

Avoid damage caused by corrosion and debris :

Corrosive materials, dirt and moisture may damage hardware components and cause hazards.

- Do not use acetic or acid-releasing sealants.
- Do not use the hardware components in environments where the air contains aggressive or corrosive components.
- Keep all rebates free of debris and dirt, especially cement and plaster residue.
- Keep the hardware dry.

Clean hardware gently

Only clean the hardware with a soft cloth and mild, diluted pH-neutral cleaning agents.

- The hardware must not be exposed to abrasive cleaners or aggressive, acidic cleaning agents.
- Leave the hardware to dry after the cleaning process.

Maintenance and adjustment of windows ironmongery:

- Check that all safety-relevant hardware components are secure and check for wear.
- Check that the hinge pins are pushed in all the way to the stop. If this is not the case, push them upwards all the way to the stop by hand and secure them with the corresponding safety screws (according to the hardware)!

- Check for loose fixing screws and check that the handle is secure. Tighten loose fixing screws using an appropriate tool. Attention: Do not overtighten the screws!
- Replace any worn/defective hardware components or over-tightened screws as soon as possible!
- Grease or oil all movable hardware components and all locking points. Use only acid-free and resin-free oil or grease.
- Use a grease spray on the movable parts in the window sash and spray into all openings in the hardware. Then move the hardware into position several times until the grease is distributed.
- Wipe off any excess oil or grease. Grease the striker plates in the window frame using a firm grease (consistency class 2 according to DIN 51818) in those places where the locking cam engages with the striker plate

Maintenance, cleaning and surface protection

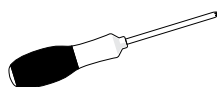
- Remove any stains or spills immediately because they could impair functioning and damage the surface protection of the hardware.
- Use only mild, pH-neutral, diluted cleaning agents.
- Never use sharp objects, abrasives or aggressive cleaning agents (such as vinegar or acidic cleaning agents) as they could damage the corrosion protection of the hardware.
- When cleaning, ensure that no water runs into the hardware.
- Dry the hardware thoroughly after cleaning and oil the surface with a non-acidic and non-resinous oil by wiping it with an oil-impregnated cloth.

Adjustment tools:



6

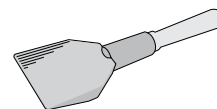
6 mm hexagon
screwdriver/key



Screwdriver



Mastic



Glass adjustment tool

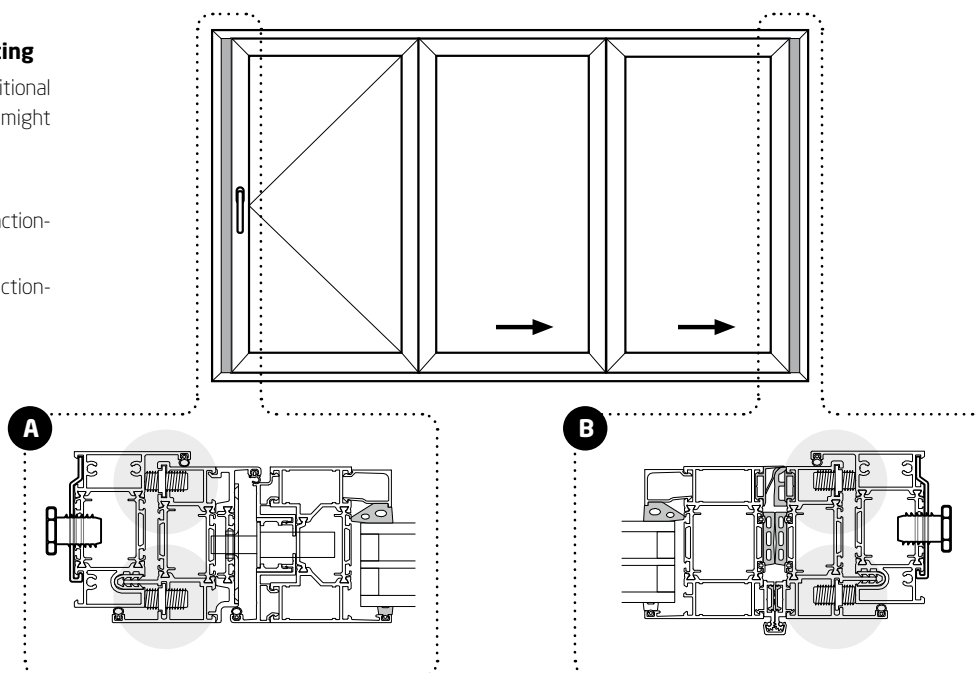
Method 1

Sash adjustment by assembly fitting

If sashes do not close/locks properly, additional frame profiles on the right and left side might be adjusted.

A - Adjustment applies on handle side functioning for configurations 330, 550, 660

B - Adjustment applies on both sides functioning for configurations 431, 633, 651

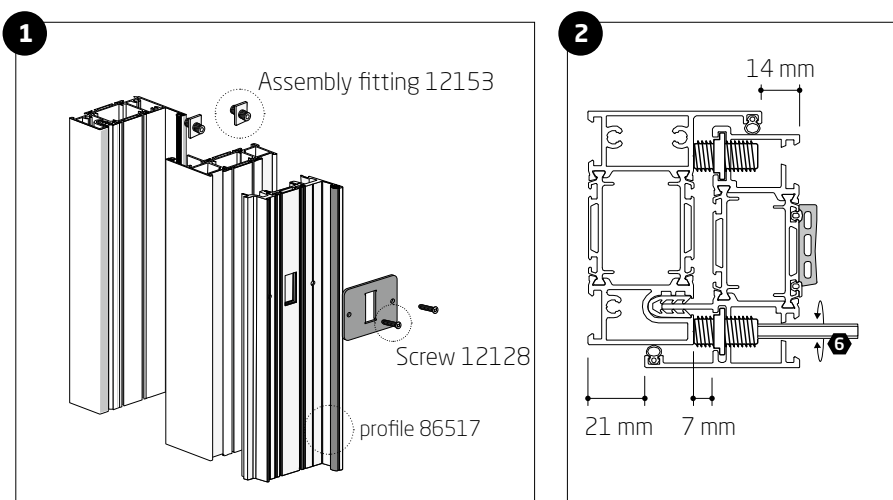


Method 1A - adjustment handle side

Step 1.1A Unscrew 12128 screws holding the striking plate and screws out of additional frame (rebate) profile 86517 (turn anticlockwise) with a help of a screwdriver. See 1.

Step 1.2A Adjust assembly fitting 12153 with a help of 6 mm Hexagonal screwdriver, See 2. Standard distance between frame and additional frame profile is 7 mm. This distance can be reduced or increased in order to achieve desired goal.

Step 1.3A Screw back screws to additional profile and fix back the striking plate with 12128 screws (turn clockwise) in to the places with the help a of a screwdriver.



Method 1B - adjustment hinge side

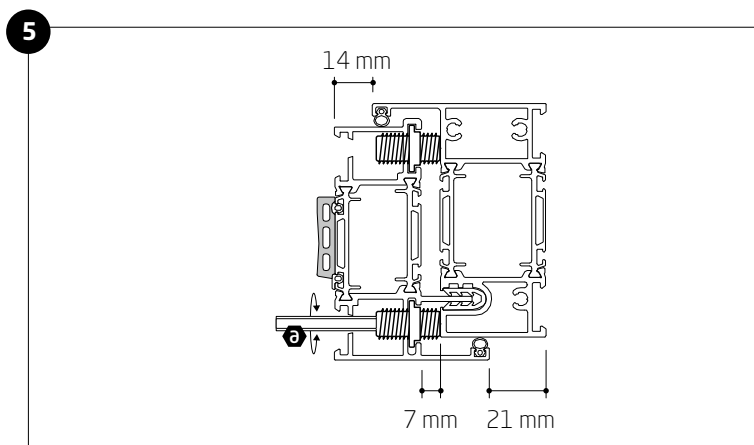
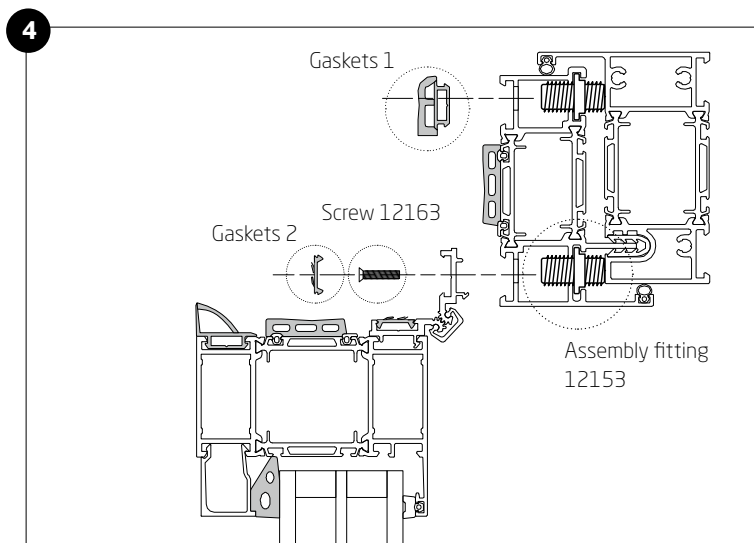
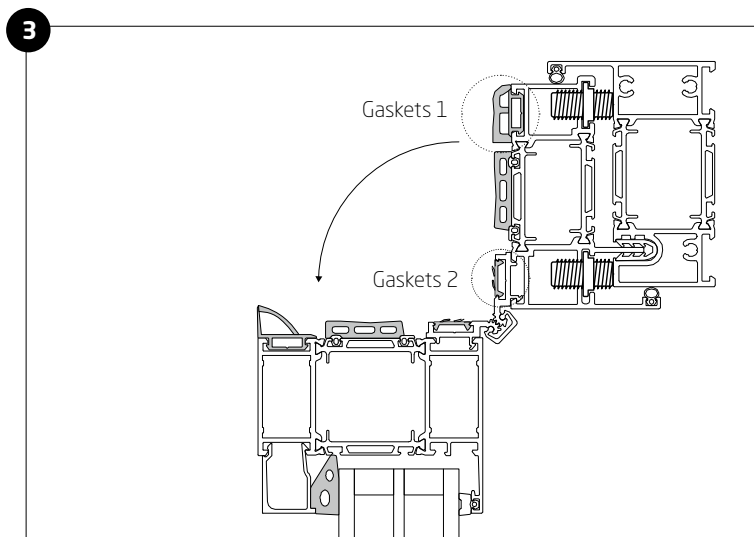
Step 1.1B Open sashes and remove both continuous gaskets (1) and (2), See 3.

Step 1.2B Unscrew continuous hinge with 12163 screws in order to adjust assembly fitting 12153, See 4.

NB! Before unscrewing the hinge support the sash in order to avoid bending/falling.

Step 1.3B Adjust assembly fitting 12153 with a help of 6 mm Hexagonal screwdriver, See 5. Standard distance between frame and additional frame profile is 7 mm. This distance can be reduced or increased in order to achieve desired goal.

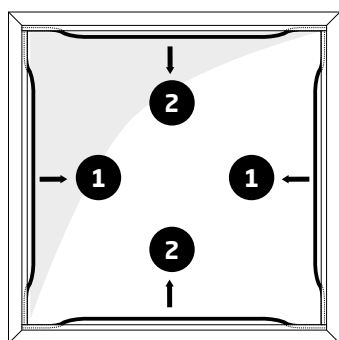
Step 1.4B Screw back screws to hinge and fitt the gaskets in place.



Method 2

Sash adjustment by leveling glass

If the sash does not open/close properly, you may need to adjust leveling of glass units by inserting extra spacer distances plates. Add it if needed (Extra distance plates will not be included from factory).

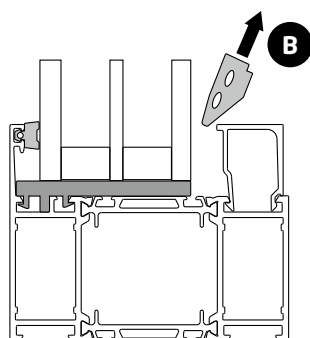
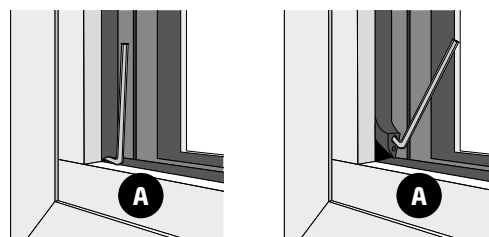


Step 2.1 First remove the vertical gaskets and vertical glass lists (one by one).

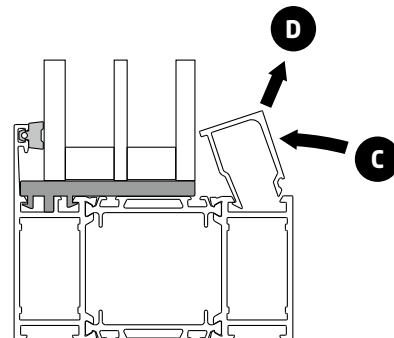
Step 2.2 Afterwards remove the horizontal gaskets and glass lists (one by one).

Gaskets/glasslists removal

A. Insert Hexagonal key in the corner. Pull out the glazing gasket from the corner.



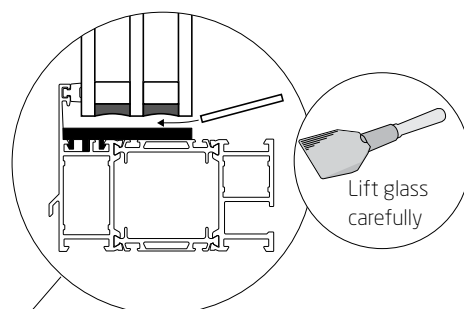
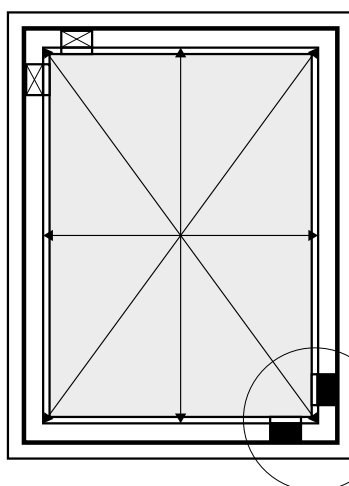
B. Take out glazing gasket by hand.






C. Push glazing list forward to the glass unit in order to free up glazing list

D. Take it out.

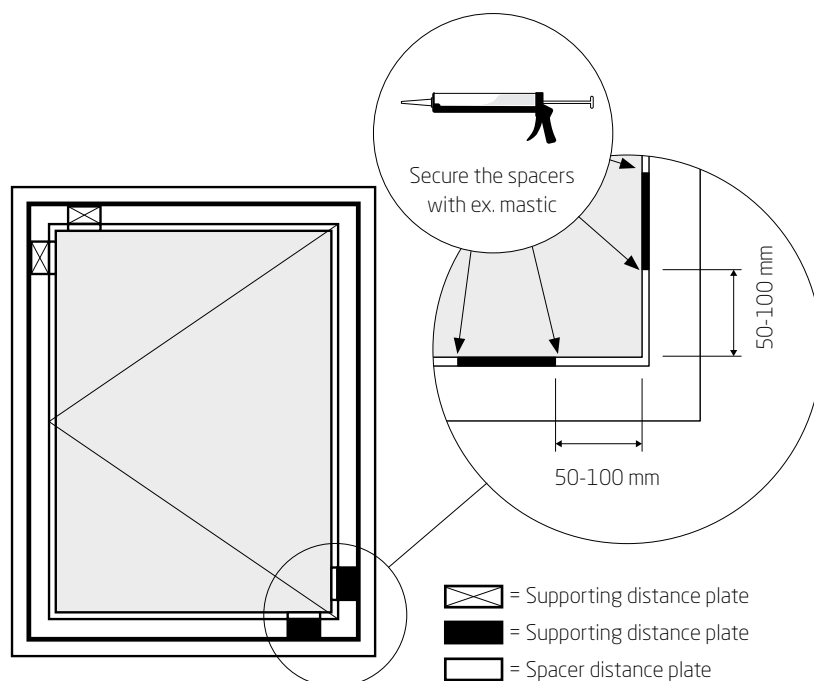
Step 2.3 To adjust the sash, add spacerplates until the diagonals of the sash is exactly the same. Be care full to not break the glas unit while inserting the spacers.



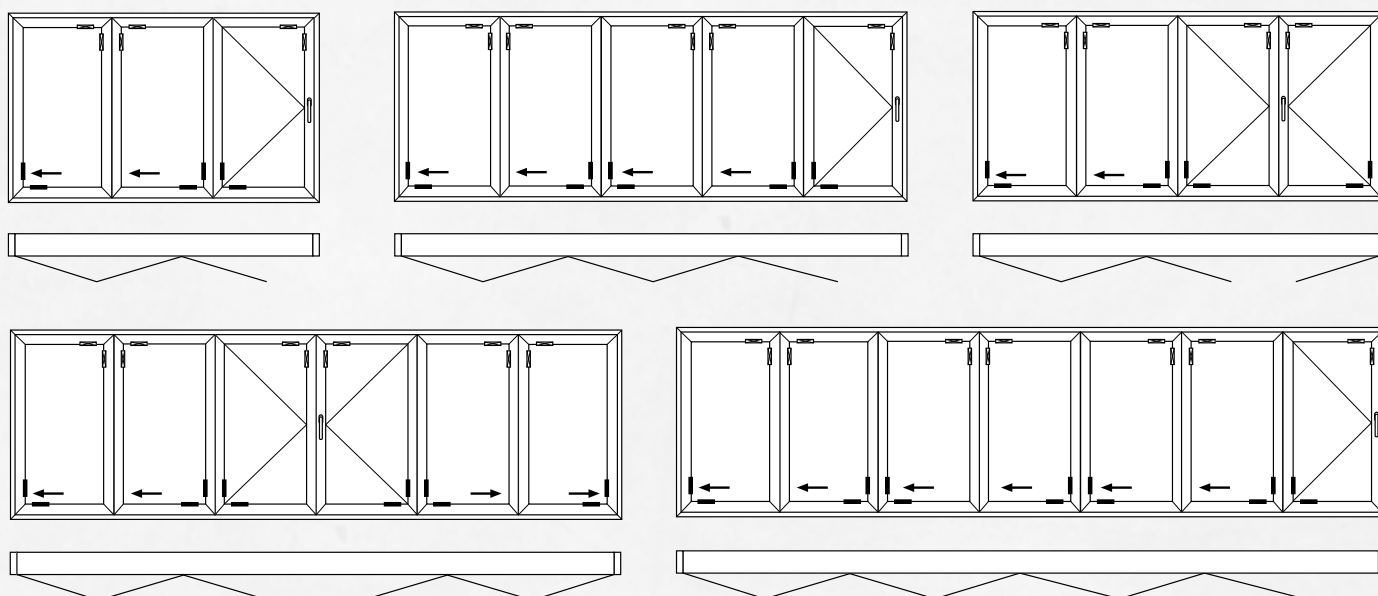
 = Supporting distance plate
 = Supporting distance plate
 = Spacer distance plate

Step 2.4 Supporting distance plates and spacer distance plates should be glued, so they will be in the right places and should not be removed. If plates would fall out, put it back by following scheme below.
The distance between the plate and the glass corner should be 50-100 mm.

NB! Glazingblocks and spacers shall be secured



Principle for installation of glazing blocks



Step 2.5

1. First install the horizontal glass lists and horizontal gaskets (one by one).

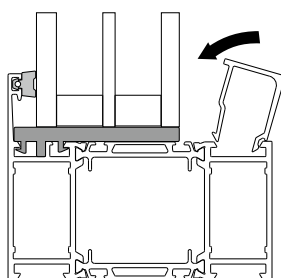
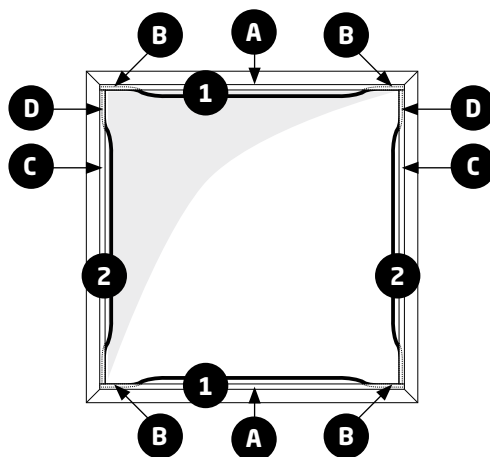
2. Afterwards install the vertical glass lists and gaskets (one by one).

A: Install horizontal glass lists

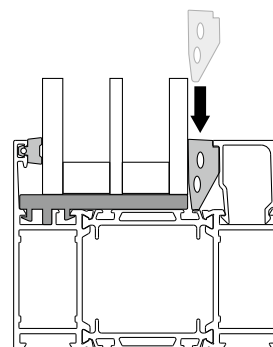
B: Press gasket ends into corners with pressure to form seal against vertical section.

C: Install vertical glass list

D: Install vertical gaskets as per pos. B.



A & C
Glass list installation
section



B & D
Glass list installation section
(Start pressing down the
gaskets in the corners)

Step 2.6 Check the functionality of the door.