



# Bi-fold doors

## 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](http://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 jambs 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 Liniar bi-folding doors, it is imperative that the instructions in this guide are followed, in the correct order.***





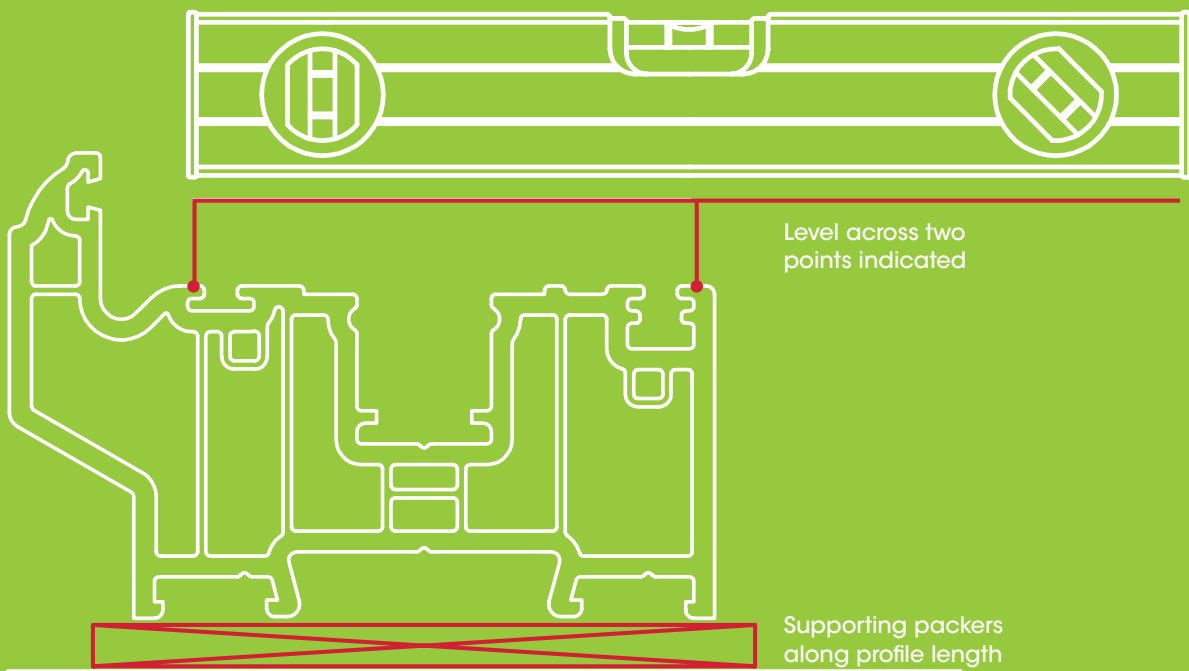
# Step by Step guide

To ensure the correct functioning of any Linar bi-folding door it is imperative that the following instructions are followed.

## Threshold and cill

- 1** Use a spirit level and a string line to assess the level of the threshold you are working from.
- 2** Temporarily place the required packers on the threshold and dry fit the cill. This will help to assess the finished level of the cill.
- 3** Once level, double check that the door will still have enough clearance on height when it is installed.
- 4** 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 packers.
- 5** Install the cill in place and tap down onto the packers gently using a plastic mallet.
- 6** Check the level again before fixing the cill into place using Spax bolts or equivalent, at a maximum of 600mm centres.
- 7** Ensure the fixings are not over-tightened causing unnecessary distortion, and check the level and bow at each step of the process.





# Remove sashes and fit outer frame

Liniar strongly recommends removing all sashes from the outer frame before installing our bi-fold doors, for the best possible results.

**8** Unscrew the hinges and carefully lift out the sash frames.

Make sure you keep all the screws in the correct order to re-assemble later.

Unscrew the hinges and carefully lift out the sash frames

ModLok doors will require the top rolling mechanism to be unscrewed from the sash and left engaged in the captive top track

**9** Run a silicone bead along the outer edges of each side of the cill, joining the rear up-stand to Liniar's unique middle up-stand. This will ensure a weather tight seal for the doors.

**10** Cover the top of any fixings in the cill with silicone to avoid any water ingress.

**11** Lift the outer frame into position in the opening.

**12** 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, as this will help to avoid any potential issues in later steps.

There should be no twist or distortion in the jambs and they should be plumb.

**13** With the packers in place, fix both outer jambs in place with appropriate fixings. Fixings should be no closer than 150mm from corners and at 600mm maximum centres, with a minimum of 3 fixings per side.

**14** Packers must be used at either side of each fixing to help prevent distortion. Continue to check for any bows, as well as for plumbness and squareness.





## Fix threshold and head

- 15** Push the threshold against the cill's rear up-stand and fix into place.
- 16** Use appropriate fixings to secure down through the pre-punched drainage holes into the PVCu cill.
- 17** Pack the head parallel to the cill. A timber lat can be used to help ensure it is parallel.

- 18** Fix the head into place, completing the outer frame installation.
- 19** Perform a final check of all the measurements again.



# Re-install sashes

- 20** Re-install the sashes you removed earlier ensuring you screw the hinges back on in exactly the same places you originally removed them.
- 21** Make sure the rollers slot into the threshold correctly as you work.
- 22** For each section, use all the screws supplied for a strong and secure installation.

- 23** Check the basic running operation of the doors to make sure the mechanisms are working properly.
- 24** Assess the gaps between the outer frame and sash at the top and bottom, ensuring they are equal.
- 25** The rolling mechanism can be adjusted to increase or reduce any door gaps - remove the cap and use an allen key to adjust up or down as necessary. Remember to replace the cap after adjusting.

**Double roller:** 6mm allen key required  
**Single roller:** 5mm allen key required





## Glaze door panels

All glazing must fall in line with the requirements of BS6262 and any recommendations of the glass manufacturers.

**26** Before glazing, remove all beads from the first hinged sash off the outer frame, taking care to note where the beads are removed from.

**27** Fit the Liniar glazing platforms in preparation for toe and heeling.

**28** Fit the glass onto the Liniar glazing platforms from the inside, and pack it appropriately.

**29** All sashes should be toe and heeled to maintain equal and parallel gaps on the head and the threshold. See page 10 for more details

**30** Add silicone between each vertical platform to help keep them in place and ensure that all platforms do not obstruct any drainage holes.

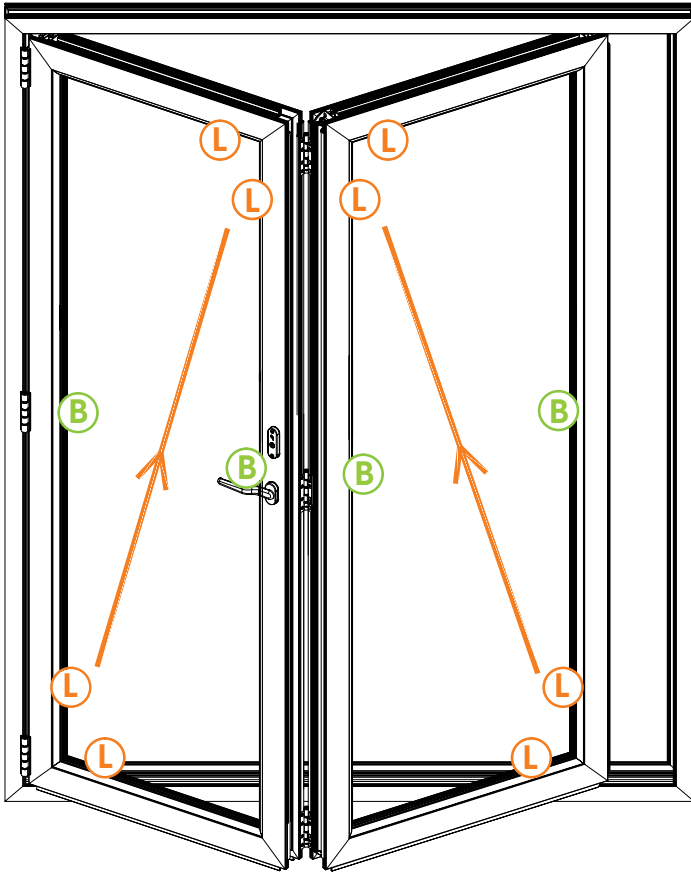
**31** Replace beading, starting with shortest pieces first and tapping into place with a plastic mallet.

Start in the corners and work towards the centre.

Repeat the 'toe and heeling' process for all sashes, ensuring all door gaps are equal and parallel.



## Glaze door panels ctd...



**L** Linear load bearing platforms **must be used** to keep door square and level.

**B** Bracing platforms to prevent movement and provide rigidity to the door.

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## Check operation and adjust

**32** 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.

**33** Make any final adjustments as necessary.

**34** Hinge adjustments can be carried out using 1mm Liniar packers. Add or remove packers from each hinged point to give plus or minus 2mm of adjustment.

Equally space packers on the hinge, adding no more than 4 in total to each hinge.

**35** The latch and hook keeps can be adjusted using an allen key to make any necessary alterations.

**36** The shootbolt can be adjusted. Twisting by 90 degrees will give a 1mm increase or decrease in compression against the outer frame.

**ModLok bi-fold** - Remove the four screws and plastic cover. Twist as necessary then replace the cover and screw back into place

**Standard bi-fold** - Unscrew the PVCu end cap and re-install 90 degrees to its original position





# Perform final checks and hand over

**37** Check that the handles and locking mechanisms operate smoothly on each door

**38** Check the bi-fold action is smooth and free running.

**39** Check that the locks operate correctly when closed.

**40** Check the door magnets are fully engaged when the doors are open –

*This is critical to the continued seamless operation of the doors.*

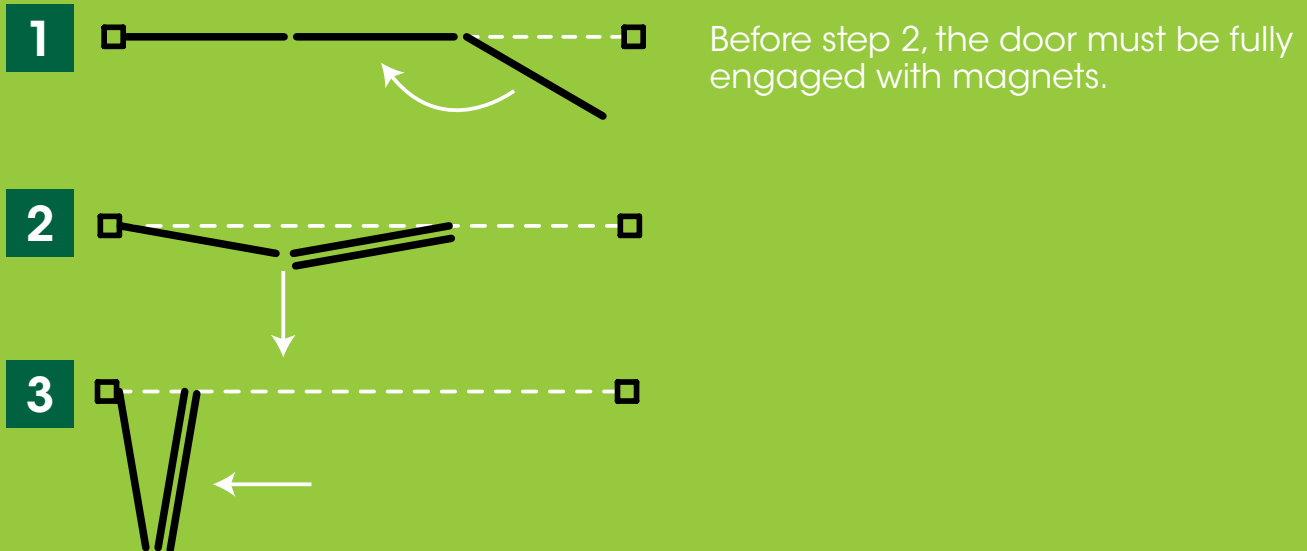
**41** The rolling mechanism won't work smoothly if there is any debris in the door track, so make sure you clean it properly with a soft brush.

**42** Tear out the "Operation and Maintenance" page and leave it with the homeowner so they know exactly how to look after their new bi-folding doors.

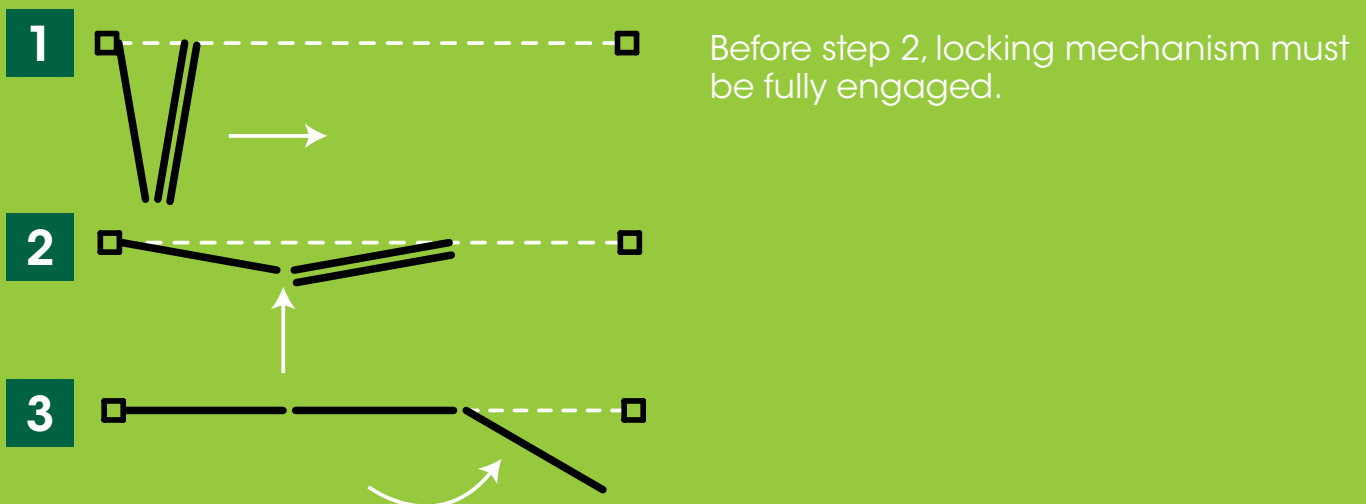


# Operation & Maintenance

## Opening Operation



## Closing Operation



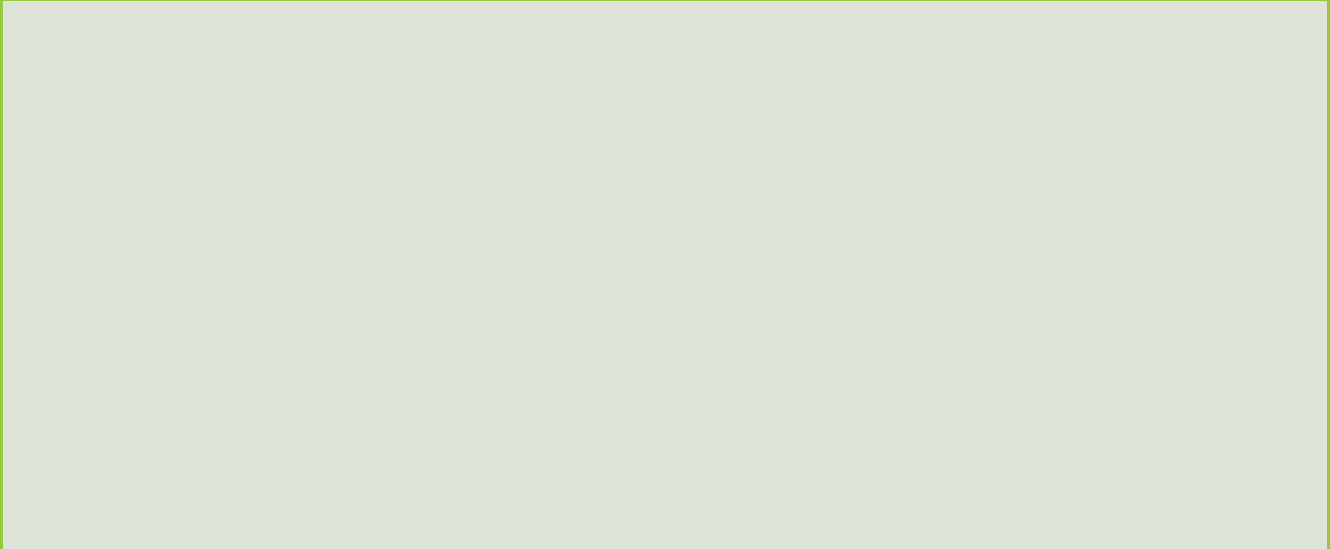
## Maintenance

- Roller mechanisms carrying the door panels are fitted with sealed stainless steel bearings and require no lubrication.
- Ensure top and bottom tracks are kept free from debris or obstacles which may impair the function of the product.
- Door locking mechanisms to be cleaned and any moving parts to be lubricated with a light machine oil at least once a year and more frequently where appropriate.
- For PVCu parts clean regularly with soap and water.

**PLEASE DETACH AND LEAVE WITH YOUR CUSTOMER**



Your Liniar bi-folding doors were installed by



On: \_\_\_\_\_

Type of doors: Standard / ModLok(TM) (Delete as applicable)





## 7 great reasons to choose Liniar

**Innovative** – the only entirely new PVCu window and door profile system to be developed in the last 10 years

**Energy efficient** – designed from scratch to achieve the pinnacle of thermal performance and retain more heat in your property

**Safe and secure** – engineered with built-in security features and approved by independent testing facilities

**British made** – manufactured in our state-of-the-art factory in the heart of Derbyshire

**Lead free** – all Liniar profiles are extruded using materials that are 100% lead free

**Quality assured** – backed with ISO 9001 accreditation for your peace of mind

**Guaranteed** – all Liniar frames are guaranteed to not warp, split or discolour for a minimum of 10 years



### Liniar

Flamstead House  
Denby Hall Business Park  
Denby  
Derbyshire DE5 8JX

Tel: +44 (0)1332 883900  
Fax: +44 (0)1332 883901  
Email: [sales@liniar.co.uk](mailto:sales@liniar.co.uk)  
[www.liniar.co.uk](http://www.liniar.co.uk)

