

# Alumina Installation Guide





Here at Liniar, we love our range of bi-folding doors.

We want to ensure that your customers love them too, so we've created a detailed installation guide to help you fit our lovely doors the way they were intended.

In addition, a detailed installation video can be found by visiting www.liniar.co.uk.

## Survey and Installation

Installation must comply with all elements of BS8213-4 Code of Practice for the survey and installation of windows and external doorsets.

There should be a solid structure to fix the frame to, and there must be a lintel above the frame.

No load is to be transferred to any part of the frame.

Prepare the aperture by making sure it is clean - remove any old silicone and brush down the threshold.

Check the aperture's height, width and diagonals to ensure the opening is equal on all sides and square.

To ensure the correct functioning of Alumina bi-folding doors, it is imperative that the instructions in this guide are followed, in the correct order.







#### Threshold and Cill

- Use a spirit level and a string line to assess the level of the threshold you are working from to aid fitting the frame at a later stage.
- Once level, double check that the door will still have enough clearance on height when it is installed.
- Add packers where required and re-check the level.
- Before fixing the cill to the brick threshold, it must be supported along its full length. Use a bed of mortar along the full cill length between the required packer.
- In instances where a cill is to be fitted, it is good practice to fit this separately to the frame. This will ensure you have a level and secure cill to work from when fitting the frame.

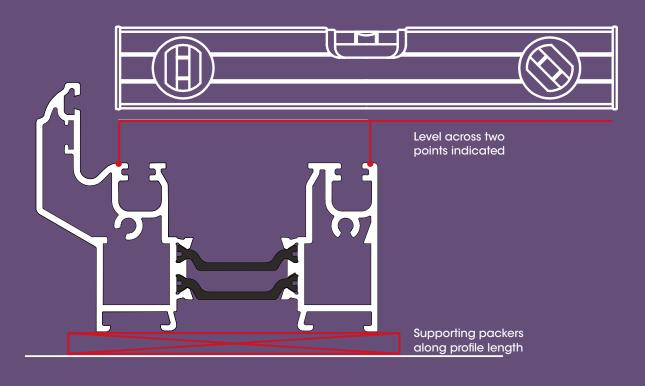












#### Removal of Door Sashes

(Optional Step)

For larger doors you may wish to remove the sashes before installing the outer frame

- Unscrew the hinges and carefully lift out the sash frames.
- Alumina doors will require the top rolling mechanism to be unscrewed from the sash and left engaged in the captive top track
- Make sure you keep all the screws in the correct order to re-assemble later.





#### Fit the Outer Frame

- Lift the door into position in the opening and insert packers under the threshold where previously noted
- With the packers in place, fix both outer jambs in place with appropriate fixings. Packers must be used at either side of each fixing to help prevent distortion.
- To hold the door in place temporarily whilst you level it, loosely pack out the jambs. Keep checking they are level as you go along.
- Fixings should be no closer than 150mm from corners and at 600mm maximum centres, with a minimum of 3 fixings per side.
- There should be no distortion in the jambs and they should be plumb.
  - Run a silicone seal between the frame and cill, and return at either end to create dam.
- As you work, continue to check for any bows, as well as for plumbness and squareness.









### Fix the Threshold

- Use silicone around the holes that are drilled through the bottom of the threshold before inserting the screws to prevent water ingress
- Check the level of the threshold once complete.

Use appropriate fixings to secure down through the pre-punched drainage holes.







### Fix the Head

- A timber lat can be used to help ensure that the head is installed parallel to the cill.
- Once the outer frame is in place, perform a final check of all the measurements again.
- Fix the head into place, completing the outer frame installation.







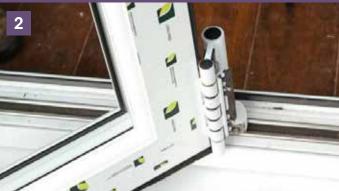
### Re-install Sashes and Adjust

If you removed the sashes earlier, reinstall them with the following steps.

- Re-install the sashes you removed earlier ensuring you screw the hinges back on in exactly the same places you originally removed them.
- Assess the gaps between the outer frame and sash at the top and bottom, ensuring they are equal.
- Make sure the rollers slot into the threshold correctly as you work.
- The door's rolling mechanisms can now be adjusted to increase or reduce any door gaps if required.
- For each section, use all the screws supplied for a strong and secure installation.

Use an allen key to adjust up or down as necessary. Once again check the door gaps.









# Commence Glazing

- Before glazing, remove all beads from the first hinged sash. Take care to note where the beads are removed from.
- Fit the Liniar glazing platforms in preparation for toe and heeling.
- Alumina's unique design means that foiled and powder coated doors come complete with PVC beads which will easily rotate out of the sash.





## Fit the Glazing

- Lift the glass onto the Liniar glazing platforms from the inside, and pack as required.
- Once the glass is in place, the beading can be replaced, starting with the shortest pieces first.
- All sashes should be toe and heeled to maintain equal and parallel gaps on the head and the threshold.
- The longest beads can easily be arched and tapped into place using a plastic mallet. We recommend starting in the corners, and working towards the middle.
- Add silicone between each vertical platform to help keep them in place.
- Work on each sash individually, repeating the toe & heeling process for all sashes and ensuring all the door gaps are equal and parallel as you work.



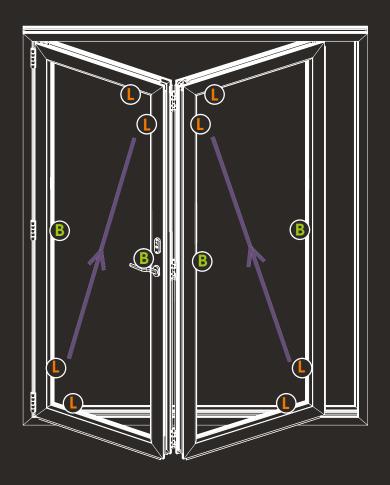








## Toe and Heeling Guide



- Liniar load bearing platforms must be used to keep door square and level.
- Bracing platforms to prevent movement and provide rigidity to the door.

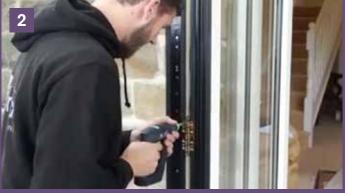


### Check Operation and Adjust

- Check the finished doors to make sure the operation is perfect. The rolling mechanism should be smooth, there should be equal gaps between each door, and all the seals should be weather-tight
- If adjustment is needed, any vertical door gap adjustments needed can be carried out with the use of 1mm packers.
- You can remove or add these packers from each hinged point in order to give you plus or minus 1mm of adjustment where you need it.

- Remember to equally space these packers on the hinge, and use no more than 3 in total per hinge.
- The shootbolt can also be adjusted by removing the four screws and the plastic cover. Twist as necessary then replace the cover and screw back into place.
- Twisting by 90 degrees will give a 1mm increase or decrease in compression against the outer frame.











### Perform Final Checks and Hand Over

- Check that the handles and locking mechanisms operate smoothly on each door, that the bi-fold action is smooth and free running and that the locks operate correctly when closed.
- The door magnets are critical to the continued seamless operation of the Alumina Bi-fold door, so it's important to check they are fully engaged when the doors are open.

Finally, the rolling mechanism won't work smoothly if there is any debris in the door track, so make sure you clean it properly with a soft brush.

The installation is now complete, and the homeowners can enjoy their new Alumina doors.

The guide on the opposite page can be detached and left with the homeowner. Alternatively, a full operation and maintenance guide can be downloaded from the Alumina website.

For more information, please visit alumina.liniar.co.uk.







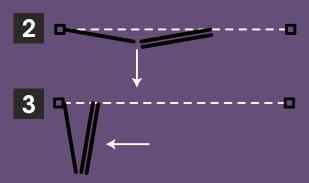


### Operation and Maintenance

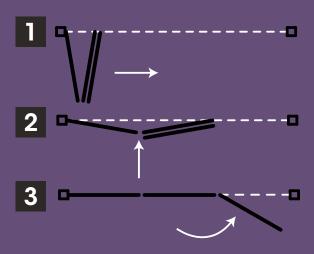
#### **Opening Operation**



Before step 2, the door must be fully engaged with magnets.



#### Closing Operation



Before step 2, locking mechanism must be fully engaged.

#### Maintenance

- The rolling mechanisms that carry the door panes along the track are fitted with sealed stainless steel bearings and require no lubrication.
- Ensure the top and bottom tracks are kept free from dust and debris, which many impair the function on your doors.
- Door locking mechanisms should be cleaned, with hinges and locking mechanisms lightly lubricated with a machine oil at least once a year (or more frequently as appropriate).
- Clean frames with a mild soap and water solution, with a soft brush, sponge or cloth.
- Liniar recommends that all keys must be removed from the lock before operating the doors (best practice to also remove folding keys).







