recommended to perform sufficient ventilation 2-3 times a day and make use of micro-ventilation. Ventilation should take 5-10 minutes, but not longer, as excessive volume of humidity from the outdoor air might enter the room. Proper ventilation is also necessary when performing wet building processes (plastering, concrete pouring...), when installing our products in new builds, and when decorating and doing other construction work.

In winter, condensation also occurs in poorly heated rooms; therefore, it is necessary to heat and air a room, especially when condensation appears on the inner side of a window or a door. Dry air heats up more quickly; therefore, it absorbs humidity better, which reduces condensation on glazing.



Efficient and proper ventilation contributes to healthy indoor environment. Excessive ventilation causes heat dissipation and heat loss, while insufficient ventilation cannot ensure the required air exchange.



With the relative interior humidity of over 60 % paint destabilization occurs.



The guarantee does not cover generation of condensation and subsequent damage, as it is a standard physical phenomenon depending on the local conditions.

VAPOUR SOURCE

BATHROOM

While are you having a bath there is 1.2 litres of water vapour produced each time.

While having a shower it is 1.6 litres.



VAPOUR SOURCE

KITCHEN

Dishwashers produce 0.15 - 0.25 litres of water vapour per wash.

Washing machines produce 0.22 - .04 litres of water vapour per wash.

Vapour produced whilst cooking is 0.45 - 1 litre each hour.



VAPOUR SOURCE

Bedroom

One person produces about 1 litre of water vapour per night.



VAPOUR SOURCE

Livingroom

One person generates 0.05 - 0.2 litres of water vapour per hour, depending on activity.

Bigger houseplants produce 0.02 - 0.03 litres of water vapour per hour.



Glazing condensation and its prevention

In cold weather, condensation of the inner side of glazing may occur on windows and doors of all types. Water vapour generated in the house cannot leak out due to high window tightness and it condenses on the coldest spot. This is usually a window or a door, regardless of its glazing. This often happens in old damp houses and flats, new buildings, and poorly heated rooms with high humidity. **Condensation can also occur on the outer glazing surface**, which is also caused by water vapour condensing on cold glazing. This phenomenon can be discovered at double glazing and triple glazing with improved insulation properties, when the outer glazing is not warmed up by interior heat dissipation.

Glazing condensation can be prevented or reduced in several ways:

- Intensive ventilation 2-3 times a day (5-10 minutes),
- Blinds must be pulled up so that the circulating air can reach the glazing,
- Air circulation must not be obstructed by curtains (i.e. these must be short),
- Air circulation must not be obstructed by a window sill (i.e. it must not cover the radiator),
- A radiator should be installed under the window so that warm air rising upwards dries the glazing,
- No source of humidity (e.g. flower-pot) shall be placed on the window sill,
- Reduction of possible sources of humidity in the room and/or house,
- Increase of the interior temperature (warm air can absorb more humidity),
- Use an extractor fan in the kitchen when cooking.



The guarantee does not cover generation of condensation and subsequent damage as it is a standard physical phenomenon depending on the local conditions.

Surface finish maintenance

Surface treatment of windows and doors carried out in the factory provides only limited protection. Varnished wooden parts of windows and doors must be maintained as needed and protected against environmental conditions.

Minor damages and micro-cracks appearing on the surface are caused, for instance, by hailing or mechanical damage. If this occurs, water can penetrate under the surface finish. This kind of damage of soft wood is manifested by blue-stain.

Traces of hailing on a wooden window after one year of weathering:

Fig. 1: Without the application of Pfl egemilch maintenance emulsion. Water penetrates through the micro-cracks and damage is caused by humidity and micro-organisms.



Fig. 1

Fig. 2: With the application of Pfl egemilch maintenance emulsion.

The micro-cracks are sealed completely and water cannot reach the wood.



Fig. 2

UNI WINDOWS Ltd. can provide service set of agents from manufacturer. With regular and correct application of these agents you can prolong the surface finish life-time as well as the interval of the doors and windows renovation.



The service set is only intended for use on UNI WIN windows and cannot be used for other products!



The 36-48 months surface finish guarantee applies only if the agents from the service set are used.

Cleaning emulsion

The cleaning emulsion is used for the removal of impurities which cannot be cleaned with water and common detergents. It is applied on the wood surfaces with a cloth and the dissolved impurities are wiped off.

service set



removing impurities using the supplied cleansing agent

Preservative milk

Preservative milk is intended especially for the treatment of wooden surfaces of products with glazing paint finish exposed to the elements. Preservative milk penetrates the surface finish and seals all pores in the paint film. It prevents water intrusion and protects the product against the weather effects. The surface treatment keeps water off, which also reduces the staining of the surface. Thus the surface is preserved and its gloss is renewed.

The application of preservative milk prolongs the lifetime of water-borne paints as well as the interval of the product renovation. Preservative milk is applied on the exterior surface of sashes and frames at the maximum wood surface temperature of 20° C. Ambient temperature must not be below 5° C. During its application, the frame and sash must not be exposed to direct sun. When treating larger areas, the preservative milk may be mixed with water

in the ratio of 1:1 and applied with a cloth, enclosed sponge or fine brush. The time of the preservative milk drying after its application is about one hour. Following the application a protective film is created, sealing all microscopic cracks. Surfaces treated in this way are not to be polished.



surface treatment

Damaged paint repair

Due to the action of mechanical impurities present in the air, solar radiation and other effects the surface layer of the finish thins out. In order to maintain optimum and durable surface finish of wooden frames and sashes of windows and doors, the owner shall perform regular maintenance. This is carried out twice a year, in spring and autumn, with the use of special agents from the service set (available on request from seller or manufacturer). The protective coating must not be mechanically damaged so that humidity does not reach wood. If the paint is damaged, the affected spot must be treated and covered with a sufficient layer of paint. If surface damage is discovered, paint must be repaired as soon as possible. This will prevent further damage and make the repair easier.

The repair shall always be carried out in a dust-free environment. Never apply paint on silicon, hardware, sealing and drainage drip caps.



Damage to paint (surface finish) caused by environmental effects is not a defect covered by the guarantee. Paint (surface finish) repair and renovation is not a service provided within the guarantee period.

For all paint work for timber and timber alu-clad use only Sigma coatings water-borne prime paints. We can supply same paint if larger surfaces need to be painted.

Basic treatment

Basic treatment is to ensure wood protection. It contains active substances protecting wood against pests, mould and fungi.



packing of basic treatment and acrylic varnish

Acrylic varnish

Acrylic varnish forms paint protecting wooden parts against environmental conditions and humidity.

Repair of minor damages:

In the case of minor damage to the paint surface, i.e. the surface layer is damaged, wood remains unaffected (fine scratches, etc.) and the repair is carried out immediately, the following procedure is recommended: clean the damaged spot and grind it with fine sand paper or sponge of grit size 280. Dust the spot off and apply the paint. It is recommended that several layers are applied (usually 2 - 3 layers with the interval of 30 minutes and at the temperature between + 5° C and +20° C), until the colour corresponds with the colour

of the surrounding area. Fine brushes suitable for acrylic paints should be used. If the paint is damaged on several spots, we recommend that at least one final paint layer is applied on the entire area from one corner to the other. Make sure that the colour corresponds with the other treated surfaces.

Surface finish renovation

The recommended interval for varnish paint renovation is 5-15 years according to the respective environmental and local conditions. Varnish renovation is usually carried out on the exterior surfaces. If the interior surface finish is also damaged, repair it in the same way.



When renovating paint, the old paint does not have to be removed prior to renovation, as there are no uneven layers of old residual paint. Surface finish renovation procedure: clean and wash doors and windows, grind them with sand paper or sponge of grit size 280 so that grey spots disappear.

Take care when sanding edges. Remove the dust from all surfaces. Two layers of base treatment shall be first applied on the spots damaged or ground to bare wood. When the base treatment dries, apply the paint in two layers at an interval of 6 hours. Spots ground to bare wood must first be treated with one or more layers of paint, and only then paint may be applied on the entire surface to ensure uniform colour.

External work around windows and doors

When the installation is completed, the window reveal, lining and bedding must be finished. In order to avoid that the guarantee is rendered null and void, the door and window frames must be concealed in the exterior facade within 6 months at the latest so that outdoor humidity does not penetrate wood, thus damaging it.



External finishing work is not part of the installation and has to be ordered and paid for separately.

Prior to external finishing work, all windows, doors and fittings must be covered and protected.



Do not pull the installation wedges or packers out, do not open or use the windows and doors until the PU foam hardens. The PU foam can be trimmed off and the external finishing work can be performed only when the PU foam has hardened.

Here are a few tips for performing external finishing work:

- When carrying out external finishing work, remember that the windows and doors must not be soiled, the glazing and outdoor aluminium window sills must not be scratched, and the blinds and their mechanisms must not be damaged; mind the hardware and locks must be kept clean all the time otherwise can impair their functioning.
- Never remove the any screws, bolts, fixing brackets, anchoring features and do not pull out any installation packers wedges and supports as they bear the weight of the windows and doors,
- Pull out only the top installation wedges and fill the openings with PU foam,
- Trim hardened PU foam off,
- Clean (remove dust from) the reveal and the base plate, and moisten or penetrate it so that plaster and/or concrete adheres well,
- Cover the windows, doors, blinds and outdoor window sills and remove the screens so that these are not soiled or damaged during the finishing works,
- Apply concrete or mortar under external window sill up to requested height for fitting of the sills
- Prepare/brick/concrete support for the indoor window sill according to the height of the sill to be installed,
- When performing finishing work at the entrance door, make sure that concrete is laid below the aluminium doorstep so that it does not sag,
- After the completion of finishing work, clean and wash all parts and remove dust from the hardware groove, blinds and other parts with a vacuum cleaner and wet cloth.

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NOTES

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