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# **Congratulations on your new elements from Sparwindows**

Sparwindows started 1975 as JNA in Denmark and from the beginning it has focused on producing and delivering quality products at competitive prices. From a one-man business, Sparwindows has grown into a sound corporation with several hundred committed employees.

For us, it is important to put the customer first. That is why we skip all middlemen and dealers, so that you buy directly from our own factories. This ensures better service and quality. We offer high quality at competitive prices.

For the optimal experience of your new elements, it is important to follow the installation instructions in this manual. When in doubt about the installation of elements, please contact us. Otherwise, errors in installation may lead to problems in the operation of windows or doors. Problems due to incorrect installation are not covered by the warranty.

For the optimal lifetime of your elements, it is important that hardware, sealing strips and rebates are cleaned after installation. Also ensure that all elements to be opened are correctly adjusted and that any surface damage is repaired.

To get the most out of your new elements, it is important to maintain and lubricate new windows and doors carefully. This instruction manual describes how to do this, including advice on ventilation and thus a good indoor climate.

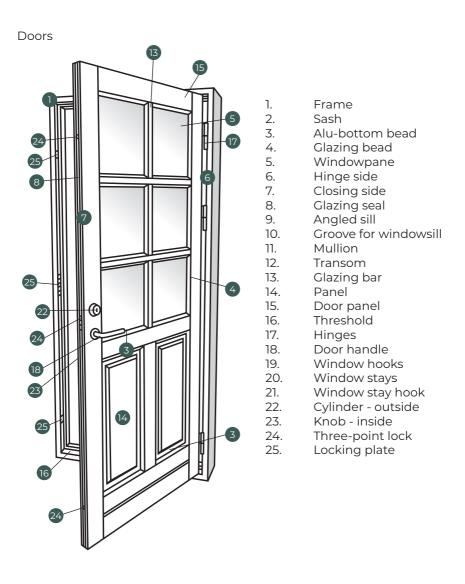
Thank you for trusting our windows and doors. We hope you will enjoy your new products. It is important that you contact us with any problems so that we can help you, but also so that we can improve our service and products.

We strive to give you the best experience as a customer. We can only guarantee this if we receive your feedback. Email: info@sparwindows.co.uk

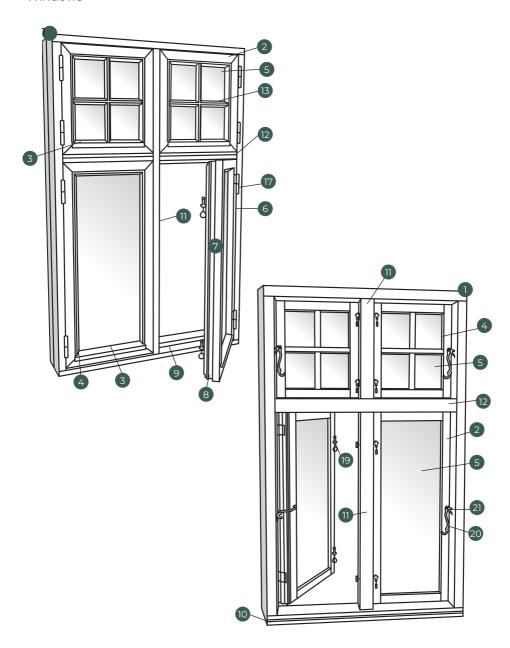
Kind regards, Sparwindows

## **Technical terms**

To make it easier to understand this manual, we have illustrated the most used technical terms below.



# Windows



# **Delivery**

Upon delivery, please check that the elements match the order confirmation and are free of defects.

In case of any transport damage or defects, please fill in our complaint form at https://www.sparwindows.co.uk/claims/, no later than 24 hours after the delivery has taken place.

Telephone: 0178 473 0790 Email: info@sparwindows.co.uk

Any transport damage must be reported to the driver and noted on the waybill.

Please note: delivery will be made to the curb side.

When goods with visible damage or defects are installed, the goods are considered approved and the right of cancellation lapses.

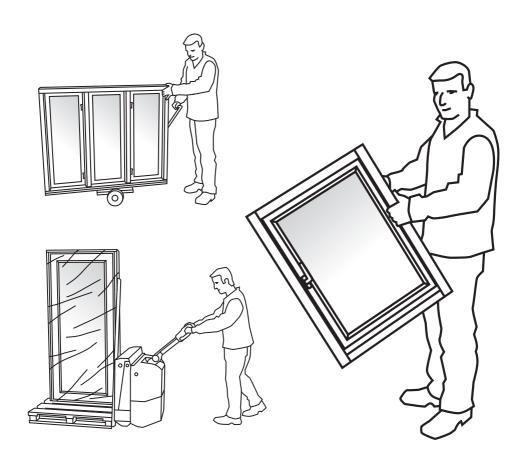
It is important that you contact us in case of problems so that we can help you, but also so that we have the opportunity to improve our service and products. We strive to give you the best experience as a customer. We can only guarantee this if we receive feedback. Email: info@Sparwindows.nl

# Storage

The elements should be stored on a level surface, free from moisture and dirt. If the elements are stored outside, they should be protected from precipitation and dirt by a good cover. Ensure good ventilation of the elements. Also ensure that the elements cannot fall due to wind gusts. If the elements are stored under cover for more than 2 months, this can cause problems with the glass or frame.

# Lifting and moving

In general, all lifting operations should be carried out safely so that there is no risk of personal injury or damage to the elements. Lifting and moving can be done with various types of forklift trucks, levers, mounted lifting brackets such as suction cups, trolley etc. Elements weighing less than 30 kg can be lifted at the lintel. Lifting on rods is not permitted. Doors with an aluminium threshold may not be transported with a hand truck unless there are slats or plywood between the threshold and the hand truck.



## Maintenance, cleaning, and lubrication of hinges

For all Sparwindows products, there are some general guidelines for maintenance, cleaning, and lubrication of moving parts. These guidelines must be met to maintain the warranty. Regardless of the type of windows and doors you have ordered, general maintenance should always be carried out, including cleaning, lubrication and checking of sealing strips and glazing bars. Here, the following is a guideline, but in case of damage, maintenance should obviously be carried out immediately.

### Cleaning:

Initial cleaning after installation should always be done with ample water. Depending on the orientation and position in the house, the frames will always be slightly dirty. The frames should be cleaned regularly, normally in conjunction with the cleaning of the glass itself. Clean the window frames with water and a suitable, sulphate-free, mild pH-neutral cleaning agent (car shampoo is suitable). Dry the window frames thoroughly.

### Sealing strips and glazing beads:

At least once a year, sealing strips and glazing beads should be inspected. In the case of sealing strips, check that their retention in grooves and sealing plane/position are in order so that they still fulfil their function. For most types of elements, it is a relatively simple operation to remove and reinstall sealing strips. If possible, this should always be done in connection with the maintenance of any surface treatment. Sealing strips and glazing beads must not be painted over and should be covered.

Glazing beads should be checked to ensure that the positioning and compression is still intact, and corner joints should be tight so that the tightness is maintained. Compression of glazing beads is best checked with a thin blade, where there should be resistance when inserting between the glass and glazing bead.

#### Lubrication:

Lubricate all moving parts of the hinges and hardware at least once a year. If the windows are exposed to the elements more than usual, for example in coastal areas, we recommend more frequent lubrication. In extreme weather conditions, it may also be necessary to replace the hardware after a few years.

All moving parts at hinges, latches, and nail connections at, for example, pivot hardware should be lubricated. It is important to keep all moving parts clean, and to keep all guides free of oil and dirt. Moving parts should not be painted over.

After cleaning, lubricate the moving parts with acid-free oil. This can be done with an oil can, a spray can or a spray can with a hose. Movable joints

between metal and a plastic frame should be lubricated with a special lubricant according to the supplier's instructions, or with stearin.

#### Maintenance:

The lifespan of the surface treatment, for example the paint, of the window frames depends partly on your location and how exposed the frames are to sun, wind, and moisture. It is always necessary to check your windows and doors regularly and maintain them if necessary. Wood should always be cared for when it is no longer water repellent or when holes or cracks appear in the surface treatment (paint or varnish). If the surface treatment is damaged, moisture can penetrate the element, which can damage the wood.

We recommend the following maintenance:

- Remove peeling paint and resin.
- Remove resin with alcohol or green soap on a soft cloth.
- Wash with water with washing-up liquid or ammonia.
- Sand the surface with fine sandpaper.
- Prime bare wood with a primer, such as Sikkens exterior primer.
- Cover sealing strips and glazing beads so that they are not painted over.
- Paint with water- or alkyd-based paint/varnish, such as Pinotex Superdec.

# Installation and fixing

Sparwindows elements should never be used as load-bearing elements. They should also never be under load from other building elements. Sparwindows is not responsible for static calculations regarding wind loads. Correct installation of Sparwindows is a prerequisite for the trouble-free operation and optimum durability of the elements and for maintaining the product warranty. Installation and fixing should be carried out according to the illustrations below. The distance between two fixing points should not exceed 800 mm:

中 Fixation with fixed support Fixing without support Additional support blocks



#### Windows:

For windows less than 1000 mm high, fixing in the centre of the jambs can be omitted. For windows less than 1000 mm high, fixing in the lower and upper transom can be omitted. When windows with multiple compartments are installed, they should be fitted with an attachment point under the vertical mullions.



#### Doors:

The upper and lower fastening should be fitted as close as possible to the hinges. Multi-part doors with or without intermediate posts should additionally have at least one fixing point in the upper and lower frame. On doors with vertical posts, fixing points should be placed below the vertical posts. One of the screws in the hinge can be replaced by a mounting screw.



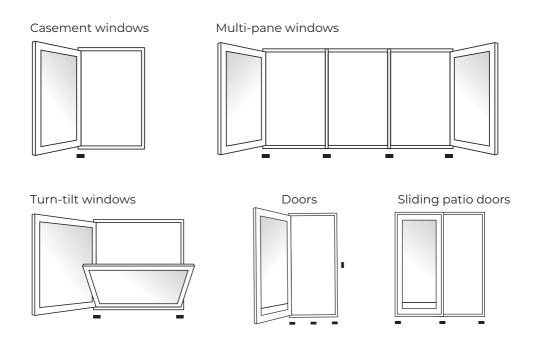
#### Sliding doors:

Do not use fixing points with fixed support for the lintel. There must be at least 10 mm between the top of the frame and the guide due to possible deflections of the guide. Furthermore, mortar-based joints should not be used due to possible deflections.

#### Additional support blocks:

The support blocks and installation base should be of sufficient size to allow space for jointing material on the inside and outside. The area should not be less than 25 cm2 and should consist of pressure-resistant material such as water-resistant plywood, Masonite or masonry.

On doors, an additional support block should always be fitted behind the striker plate as additional protection against burglary. Sills should be supported at the sides and in the middle. For aluminium sills, the distance between support blocks should be a maximum of 200 mm.







Connection of several wooden elements. The distance between the elements must be at least 10 mm. The elements are joined at several points, corresponding to the fastening in the other element. Additional supporting blocks are placed under the joined frames and the lower and upper transom are fixed (fastened into the wall) as close to the joint as possible.

Joining of multiple timber/aluminium elements. The distance between the elements must be at least 10 mm. The elements are joined at several points, corresponding to the fastening in the other element. Additional supporting blocks are placed under the joined frames and the upper and lower transoms are fixed (fastened into the wall) as close to the joint as possible.



Fasten the elements with appropriate fasteners, depending on the substrate. Frame screws/dowels are normally inserted into the frame rebate. For fixed frames (windows that do not open), frame screws can be inserted into the frame.



Fastening should take place in the frame rebate wherever possible.



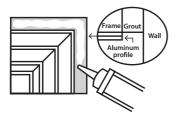
Fixing into the wall should be done with special frame brackets, which support the horizontal and vertical force. After fixing, the elements are fixed to the façade as described.

# Grouting

When filling the insulation material, it is important not to press the joint too hard. This is because it risks warping the window frames.

Industry-approved grouting materials can be used for Sparwindows elements. Never use grouts with lime/cement mortar for wood/aluminium elements.

It is important for both the woodwork of the element and for heat utilisation that the joints are intact. Therefore, the joints should be inspected at least once a year and any leaks or damage repaired with the same grouting material. In case of major leaks or damage, the entire joint should be replaced.

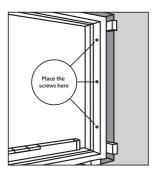


Remember that the grout should ALWAYS be placed in the wooden part and not in the aluminium. Grouting the aluminium part restricts ventilation and can lead to moisture accumulation between the wood and the aluminium.

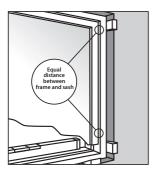
### Installation of windows



- 1. Remove the existing window and frame. Clean the wall cavity to ensure no sealant residue and the like remain.
- 2. Place the frame in the window about 3-5 cm from the front of the wall.
- 3. Secure the frame with wedges so that the distance between the frame and the window is even all around. The lower sill should be water level. Place the wedges between the frame and the wall so that there is equal space between the frame and the studs everywhere.



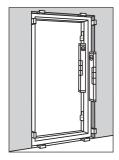
- 4. Screw the frame to the wall at the top corners with frame screws. Then replace the sash.
- 5. Screw the frame into the wall with frame screws all around. Place the frame screws close to the support blocks.
- 6. Once the frame is screwed in, grout the frame with insulating material. It is important not to press the grout too hard so that the frame bends. Joint in such a way that the front of the joint is about 1 cm from the windowsill, about 2 cm for wood/aluminium elements.

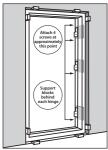


7. Joint the frame externally with a diffusion-open sealant.

See also chapter Installation and fixing

### Installation of doors









- 1. Suspend the door panel. Ensure that the lower sill and side post are level and place support blocks all around. It is important that there is a maximum of 40 cm. between support blocks, otherwise the lower sill may break. By placing support blocks, ensure that the hinge side is level.
- 2. Place support blocks between the frame and masonry at the hinges (hinge side) and locking plate (closing side) and install the frame screws as shown.
- 3. Replace the door panel and carefully close the door. CAUTION! Before the frame is permanently screwed in, check that the door plate hangs perpendicularly when closing and therefore the distance between the door plate and the frame is the same at the top and bottom. If there is a difference, the frame must be repositioned.
- 4. Once the frame is screwed in, grout the frame with insulating material. It is important not to press the grout too hard so that the frame bends. Joint in such a way that the front of the joint is about 1 cm from the windowsill, about 2 cm for wood/aluminium elements.
- 5. Join the frame externally with a diffusion-open sealant.

See also chapter installation and fixing

## Installation of double glazing

Double glazing should be installed correctly with support blocks. The function of support blocks is to support the glazing, fix it, and support the distance between the frame and the window. In general, support blocks should not block drainage and ventilation.

Supporting blocks should be made of a mould-resistant material that cannot absorb moisture. Support blocks made of plastic should have a hardness of 70-95 IRHD.

The depth of the support blocks should be equal to the depth of the window plus mounting tape.

There are 3 types of support blocks, each with its own function:



#### Bearing block

Bearing blocks should always be used. Bearing blocks distribute the load between the pane and the rebate and contribute to the stability of the element as a whole.

The distance to the corner of the element should always be greater than 50 mm.

If the frame is supported by only 1 block, as in the case of turn-tilt windows, the block should be 100 mm long for elements under 2 m2 and 200 mm for larger elements.



#### Control block

Control blocks guarantee the distance between the frame and the rebate. The distance to the corner of the element must always exceed 50 mm.



#### Support block

Support blocks can be used as required to ensure the operation of the fittings and the centring of the elements during transport and use.

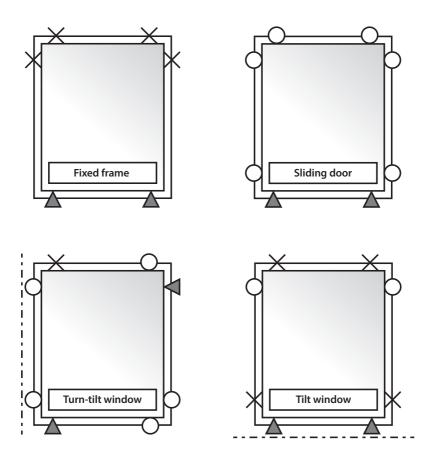
The block should be 50 mm long for elements under 2 m2 and 100 mm for larger elements.

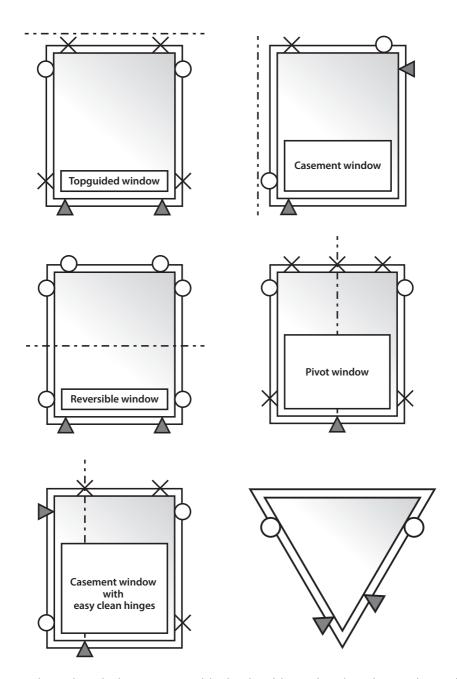
The minimum distance between rebate and frame is 4 mm.

With a sloping lower sill, the support blocks should be positioned so that the window rests on a horizontal surface.

Bearing blocks must be able to support the load on the lower sill without risk of tilting and/or deformation.

The support blocks must be placed in the prescribed positions to fulfil their function. No nails, screws or dowels may be used to hold the support blocks in place in such a way that the window may be damaged. The positioning of the blocks must not block the function of sealing strips.





For triangular windows, support blocks should NOT be placed opposite each other.

#### Ventilation

It is well known that new windows these days are considerably tighter than older windows. This means that these windows are less draughty, which makes systematic ventilation important. In fact, old, drafty windows continuously ventilate your home, but with this, heat is also lost.

New windows, new habits - now it's up to you to make sure your home is well ventilated. It is a common myth that thorough ventilation is expensive. The fact is that new air heats up significantly faster than old air, you just need to ventilate properly.

Open a window or door all the way, preferably so that there is a draft. This will completely replace the old, hot, humid indoor air with fresh, cold, dry outdoor air in about 10 minutes. Brief ventilation keeps furniture, floors, and walls from cooling. As a result, the energy loss is so small that it is almost imperceptible. In new buildings, ventilation is particularly important. Ventilation should be carried out a few times a day. For example, in bedrooms and bathrooms in the morning, so that the old damp air of the night is replaced. And, for example, in the other rooms of the house in the evening.

By airing a few times a day, you contribute to a healthy and comfortable indoor climate for you and your family.

Ventilation is especially important in new buildings. Building moisture from walls and floors can easily linger in the structure for up to 2 years.

#### Condensation on windows

In most cases, condensation is a sign of a lack of ventilation. The cause depends on where the condensation is: on the inside, the outside or between the layers of glass.

#### Condensation on the inside of the window

If the window fogs up on the inside, it is a clear sign that the relative humidity in the house is too high. To prevent this, you need to ventilate. Otherwise, there is a risk of mould and moisture damage and a poor, unhealthy indoor climate. See the Ventilation section for more information on ventilation.

### Condensation on the outside of the window

If the window fogs up on the outside, this is a sign that the window is an HR window and that it is functioning as it should.

In certain types of weather, usually with rapid temperature changes such as night frost, a window may fog up in the morning hours because the outside of the window is colder than the outside air. This creates condensation. The condensation disappears on its own as soon as the air temperature rises. This is due to the structure of the glass itself. The inner glass layer has a thin, almost invisible coating that reflects heat back into the house. Moreover, the space between the glass layers is filled with argon, which prevents the heat from the inner glass from heating up the outer glass. Therefore, the outside of the window may be colder than the outside air. With older double-glazing, without a coating, much more heat escapes through the pane.

### Condensation between the panes

If there is moisture between the glass layers of double or triple glazing, it is most likely leaking and needs to be replaced.

# Finger-joined timber

For our production of wooden elements, we use finger-jointed wood. This means that we cut all large knots out of the wood, after which it is re-finger-joined with a so-called finger joint to prevent knots from showing through the lacquer. Finger jointed wood is more stable and the finger joint itself is more resistant to breakage than the surrounding wood.

Wood is a living material, which works over the years. The wood structure may therefore be more or less visible, depending on humidity.

Resin may leak from the wood. That can be remedied in the following way:

- Take a soft cloth soaked in spirit and rub away the resin. Then wash with clean water.
- Crystallised hard can be removed with a hard brush or can be scraped away.

Be careful not to rub too hard when removing the resin, as this may damage the paint.

If the painted surface is damaged during resin removal, sand the area with fine sandpaper and apply new paint with a soft brush or roller.

### Warranty

For information on our warranty, visit our website www.sparwindows.co.uk.



# **Tophung window:**

Top hung windows have a fixed pivot point at the top of the the window. When opening, the lower part of the frame is pushed out, while the sash is held at the top at its original level. Windows are usually equipped sliding bar/window holder, to maintain the the position of the frame corresponding the number of holes in the sliding bar.



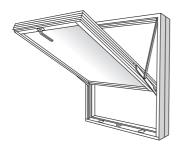
# **Topguided windows:**

Topguided windows have a sliding fitting between frame and sash at the top of the sash. When opened, the lower part of the frame slides out, while the upper part slides down slightly. The window is operated by a handle in the centre of the sash.

When opened, the window can be placed in the ventilation position, with the window fixed open 1-2 cm.

When opened further, the window is controlled by friction brakes in the hardware. The brake function can be set in the upper part of the bracket in the hardware. Make sure the friction is equal on both sides.

N.B. the hardware is not resistant to strong winds.



### **Reversible windows:**

Reversible windows feature sliding hardware between the frame and the sash. When opened, the bottom of the window is pushed out, while the top part slides down. This allows the window to be fully rotated, making it easy to clean.

The window is operated with a handle in the centre of the window. When opened, the sash can be held in the ventilation position, creating an opening of 1-2 cm.

Reversible windows can be fitted with a window safety device so that the window does not open more than 10 cm. To open the sash further, unlock the window security with the hardware between the frame and sash. When the sash is fully turned, it is locked in the cleaning position. The cleaning position must be released to return the sash to its normal position.

The window can be opened to any desired position but has no friction brakes so it cannot withstand wind and the like.

The window cannot be fixed at a larger opening than the 1-2 cm ventilation position.



### **Casement windows:**

Casement windows are available with two types of locking hardware. Casement windows with window hooks are also fitted with a window stay to keep the window in the open position, matching the number of openings in the window stay on the hinge side. N.B. the window stay is not resistant to strong winds.

Casement windows with normal window handles are operated by the handles located on the frame opposite the hinge side. In the open position, the window is operated by a friction brake, which is activated by turning the handle to the closed position at the desired opening. N.B. the hardware is not resistant to strong winds.



# Double side hung windows:

Side-hung windows are fitted with sliding fittings at the top and bottom, whereby the frame opens and rotates approximately 90 degrees so that the outside of the pane can be from the inside.

The frame is operated either with crank handles, or with handles located on the side frame.

The friction can hold the frame in any position. N.b. The friction cannot secure the frame's position under greater wind loads.

Side hung windows are delivered without a brake. There is only the friction that the fitting itself has.



### **Turn-tilt windows:**

Turn-tilt windows always open inwards. It is a window that can either turn (with hinges in the side post) or tilt (with hinges in the bottom). Because the window can turn inwards, it can be easily cleaned from the inside. The tilting position is very suitable for ventilation.

The window is operated with a handle in the side of the sash. When closed, the handle is turned downwards. The turn function is used by turning the handle to the horizontal position, the tilt function is used by turning the handle to the vertical position.

When fully opened in the tilt position, there is an opening of about 10 cm at the top, depending on the size of the frame.



#### Front doors:

Front doors can be supplied either exterior or interior.

Front doors are supplied with a three-point locking system. The middle locking point is active when the handle is operated normally.

The upper and lower locking points are activated by lifting the handle, after which the door can be locked (handle-operated locking).

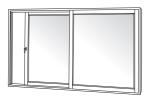
We supply both glazed and panelled front doors.



### Patio doors:

Patio doors can be supplied either outward or inward opening. Patio doors are supplied with a three-point locking system. All locking points are activated simultaneously by turning the handle.

Additional, crank-operated, friction hardware can be installed. This is activated by turning the handle downwards when the desired position is reached. The friction fitting can hold the door in any desired position. N.B. the friction fitting is not resistant to strong winds.



### Sliding doors:

Lift-and-slide doors consist of a fixed and a sliding (sliding) part.

Turning the handle lifts up the sliding section. This releases it from the lower rail and allows it to slide along the fixed part. When closing and locking, make sure the door handle is back in the vertical position (locking position).



### **Double doors:**

Double doors can be supplied opening outwards or inwards. Double doors are also available as French doors.

Operation is similar to the operation of a front door or patio door, see the section Front door or Patio doors.

The passive door is equipped with a sliding bolt, which can be activated by pulling up the pin on the sliding bolt. The sliding bolt can only be operated when the active door is open and is placed in the rebate of the active door.

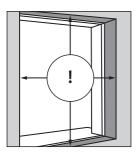
N.B. 100% watertightness cannot be expected for inward-opening doors. This also applies to double doors that are particularly exposed to wind and weather, e.g. on the first floor or higher.

# Measuring

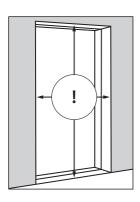
#### Window/door:

- 1. Measure the width and height of the opening in the wall remember to measure in several places in case the wall is crooked.
- 2. Subtract 2-3 cm from both measurements for the grout and insulation
- this will give you the outer size of the window frame, or the exterior dimension.
- 3. If the window is crooked, make sure the grout is at least 1 cm at its narrowest. Note discrepancies in the brickwork and any sills under the windows.

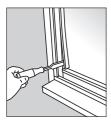
We always state the sizes of windows and doors in external dimensions.



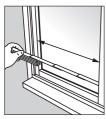
The new window or door should be 2-3 cm smaller than the distance from brick to brick.



#### Glass:



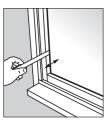
Use a wide chisel to loosen the glazing beads from the frame. Be careful not to scratch the frame.



Once the two side slats are removed, measure the width later from edge to edge of the frame (rebate measurement). Subtract 8 mm to arrive at the width of the pane you need to order (glass size).



With the top and bottom bars removed, measure the height tightly from edge to edge (rebate size). Subtract 8 mm from the rebate size to arrive at the correct height of the pane (glass size).



Finally, measure the depth of the rebate (rebate depth). You are now ready to order your new windowpane.

Remember that we always state the glass size in quotations and order confirmations.

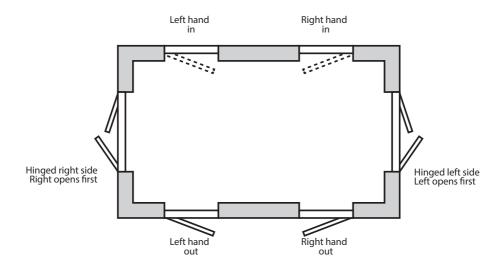
# **Opening directon**

When ordering windows and doors, it is extremely important to correctly indicate the direction of rotation.

The rotation direction is always indicated from the opening side. That is, if the element opens inwards, the element is described as opening inwards. If the hinges are then mounted on the left side, the element is described as inside opening on the left.

If the element opens outwards, it is described as outward opening.

Right hand out = hinges located on the right side, seen from outside
Left hand out = hinges located on the left side, seen from outside
Right hand in = hinges located on the right side, seen from inside
Left hand in = hinges located on the left side, seen from inside



Note: Our drawings are shown from the outside. Inward-turning elements are indicated by a dotted line, and outward-turning elements are indicated by a continuous line.

### **Feedback**

We want you, our customer, to have a good experience with us. If your windows or doors do not meet your expectations, or if there is anything else we need to know about your experience with Sparwindows, we would like to hear from you.

It is important for us to get feedback so that we can help you as a customer, but also so that we can improve our service in the future.

Please feel free to write to us at info@sparwindows.co.uk



