

Aluminum Bi-Folding Doors

STEP-BY-STEP ILLUSTRATED ASSEMBLY INSTRUCTIONS

Please read the complete set of instructions before starting installation to familiarise yourself with the stages of construction.

IMPORTANT NOTES.

- 1) Before proceeding it is advisable to check that your new Aspect doors are the correct size and handing to fit the intended aperture. Do not remove your old frame until you have confirmed all the points below.
- 2) Carefully open the packs supplied and check the contents against the attached list.
- 3) Do not destroy any of the packaging until you are certain that you have all the necessary parts for the installation.
- 4) Before installing, the structural opening should be cleared of all dust and debris and a check to make sure the D.P.C is undamaged and in position.
- 5) Levelling and plumbing; it is important that you check the level and plumb when installing the frame.
- 6) Correct glazing of ALL doors will ensure smooth operation. The correct "Toe and Heeling" of glass units is required.

NOTE. Frame fixing screws are not supplied. Only use suitable frame fixings depending on your wall, threshold and head construction, if in doubt consult an expert.

2 people required. At certain stages of the installation 2 people will be required.

Remember the doors are heavy.

For future use please retain all assembly instructions. All dimensions given are in mm.
Finally, please do not rush; take time to do the job properly.

Useful hints and tips

Take care when unpacking and installing your Bi-Folding doors so as not to damage any of the parts. Check that all parts are present and free from marks or scratched surfaces, before installation.

Check list of parts supplied.

Please ensure all parts are present and free from marks, scratches or damage.

- 1). Door outer frame with the door leafs fitted.
- 2). Double glazed sealed units.
- 3). Optional Cill if required / ordered.
- 4). Optional Ventilator if required / ordered.
- 6). Fitting Pack Pack Containing;
 - Handle
 - Cylinder & Keys
 - Cill end caps
 - Glazing packers & Bridge
 - Glazing Wedge Gasket.

Additional tools and materials required (not supplied).

Electric drill. - Drill bits for metal and masonry. (Long reach bits).
Screwdrivers. Hand drivers & Electric.
Tape measure.
Rubber mallet.
Glazing spatula.
Spirit level.
Glue / adhesive.
Suitable frame fixings.
A selection of wedges / packers.
Exterior frame silicone sealant.

1. PREPARING THE OPENING.

It is recommended that old doors and windows should not be removed until all the new materials are on site and have been checked and confirmed ok. The door frame must be fitted under a lintel which extends at least 150mm onto brickwork at both sides of the opening. This must be checked before the opening is prepared and any old frames removed. If an existing lintel is not sufficiently wide, a new lintel will need to be installed.

The brickwork opening dimensions must be slightly larger than the external frame dimensions to allow for packing and square fixing of the frame. There needs to be a clearance of approximately 5mm between the new frame and the brickwork. (Jambs and head only).

A clean and square opening must be prepared. Any wall cavity, which has been opened, must be closed, incorporating a damp proof course. Check that a damp proof course is in place at the cill level. If not, one will need to be installed.

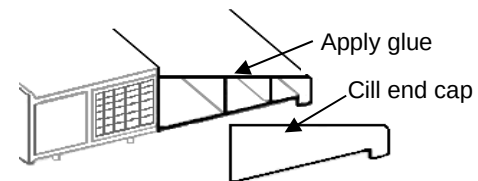
The frame / doors are heavy and therefore any moving of the frame / doors must be done by a minimum of 2 people.

Place the frame / doors on a clear area and remove all the packaging.

The doors have been supplied fitted into the frame (without the glass) with all the rollers and hinges etc, pre-installed and aligned correctly in the factory. The doors are not to be removed from the frame. Do not at this stage open the doors.

2. FITTING THE CILL. (Where required)

2.1 Glue the cill end caps onto the cill.



2.2 Offer the cill into the opening, check the cill is level across its overall length.

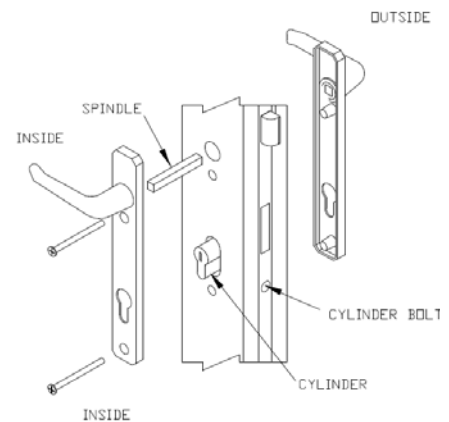
(Maximum deviation is 2mm).



2.3 Apply a generous bead of silicone across the bottom of the aperture to sit the base cill on and fix the cill to the aperture ensuring once again that it is level. Fixings should be approx 150mm from each end and minimum 300mm centres between. Ensure the cill is not distorted when fixing down.

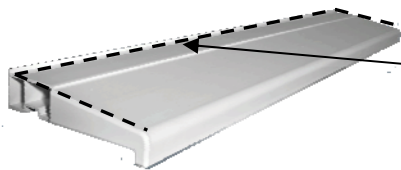


2.4 Fix the master door handle & lock cylinder to the door. Ensure the handle fixing bolts are to the inside of the property.



3. FITTING THE DOORS.

Please read section 3 completely prior to door fitting.



3.1 Apply a thin bead of silicone along the back edge (upstand) of the cill just prior to lifting the frame and doors into place.

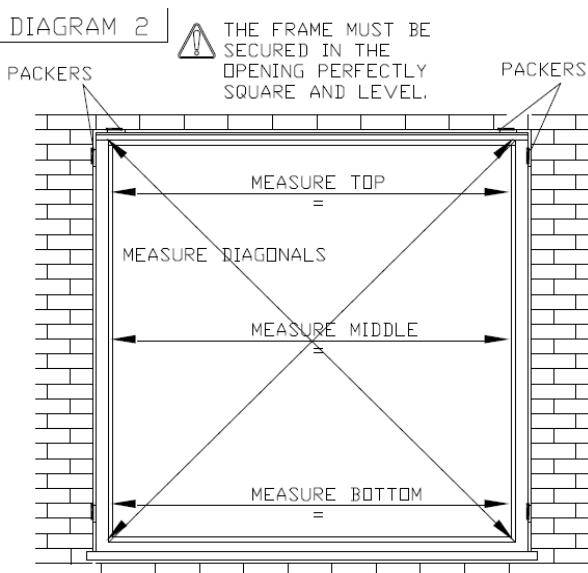
Once fitted, also ensure a bead of silicone runs along the edge against the wall to stop any water runoff from returning around the cill.

3.2 Identify the front face of the doors. With the doors closed and locked in position carefully lift the frame / doors into position.

3.3 Positioning the frame / doors in the opening and drilling the frame.

With the doors in the closed position in the frame, offer the frame into the prepared opening, and make the following 4 frame alignment checks.

1. Check that the sill is level
2. Check the frame is vertical from side to side and from back to front.
3. Check that the frame diagonal dimensions are the same.
4. Make sure the frame is square and not bowed in any direction by measuring the width at the top, middle and bottom. Refer to Diagram 2.



4.4 Use wooden or plastic wedges (not supplied) to hold the frame in the opening, positioning the wedges directly above the frame jambs and close to the vertical ends of the jambs to avoid bending the frame and trapping the doors. Diagram 2. Slip packings into the gap between the frame and the wall ready to take the permanent fixings @ minimum of 150mm from the top and bottom corners and equally spaced. Do not bend the frame in the process.

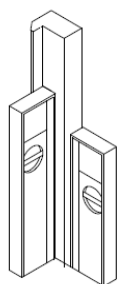
Note. Most alignment and locking problems are due to the fact that the frame is not installed correctly. Please take time and care to ensure that the frame is installed plumb, level and square.

4.5 Securing the frame in the opening.

Whilst supporting the frame, open the master door & drill a minimum of five holes into the frame vertical, a minimum of 150mm from the top and the bottom corners and equally spaced as in Diagram 3, hole positions 1, 2, 5, 6 and 7. The diameter of the holes you are drilling will depend on the type and size of fixing you are using to secure the frame in the opening. You can remove the small pan head screws used to fix the metal channel and use these holes for some of your fixings as long as they line up. Only remove and use one at a time.

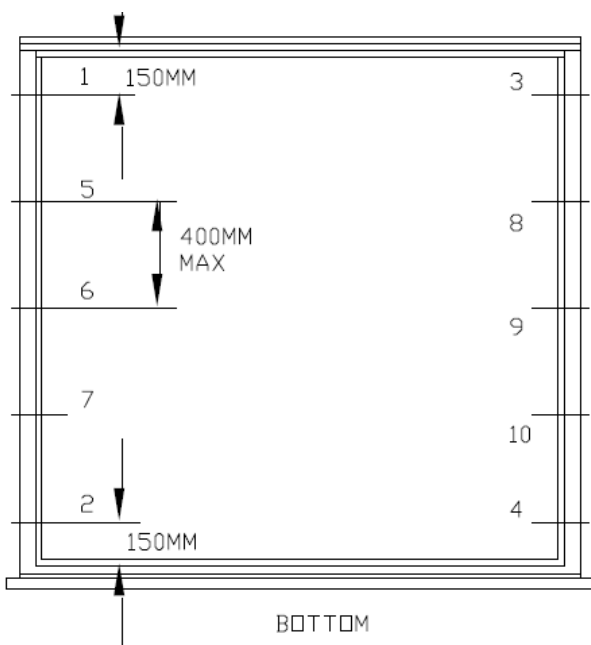
Ensuring the frame remains in a fixed position, open the other 2 doors, and slide all doors open. Support the weight of the doors to prevent them from disturbing the position of the frame. Drill a minimum of five holes into the other frame vertical, a maximum of 150mm from the top and the bottom corners and equally spaced as in diagram 3, hole, positions 3, 4, 8, 9 and 10.

4.6 Ensure that the holes align with brickwork and not a mortar line.



TOP, MIDDLE AND BOTTOM MUST BE EQUAL. THE TWO DIAGONALS MUST BE EQUAL

CHECK THE FRAME IS VERTICAL FROM SIDE TO SIDE AND BACK TO FRONT



Re check the frame alignment points 1 to 4, (as in section 4.3) to ensure the frame has not moved.

4.7 Carefully drill a hole through the pre drilled hole in the frame at point 1, into the brickwork using a masonry bit. The diameter of the hole you are drilling will depend on the type and size of fixing you are using to secure the frame in the opening.

4.8 Secure the frame to the brick at point 1 using your chosen size of frame fixer (not supplied). When tightening the screw use wooden / plastic packings to prevent the frame from distorting.

Fully check that the frame has not moved by repeating the frame alignment checks 1 to 4, (as in section 4.3).

4.9 Repeat this process for fixing the frame at points 2, 3 and 4, thoroughly checking the alignment after making each frame fixing.

The frame should now be secure and fixing points 5, 6, 7, 8, 9 and 10 can now be completed ensuring that when tightening each fixing wooden / plastic packings are used to prevent the frame from distorting.

As earlier stated, most alignment and locking problems are due to the fact that the frame is not installed correctly. Please take time & care to ensure the frame is installed plumb, level and square and the fitting sequence is followed.

Please ensure you do not overtighten the fixings as this can distort the aluminum profiles.

When fixing down to the cill, ensure that screws are sealed with silicon to prevent water ingress into the profile.

The fixings in the head and cill should fit as flush as possible to enable the rollers to easily pass over the fixings but it is important that these are not over tightened as this will distort the aluminium track and prevent the door from operating correctly

At this stage the doors should be checked for correct operation.

Ensure the top & bottom roller tracks are free from debris or obstacles which may impair the function of the product.

Check that the doors operate correctly before the glazing begins and also check that the doors open, close and lock correctly.



5. GLAZING

Close and lock all of the doors.

Note: It is essential that the doors have the glass installed with the glazing platforms and glazing packers fitted in the correct positions as shown in the diagram "TOE & HEELING" below, depending on which way your doors are folding, please reverse the image for the opposite folding doors.

Failure to fit the packers in the correct place will prevent the doors from operating correctly over a period of time.

Starting at the opposite end to the opening door, (The master door will be glazed last of all) carefully remove the beads from the first sash noting the position of each bead (top, left, right and bottom) and fit glazing platforms.

NOTE: Toughened Glass is extremely strong on its front faces once installed but very sensitive on its edges to sharp objects (small stones etc). Do not place direct glass edges onto concrete or paved areas etc use timber batons or similar if required as a support if you need to put it down.

Taking great care as each double glazed unit is heavy and delicate, fit the glass and pack appropriately. All door sashes must be "toed and heeled" to ensure an equal and parallel sight line between the head of the sash and the outer frame. When the glass is fully packed out, re-bead placing the beads in their original locations.

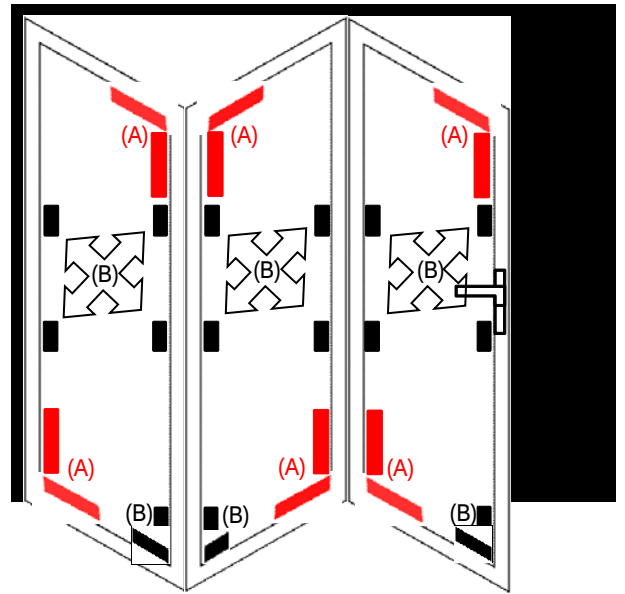
Once complete the insert the wedge gasket into place starting and finishing at the bottom. Repeat the above steps until all sashes are glazed.

TIP: The wedge gasket can be tight to insert so it may be beneficial to use some 'fairy liquid' as a lubricant. It can also help if you fit the beads with the glass in then wedge glazing packers between the bead and the glass. This helps compress the seal on the door behind the glass giving you more room to get the wedge gasket in.



(A) Glazing Platform.
Load bearing packers to keep the door and glass square and to 'toe and heel it'.

(B) Glazing Packers.
Packing to prevent glass slippage and provide stiffness to the door. Use silicone to secure these in place so that they do not drop once the beads are put in place and during the normal operation of the doors.



After glazing is complete check that the doors open close, and lock correctly.

Refer to section 6. FINALS for adjustments.

6. FINALS

Ensure the top & bottom roller tracks are free from debris or obstacles which may impair the function of the product.

Sealing the frame.

Fill any gaps between the masonry and the frame. If the gaps are too wide, a proprietary expanding P.U. filler or foam may be used, prior to finishing with a silicone sealant. Take care not to distort the frame by using too much foam filler and that the filler does not stain the doors.

The gap between the frame and the brickwork can be covered using a trim if required.