

# INSTALLATION GUIDE

for timber and alu clad bi-folding doors



- ▶ **Parts included may exceed the quantity required for your particular installation.**
- ▶ **Do not unscrew the door from the pallet until you have read this manual.**

### Parts included:

- ✓ Bi-folding door unit
- ✓ Screws
- ✓ Plastic plugs, 14 mm
- ✓ Adhesive gasket
- ✓ Glazing blocks in various colours
- ✓ Glazing beads
- ✓ Rubber gasket (timber doors)
- ✓ Plastic clips

### Tools needed for the installation:

- Laser level
- Measuring tape
- Drill
- Bits
- Crowbar
- Rubber hammer
- Nail gun (timber doors)
- Plastic blocks / wedges
- String
- Silicone
- Vacuum lifters
- Glazing shovel:



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## 1. PRIOR TO INSTALLATION

### 1.1. INSPECTION UPON RECEIPT

The products must be inspected upon receipt. Any damages and items missing from the delivery manifest must be immediately specified on the delivery note by the receiver. Any other visible defects must be brought to the attention of the place of purchase directly on delivery and before the installation, though no later than 5 days after receipt of delivery.

### 1.2. STORAGE

Store the door indoors or under a roof:

- Protect the door against rainfall and dirt.
- The storage area must be well-ventilated.
- The door must be stored upright on a level surface with clearance between the door and the surface to protect against moisture.

### CAUTION

If the products are stored outside under a tarpaulin, this must only be temporary for a short period. Ensure that the area beneath the tarpaulin is well-ventilated.

## 2. GENERAL INFORMATION FOR INSTALLATION

### 2.1. INSPECT ROUGH OPENING

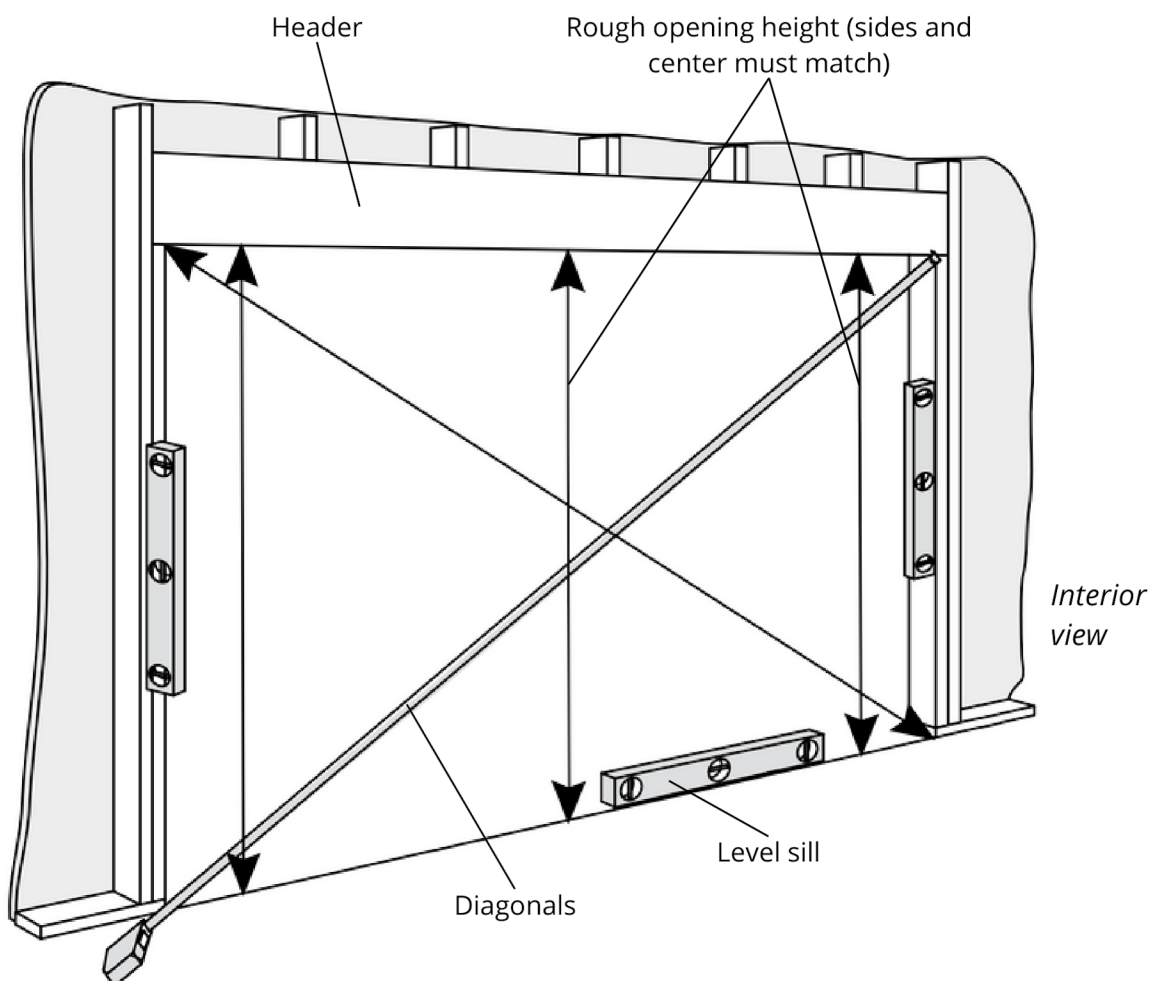
- The optimal perimeter gap between the frame and wall is 10 - 15 mm.
- Verify that the rough opening is square. The opening is square if the diagonals are identical. The difference in diagonals should be no greater than 5 mm.
- Verify that the sill is level. Use plastic shims to level the sill if needed.
- Verify that the header/lintel is level. Measure the height of the rough opening at the sides and in the centre. Measurements must be the same.

#### **WARNING**

The folding door must not be subjected to load/deflection from the header/wall construction above.

#### **CAUTION**

Deviations to the rough opening must be corrected before installing the door.

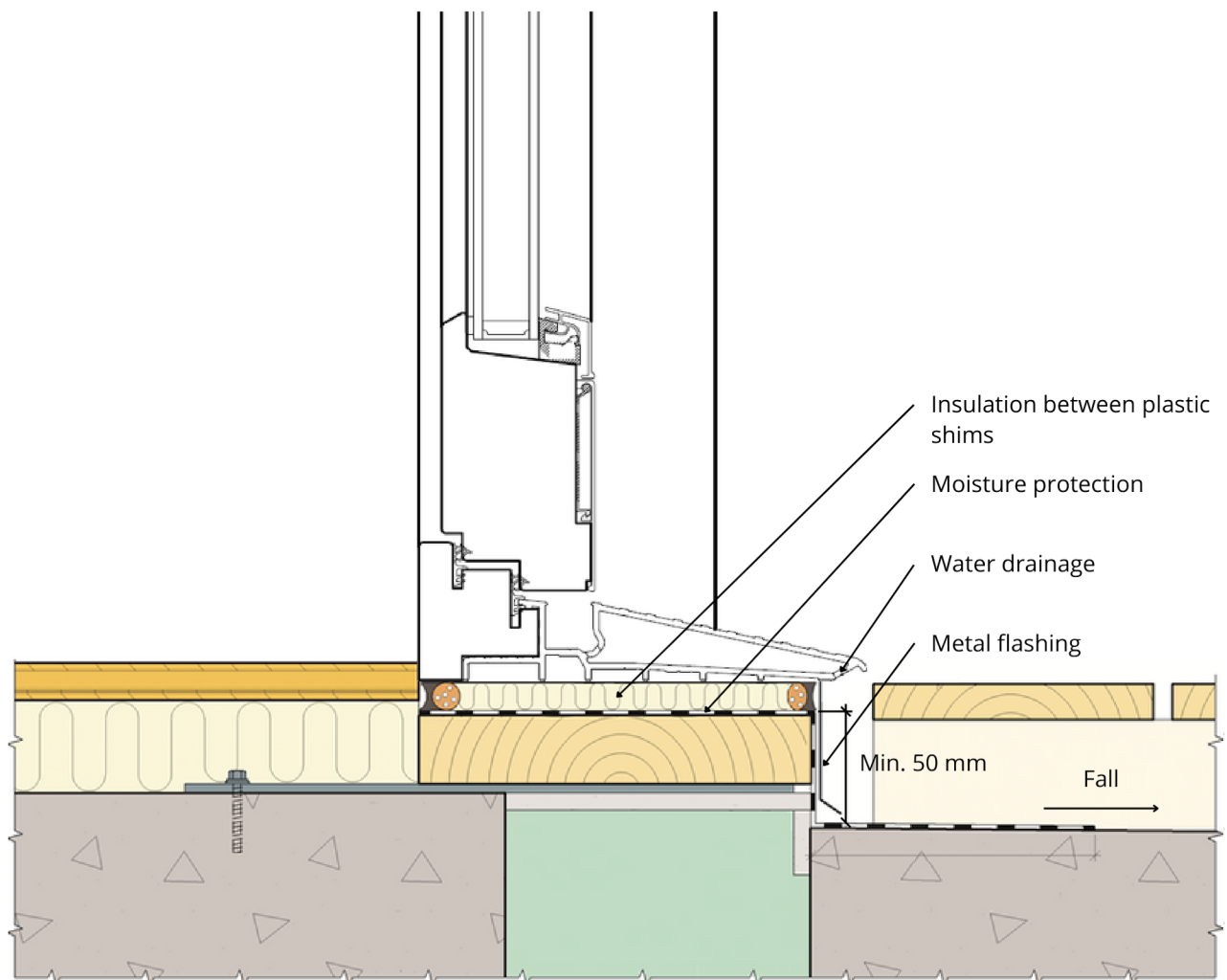


## 2.2. PREPARE ROUGH OPENING

- The door must be installed in the warm part of the wall.
- Carefully consider the design of the opening to minimise the possible ingress of water. Refer to the illustration below.

### CAUTION

Protect against water ingress through the sill. We recommend installing moisture protection on top of the sill and raising 100 mm on each side of the opening.



### 3. INSTALL FRAME

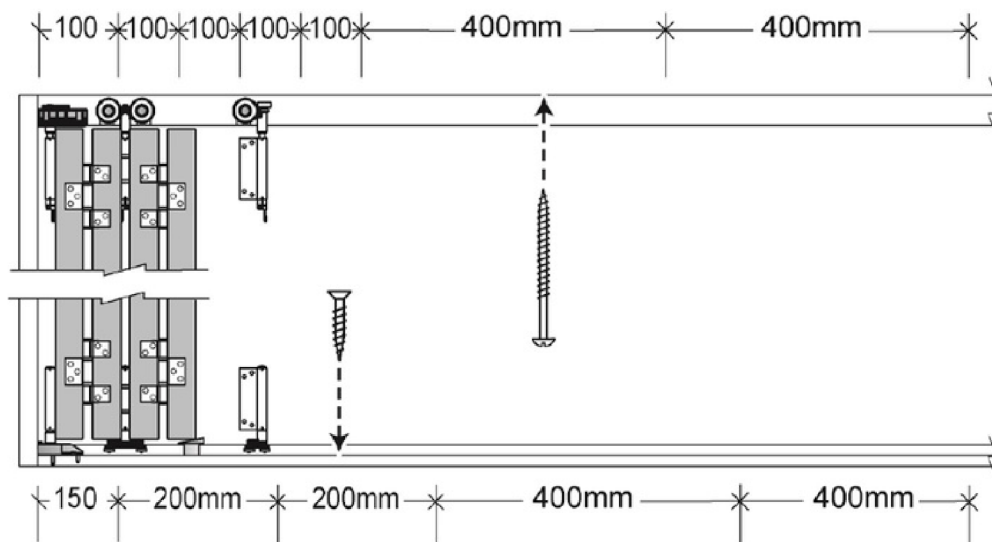
#### ⚠ WARNING

The doors are heavy. Use safe lifting techniques and a reasonable number of people with enough strength to lift the door and to avoid injury and/or product damage.

#### ⚠ WARNING

Make sure that the door cannot fall out of the rough opening during installation. Place supports on both sides of the opening after the door is lifted into the opening.

1. Place blocks of durable material on the sill max. 100 mm from the sides and for every 400 mm along the remaining width. The blocks must create a space between the threshold and sill of min. 10 mm.
2. Verify that the blocks create a level foundation for the threshold.
3. Unscrew the frame from the pallet and lift it into the rough opening. Ensure that the frame cannot fall out by fixing support to both sides of the opening. The support must not block the panels from opening.
4. Centre the frame in the rough opening. Use a crowbar if needed.
5. Insert blocks as needed behind the pre-drilled holes in the side frames. Use a laser level to check the side frames for plumb.
6. Carefully open the panels and fix the side frames through the pre-drilled holes. Each side frame will have 4-5 pre-drilled holes depending on the door height. Ensure that the frame remains plumb while fixing.
7. Place a string along the interior side of the threshold. The string is used to verify that the threshold remains straight while fixing.
8. Fix the threshold through the pre-drilled holes. Use the string as a reference to ensure that it does not bend inwards or outwards (i.e. banana-shaped).
9. Fix the top frame through the pre-drilled holes with screws of proper size. Place a string along the top frame and ensure that it remains straight while fixing. Use a laser level or measuring tape and tighten the screws until **the top frame bends 2-3 mm up in the centre compared to the sides. This is important in case the header deflects over time.** The screws will be situated closer to each other on the side the panels move to. Do not insert blocks between the top frame and header to allow for later adjustments. Only use flexible types of insulation between the frame and rough opening.



## 4. GLAZING

### IMPORTANT

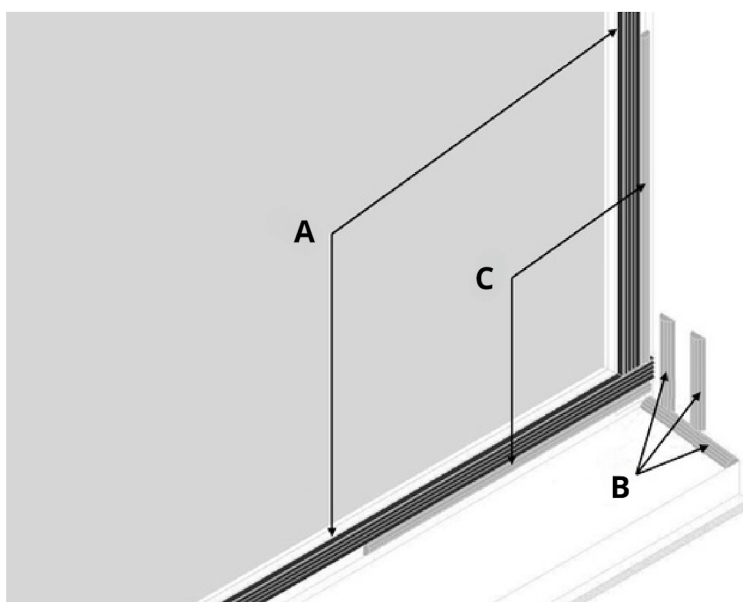
Always start glazing the panel that is hinged to the frame. Glazing should only be performed after the frame is installed and the panels are closed.

### CAUTION

The glasses must be packed correctly for the folding door to operate as it should. Failure to place the glazing blocks correctly will affect product performance.

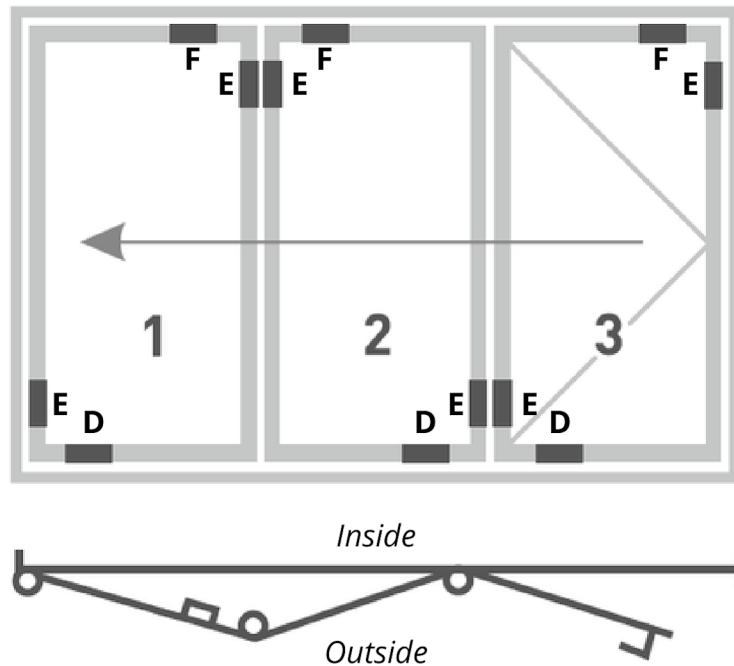
### 4.1. PREPARE FOR GLAZING

1. Close the panels, clean the glass rebate and wipe off excess water/moisture.
2. Stick the self-adhesive black gasket (4x9 mm) to the glass rebate (A). Avoid gaps in the corners where the gaskets meet.
3. Apply silicone to the bottom corners of the glass rebate, between the horizontal and vertical parts of the panel (B).
4. Apply adhesive sealant (e.g. Tech-7) to all four corners of the glass rebate, with a length of approx. 100 mm in horizontal and vertical directions (C). The string thickness must be min. 4 mm to come in contact with the glass unit and seal the corners.



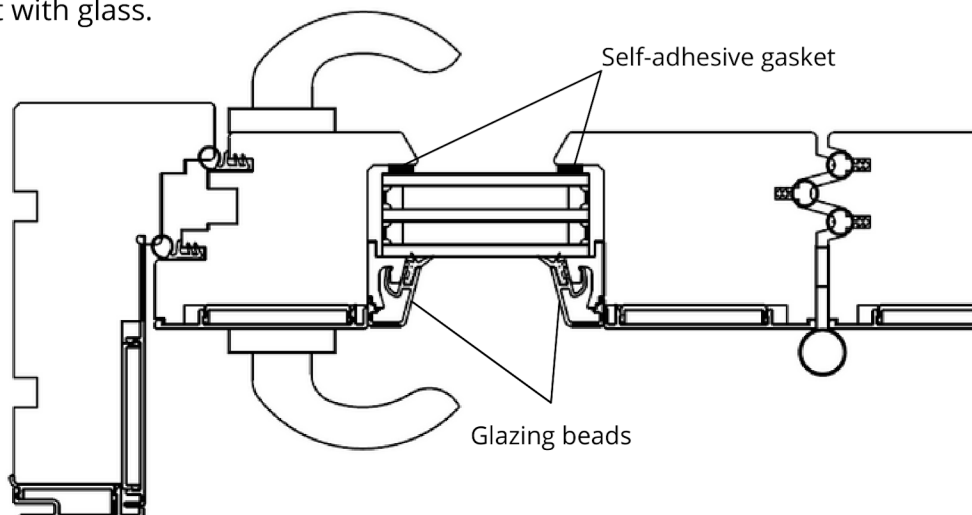
### 4.2. INSTALL GLASS

1. Start glazing the panel hinged to the frame (1 - 2 - 3). Refer to drawing on next page.
2. Place the angled glazing block (blue) on the bottom glass rebate approx. 100 mm from the corner with the thickest side out (D). **Note:** Place a temporary glazing block (green) in the opposite corner. It must be removed after inserting the two next glazing blocks (E).
3. Find the label on the glass unit to determine the external side.
4. Use vacuum lifters to lift the glass unit into the panel with the correct side facing out.
5. Insert glazing blocks with 5 mm thickness (green) on the vertical sides of the glass (E). Use a glass shovel. Push the glass properly against the self-adhesive gasket.
6. Insert a glazing block of 5 mm thickness (green) on top of the glass (F). Use a glass shovel to create space for the glazing blocks. Verify that the gap between the panel and the top frame is identical in both corners. Insert/remove glazing blocks as needed. By placing glazing blocks in this way, the panel is tensioned diagonally so the weight of the glass is transferred towards the threshold when the panels are in open position.



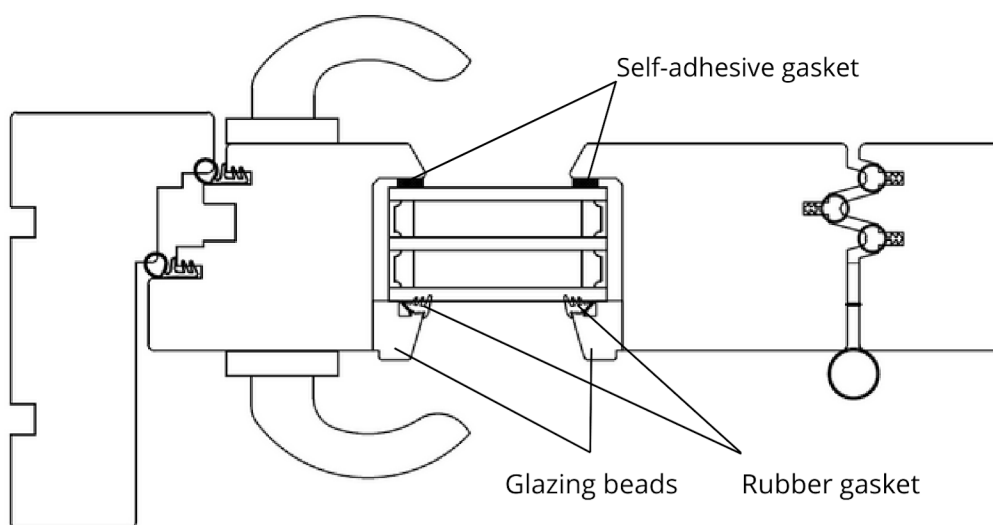
### 4.3. DOORS WITH ALU CLADDING: INSTALL GLAZING BEADS

1. Fix the smallest clips with the straight underside to the top glass rebate with the included screws. Press the clips firmly towards the glass to compress the self-adhesive gasket on the inside. Place clips 40 - 50 mm from the corners and for every 120 - 150 mm of the remaining length.
2. Fix the largest clips to the bottom glass rebate with the included screws. Press the clips firmly towards the glass to compress the self-adhesive gasket on the inside. Place clips 40 - 50 mm from the corners and for every 120 - 150 mm of the remaining length.
3. Click the short glazing beads in place. **Note:** *The tallest glazing bead is at the bottom.* Place the glazing beads over the clips and push them onto clips from the front. Carefully hit them with a rubber hammer or wooden block to engage the clips.
4. Fix equal clips as in the top to the sides of the glass rebate. Press the clips firmly towards the glass. Place clips 30 - 40 mm from the top and bottom glazing beads and every 120 - 150 mm of the remaining height.
5. Click the long glazing beads in place with the same technique as described in point 3.
6. When all glazing beads are in place, carefully hit them with a wooden block or rubber hammer to ensure that they are engaged in the clips and that the rubber gaskets are in contact with glass.



#### 4.4. DOORS IN TIMBER: INSTALL GLAZING BEADS

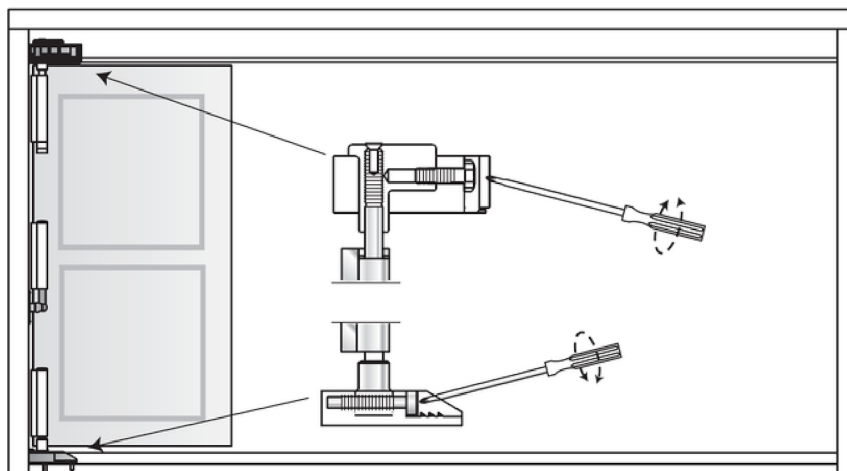
1. Fix the short wooden glazing bead to the top of the glass rebate. See the drawing below to determine the correct direction. Press the glazing bead firmly towards the glass while fixing to compress the self-adhesive gasket on the inside. Use a nail gun or nails and hammer for fixing.
2. Fix the clips to the bottom glass rebate with a nail gun or nails and hammer. Firmly push the thin edge against the glass. Place clips 40 - 50 mm from the corners and for every 120 - 150 mm of the remaining length.
3. Install the aluminium glazing bead at the bottom. Place the glazing bead over the clips and push it onto the clips from the front. Carefully hit it with a rubber hammer or wooden block to engage the clips and ensure that the rubber gasket is in contact with the glass.
4. Fix the long glazing beads to the sides of the glass rebate with the same technique as described in point 1.
5. Open the included black rubber gasket along the middle. Push the rubber gasket into the gap between the glazing beads and glass. Start with the top before continuing with the sides. Apply a few drops of super glue at the ends to secure it.



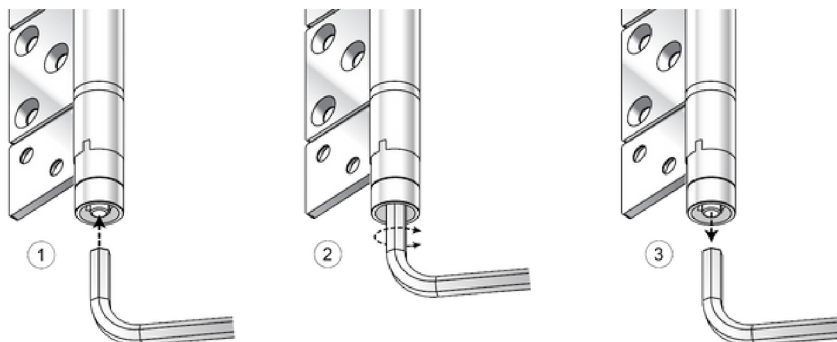
## 5. ADJUSTMENTS

It might be necessary to adjust the door after installation to ensure that the panels and lock are easy to operate. The panels are adjustable in horizontal and vertical directions:

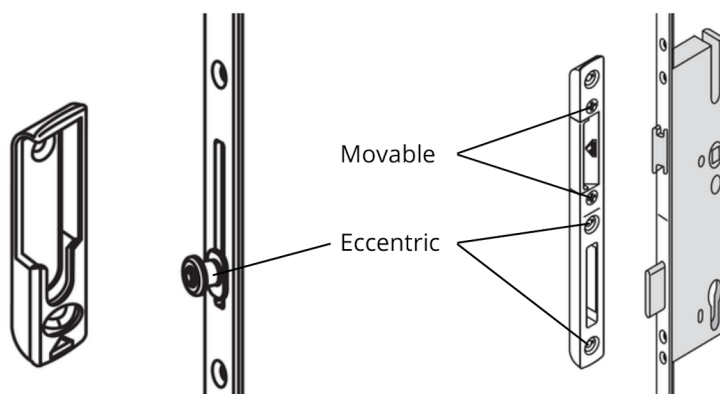
- **Horizontal direction:** The panels can be moved +/- 5 mm sideways by winding the upper and lower hinges fixed to the side frame with a Phillips screwdriver. Turn counter-clockwise to move the panels closer to the frame. Turn clockwise to move the panels from the frame.



- **Vertical direction:** To raise or lower the panels, insert an 8 mm Allen key into the upper hinges on the exterior side and press in the spring-loaded pin to wind up or down. Once adjusted, the new setting is locked into place as the Allen key is removed.



- **Lock (handle and cylinder):** The handle must be lifted to engage the cylinder lock. If high force is required to lift the handle the locking pins on the espagnolette must be adjusted. The locking pins are eccentric and can be moved in or out by turning them with an Allen key.





## 6. FINAL INSPECTION

- Clean and clear the tracks of debris.
- Test the folding door and perform necessary adjustments if it is not operating efficiently.
- Insert the included plastic plugs into the pre-drilled holes.
- Insulate around the frame with flexible types of insulation.
- Clean the glasses with mild soap to remove dirt and stickers. Do not use metal tools to remove dirt from the glass.

## 7. MAINTENANCE

- Remove snow and ice from the threshold during wintertime.
- Doors without aluminium cladding must be controlled yearly. Apply paint as needed.
- Rubber gaskets and sealings must not be painted.
- The threshold must be oiled every year with oil intended for hardwood. It is oiled at the factory before delivery.
- Moving parts should be lubricated with oil once a year.
- Worn or damaged areas must be surface treated as fast as possible.
- Do not use metal tools to clean the glass.

