



# Patio door

## Installation guide





The following installation guide is designed to show you the best way to fit the Liniar sliding patio door.

By following the details within you will be able to give your customer peace of mind that their new door will operate and perform exactly as it is designed to do.

# 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 aperture.

**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 patio 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 patio 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.





# Fit the frame

- 8** Ensure that all the threshold and drainage cover trims have been removed from the frame.
- 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.
- !** A shield must be used to prevent damage from screwdrivers.
- 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.
- !** Make sure the screws are fully fixed so that they do not interfere with the refitting of the threshold cover.





# 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 centre channel of the PVCu outer frame. Use silicone in conjunction with each fixing.

**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 the doors level, plumb and squareness again.

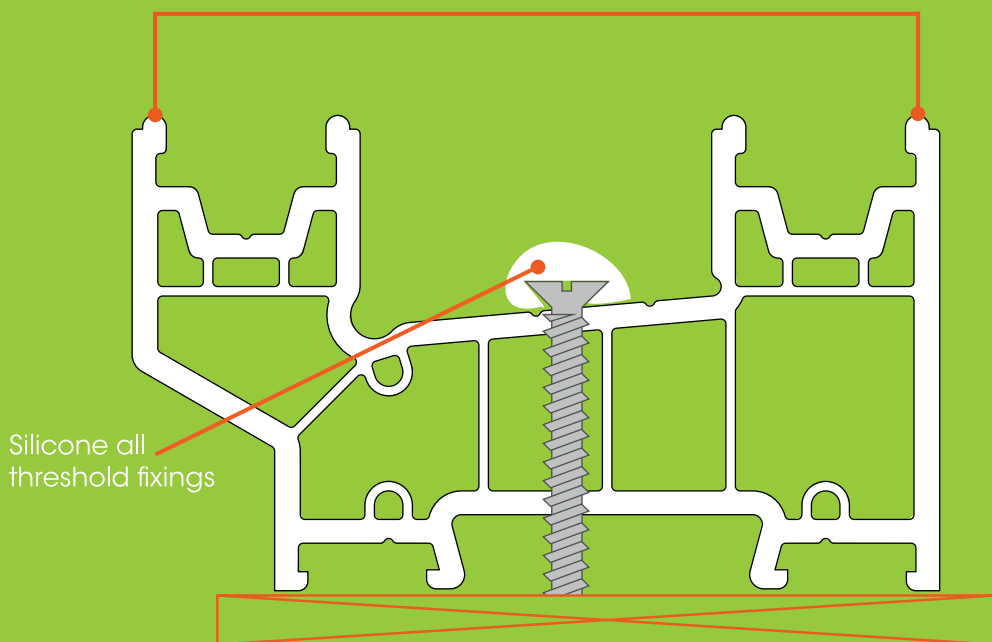
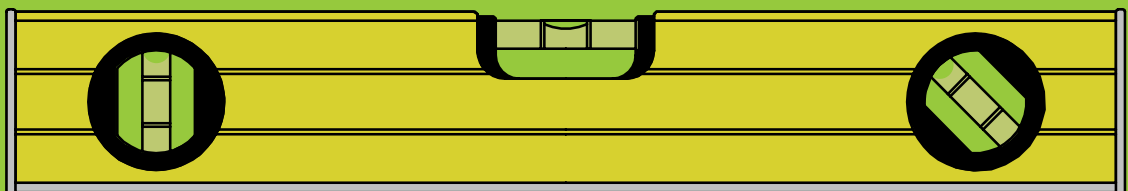






Ensure level across two points indicated

16



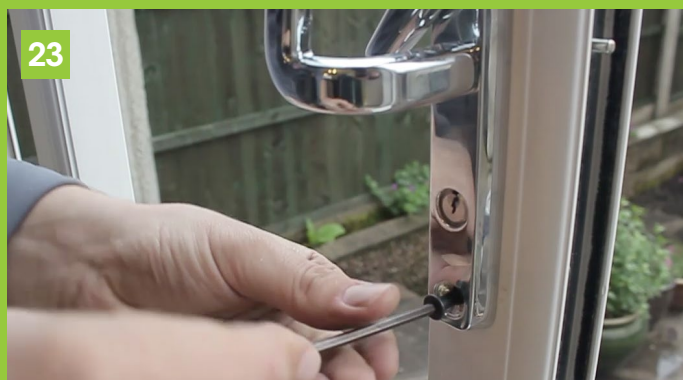
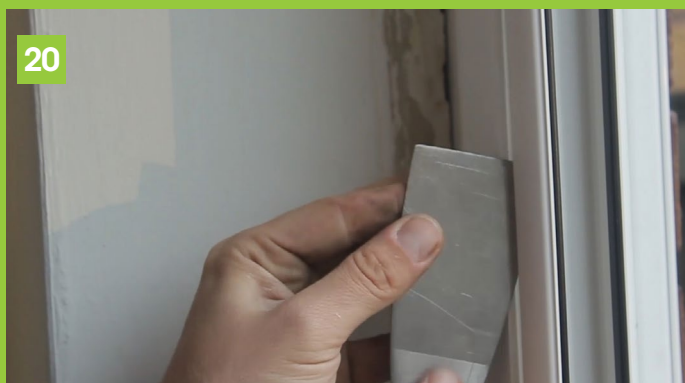
Silicone all threshold fixings

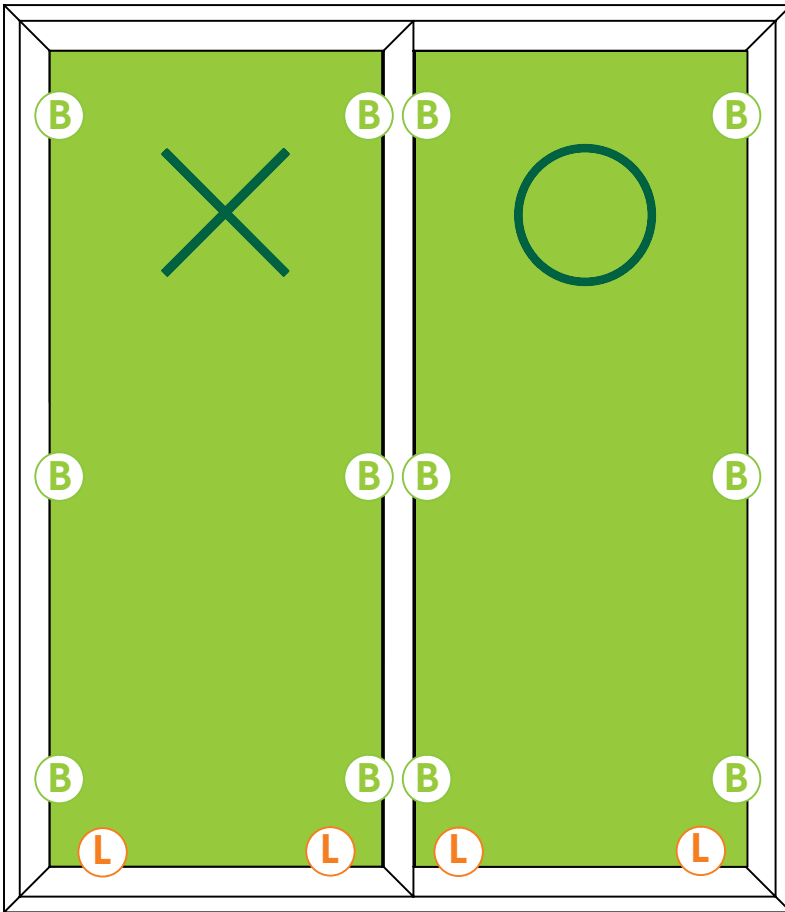
Supporting packers along frame width

## Glaze door panels

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

- 20** Before glazing, remove all beads from the sliding sash, taking care to note where the beads are removed from.
- 21** Fit the Liniar glazing platforms in preparation for glazing.
- 22** Add silicone between each vertical platform to help keep them in place and ensure that none of the platforms obstruct any drainage holes.
- 23** Before glazing, it is recommended to remove the door handle using a 4mm allen key.
- 24** Fit the glass onto the Liniar glazing platforms from the inside, and pack it appropriately.
- 25** Once the glass is in place, the beading can be replaced, starting with the shortest piece first. Use a plastic mallet to tap each piece into place. We recommend starting in the corners, and working towards the middle.
- 26** Repeat the glazing process for the fixed sash.
- 27** Replace the handle along with the threshold cover and drainage cover trims.





Linear 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

**28** Check the finished doors to make sure the operation is perfect. The rolling mechanism should be smooth.

**29** If the sliding door requires adjustment, this is performed at either corner of the bottom sash by adjusting the wheels with a 4mm allen key (these must be adjusted equally so that the door is parallel with the jamb)

Turn allen key:

**Clockwise = Lift door**

**Anti-Clockwise = Lower door**

Doors are supplied at the lowest position setting and should only require a clockwise adjustment if applicable to raise the door.

**30** If necessary, the shootbolt can be adjusted by reinstalling with either the round or elongated hole facing towards the jamb.



## Perform final checks and hand over

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

**32** Check the sliding action is smooth and free running.

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

**34** 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.

**35** Tear out the "Patio Maintenance" (page 17) and leave it with the homeowner so they know exactly how to look after their new patio doors.

Make sure you complete your details on the reverse.



# Removal of sliding sash for maintenance

If it is necessary to remove the sliding sash after installation, please follow the following steps:

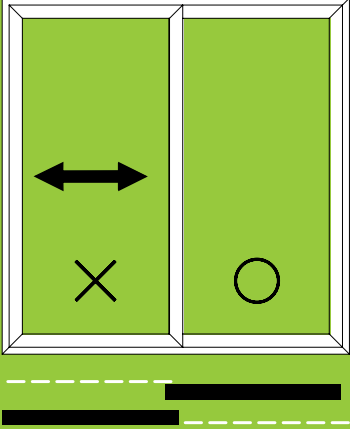
- !** Ensure the sliding sash is in its fully open position before continuing with these steps.
- 1** Remove the threshold trim from the base of the door and the blanking and drainage covers from the head of the frame.
- 2** Remove the de-accelerator arm from the head of the frame.
- 3** Remove the centre seal from the central PVCu chamber on both the top and bottom of the frame.
- 4** Lift the sash out of the frame by lifting upwards and rotating the bottom of the door off the track.
- 5** Reverse all steps to re-install the sliding sash in place.
- 6** Check the rolling and locking operation of the door to ensure all parts are in good working order.



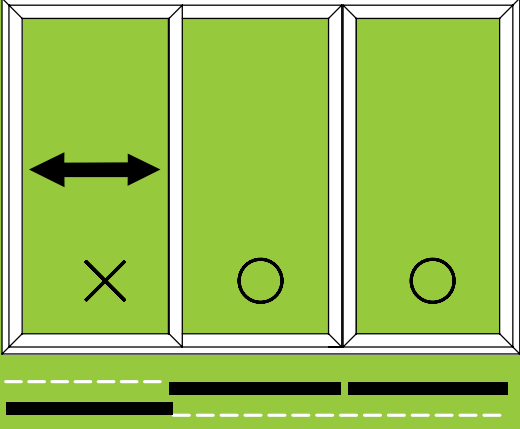


# Patio Operation

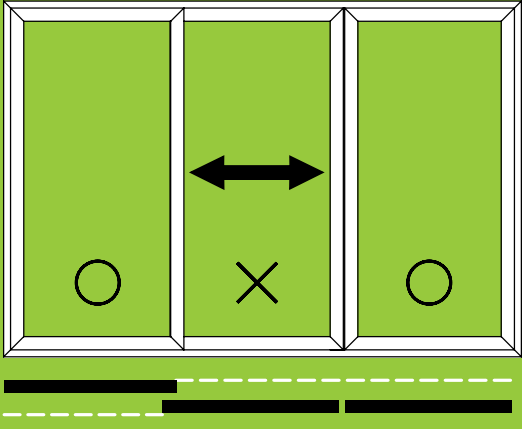
2 Pane - Style OX/XO



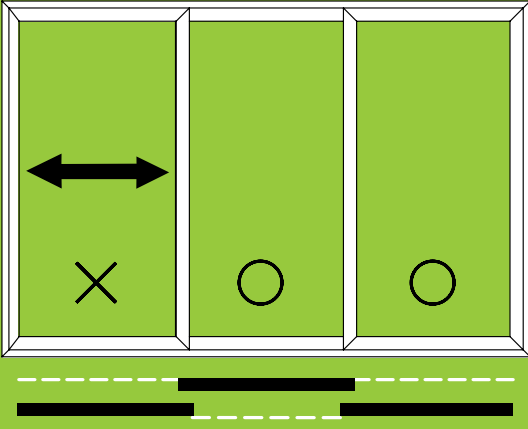
3 Pane - Style XOO/OOX



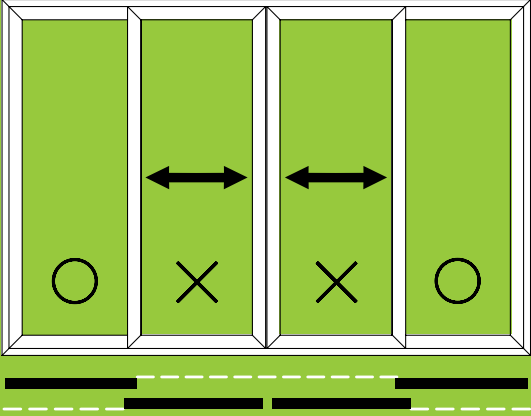
3 Pane - Style OXO L/R



3 Pane - Style XOO/OOX Optional



4 Pane - Style OXXO





# Patio Maintenance

## PVCu

To ensure frames are free of dirt, clean regularly with soap and water.

Drainage holes are to be checked and any blockages removed.

Wood grain frames with minor scratches can be repaired using a wood grain marker pen.

## Locks

Door locking mechanisms should be cleaned and any moving parts should be lubricated with light machine oil at least once per year, and more frequently if required.

The door locks are fitted with anti-mishandling devices and cannot be operated until the door is in the closed position.

## Other

Roller mechanisms operating the door(s) are fitted with acetal bearings and are self-lubricating, therefore need **no maintenance**.

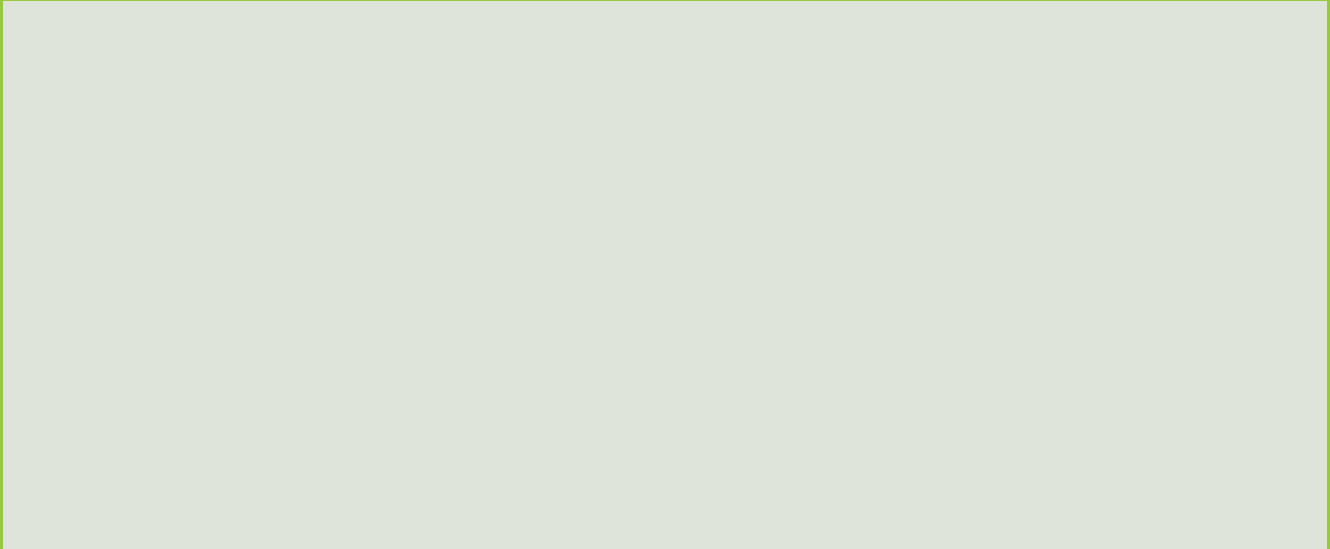
Ensure all tracks are kept free from debris or other obstructions which may impair the correct functioning of the product.

Due to the high energy efficiency of glass fitted to patio doors, it may be common to have condensation may form on the external face of the glazed unit. This is normal and demonstrates how effective your doors are at keeping heat inside your home

**PLEASE DETATCH AND LEAVE WITH YOUR CUSTOMER**



Your Liniar patio doors were installed by



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



## 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



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