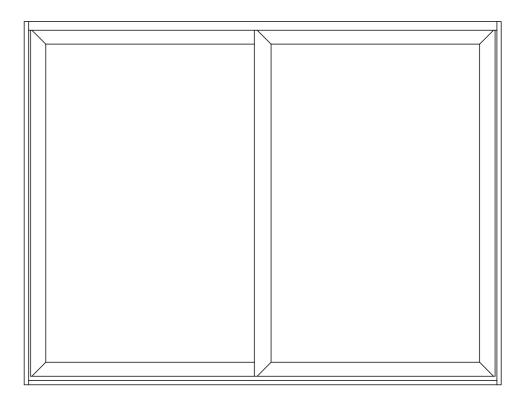
# 70

# **EXTERNAL ALUMINIUM**

# 'LIFT AND SLIDE' PATIO DOORS

Assembly Instructions
Bespoke and Standard Sizes
up to 6 metre wide

# **Double track**



# **About your Lift and Slide Patio Door Set**

All products must be installed in accordance with accepted good trade practice (and in accordance with supplied instructions where applicable), and maintained in accordance with these procedures or else the warranty shall be void.

## **Important Information**

We recommend that a competent trades person installs this product. A single person must NEVER carry out the installation, as some of the components are heavy.

All of our external aluminium sliding doors and frames, powder coating finish, glazed units and hardware components are guaranteed for a full 15 years against the occurrence of manufacturing faults, all subject to correct installation, regular maintenance and care in use as detailed below.

## **Powder Coating Finish and Maintenance**

All our aluminium sliding door sets are supplied fully powder coated in a satin finish providing a high quality and durable finish, unless otherwise stated.

Our standard range of colours are Anthracite grey RAL 7016, Jet black RAL 9005 and Hipca white RAL 9910. If you have selected an alternative custom colour option and require the colour and RAL code please contact us.

To maintain the external aluminium powder-coated finish, wash regularly with soapy water and then dry off with a soft lint-free cloth. As a minimum, the external surfaces must be washed at least every three months, and monthly if within five miles of the sea or in an industrial area. Our general recommendation would be to wash the external aluminium every time you clean your windows, which should normally be more regularly than the minimum requirement.

The powder coating is not guaranteed unless the doors are installed at least 800 metres away from the sea.

We cannot accept any claims for damages, including scratches to the powder coating and aluminium reported 72 hours following delivery, and / or after installation has commenced.

## Installation

This door set is designed to be installed by competent trades persons with good knowledge and previous experience of installing sliding doors.

Our aluminium doors are supplied with all the essential items, most hardware factory fitted and everything pre-machined. This design allows for simple on-site assembly by experienced trades persons.

The outer frame needs to be securely fixed into the opening perfectly square and level on all planes. The aluminium sliding doors are bottom hung, the weight of the doors is supported via the sliding hardware and threshold. Importantly: the threshold must be sufficiently packed to ensure there are no dips or rises along the full length of the bottom tracks. When fixing the frame head, ensure there is no bowing.

## **Glazing Units**

To reduce carbon emissions from the home and to keep heating and cooling bills down, the government has recommended that all manufacturers use a special Low E thermal glass within the sealed units to comply with Building Regulations Part L.

This glass is coated with a special substance to comply with the above and occasionally, and in certain light conditions, may produce transient visual effects, this can sometimes look like a transparent film or haze, and make the glass appear cloudy. This is very infrequent and only affects a minority of door sets. As a company, we do have to comply with the new regulations which are for the benefit of all, and this is not a defect.

Due to demands for better thermal efficiency, it is normal for condensation to form on the outside of the glazing units, to the exterior side of the property. This demonstrates that the glass is performing as it should by reducing the transfer of heat from the internal side of the property to the external side of the property, this is not a defect. For any condensation forming to the inside of the property, this is normally due to high levels of moisture in the air and / or insufficient ventilation in the room, the moisture is then forming on the cold surface. If condensation is forming inside the glazing unit (between the panes of glass) it is likely that the glazing seal has been compromised.

Tempered glass means it has been toughened to be up to five times stronger than normal glass. It is unusual to break such strong glass, but sharp objects hitting the glass at certain points can cause breakage. Tempered glass is also known as safety glass. This means that if it breaks it will shatter into smaller fragments which are less likely to cause injury, unlike non-tempered glass which breaks into large, sharp fragments.

Laminated glass is also called safety glass and comprises of multiple layers of glass sandwiched together. Due to its high strength, this prevents the glass from breaking into large pieces. If the glass breaks, it will produce a 'spider web' effect similar to what is commonly seen in shattered car windscreens. Laminated glass will also increase the sound rating insulation.

Glass must be regularly maintained and cleaned to stop break down of the glass or seals. This can be done using a mild solution such as washing-up liquid diluted in water. Do not use abrasive cleaning solutions as this may cause scratching.

Visual distortions caused by reflections in toughened glazing units are a natural phenomenon and not a fault.

Laminated, toughened or coated glass is acceptable if bubbles or blisters, fine scratches no more than 2.5cm long and / or minute particles are neither obtrusive or bunched. The glass used in sealed units is processed glass, therefore

# **About your Lift and Slide Patio Door Set (cont)**

certain blemishes are unavoidable. More blemishes may be visible in laminated glass due to its layered construction.

For carrying out glass inspections, stand at least 3 metres away from the glazing, view at a 90 degree angle and look directly through the sealed unit(s). The glass must be viewed in natural daylight but not with the sun directly on it. Any moisture must be removed from the surface of the glass before inspecting.

## **Hardware Components**

The exterior hardware in your sliding door set can deteriorate from everyday use, and also because of the weather and local environment. That's why regular maintenance of your door hardware is even more important if you live in severe environments like coastal / marine areas and some industrial locations.

We require that the below minimum maintenance is carried out as often as necessary to prevent deterioration. As a guideline, we recommend that this maintenance is done every three months if you live in a marine environment, or every six months if you live in a more general location, otherwise your guarantee will not be valid.

## Tracks and bearings

Once your installation has been completed, and before fully operating your door set, please carefully remove any debris / swarf from the top and bottom tracks to ensure nothing comes into contact with any moving components. After cleaning the tracks, using a microfibre cloth, apply a small amount of lubricant such as a silicone spray to the inner lip of each side of the track.

Extra lubricant can be added around the bearings. Adding lubricant in this way reduces wear, improves smoothness and gives additional protection against corrosion of track and bearings.

## Locks and handles

Your inline sliding door is opened and closed by raising and lowering the handle, and locked using the key. The lock should operate just as smooth with the access door in the open position as what it does when it is fully closed. It is important that if you feel any excessive resistance when operating the handle, you do not continue to operate the doors as this may eventually cause the lock to fail and will invalidate your guarantee.

All moving parts should be lubricated using a silicone spray. The handles should be regularly cleaned with a soft damp microfibre cloth to remove any dust or grime taking care not to scratch the surface.

If you experience problems with locking or unlocking the doors, first eliminate actual locking problems by opening the access door and pulling the handle downwards and then turning the key. If this can be done, the lock is operating normally, and the problem is likely to be due to incorrect door alignment / adjustment.

## **Door Operation**

Sliding door sets have become more popular due to customers wanting to maximise the size of each glazed panel, giving more light and fewer interrupted views. The bigger the glass area the heavier the individual panels will be, which in turn will cause extra resistance when operating the heavier doors.

All our pre-glazed aluminium sliding door sets have been pre-assembled in our factory. They are installed into a steel framed testing rig where they are glazed and then fully operated, including checking the doors lock and unlock smoothly. The door sets are then part dismantled, packaged up ready for dispatch and onsite assembly.

If you experience any difficulty operating your doors, including opening, closing, sliding and locking, do not continue to use your doors as this may cause further issues and damages. Please contact a member of our customer service team so we can assist you further.

# **Introduction to Assembly - Quick Guide**

How your aluminium lift and slide patio door set arrives on site will depend on the size ordered, however as a rough guide;

## **Outer Frame**

If the outer frame is 3 metres or more, it will likely be supplied with the frame in loose sections. Outer frames under 3 metres will likely be supplied built up.

## Glass

If your door set is over 3 metres, the glazing will likely be supplied loose. 3 metres and under will likely be supplied with the doors pre-glazed.

These guidelines are to ensure the safety of those handling our products, as well as ensuring they arrive to you in the best possible condition. Our team will contact you in advance of dispatch to discuss your individual delivery arrangements.

These fitting instructions will cover the installation of both standard sized and bespoke lift and slide door sets, with sections covering assembly of frames that are supplied loose and built up, and door leafs that are pre-glazed as well as supplied with glass loose.

Every lift and slide patio door set is pre-assembled in our factory to ensure it is operating perfectly before we deliver it

For installation, assemble the frame if required then install it into the brickwork opening. If the cill nose option has been selected, the cill nose will already be attached to the frame bottom drainage threshold.

Install the doors into the assembled frame.

Because the lift and slide patio door set has already been assembled and operated in our factory, as long as the frame is installed securely into the brickwork opening, completely level and square in every plane, then the installed door set should operate perfectly, without the need for further adjustment.

IMPORTANT: Glass lifters / suction cups must be used during the installation of these doors (not supplied)

Full and detailed installation instructions are contained within this Instruction booklet

## **Contents**

## **DOORS-**

Supplied pre-glazed or with loose glass, depending on order

## FRAME-

Comprises of frame head, jambs and threshold. Supplied built-up or loose depending on order

## LOCKING KEEP COVER PIECE-

Qty 1 supplied loose

## **OPTIONAL EXTRAS**

## CILL-

Optional. Supplied fitted

## TRICKLE VENTS-

Optional. Supplied fitted in frame head add-on

## **FIXING KIT-**

- HSS dill bit 6.5mm x 100mm Qty 1
- Masonry drill bit 6.5mm x 160mm Qty 1
- 1/4 hex torx bit Qty 1
- 92mm direct frame fixing screws Qty 30
- Low modulus silicone Qty 1
- Assorted packers Qty 1 bag
- Jamb fixing plates Qty 8

# Jamb fixing plate

## **UNASSEMBLED FRAMES ONLY-**

- Frame fixing screws - Qty 16

## **UNGLAZED DOORS ONLY-**

- Wedge gasket Qty 1 roll
- Glass supports Qty 2 per glazing unit



Wedge gasket

# **Preparing the site**

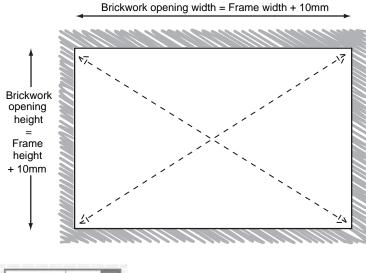
## **Brickwork opening:**

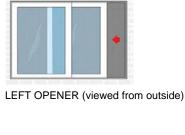
When preparing the site please prepare the brickwork opening to be 10mm more in height and width than the outside assembled frame size of the Inline sliding door frame.

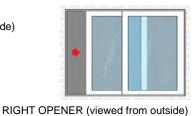
It is essential that all 4 internal surfaces of the brickwork be levelled before installation. Please ensure that all dimensions are correct for installation before proceeding, as the outer frame must be installed square and level into the opening.

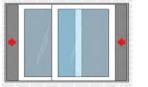
Dimensions for standard sizes:

Outer Frame (Width x height)	Brickwork Opening (Width x height)
1790mm x 2090mm	1800mm x 2100mm
2090mm x 2090mm	2100mm x 2100mm
2390mm x 2090mm	2400mm x 2100mm
2690mm x 2090mm	2700mm x 2100mm
2990mm x 2090mm	3000mm x 2100mm
3590mm x 2090mm	3600mm x 2100mm
3990mm x 2090mm	4000mm x 2100mm
4990mm x 2090mm	5000mm x 2100mm
5990mm x 2090mm	6000mm x 2100mm

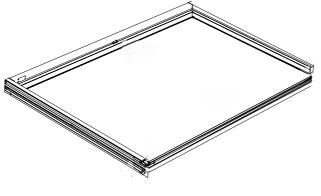








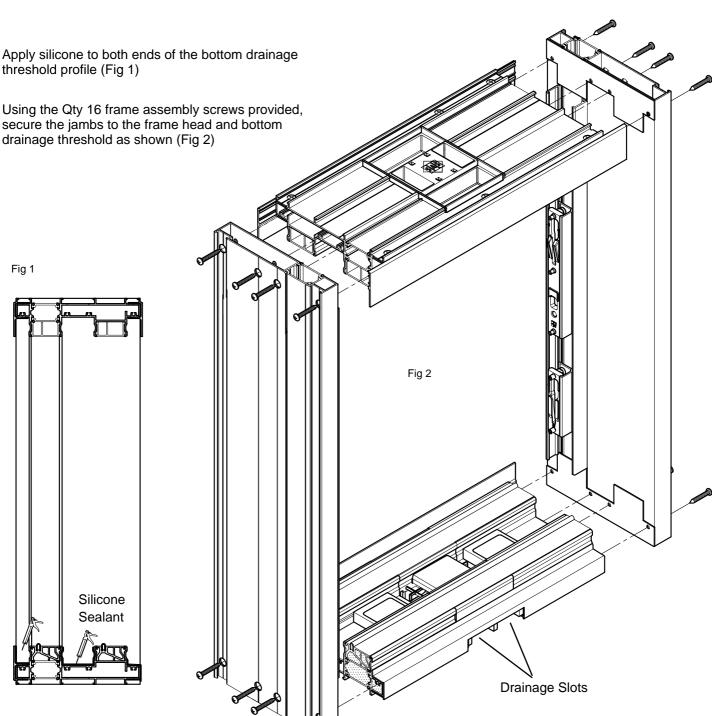
# Assembling the outer frame



If your outer frame has been supplied loose, lay the 4 pcs of frame on the floor on top of cardboard or similar protective covering to prevent damage to the aluminium powder coating.

Take care to ensure you've correctly assembled the frame. The sections will be labelled during production as 'top, bottom, left & right' on the outside faces and should be assembled so accordingly.

IMPORTANT: Apply silicone sealant to all touching faces.



remain clear.

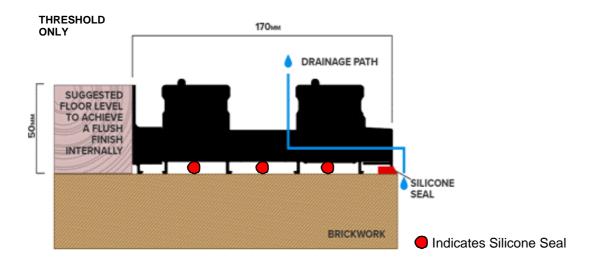
IMPORTANT: Take care to ensure the drainage channels

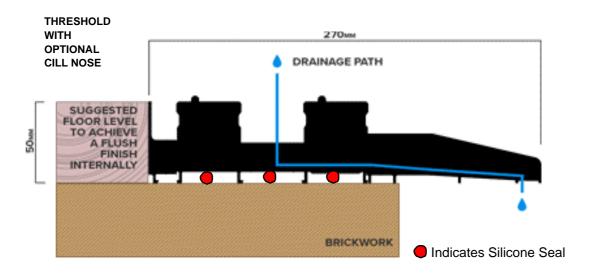
# Optional trickle vent add-on

If you have chosen to add trickle ventilation to your sliding door, these are supplied in an aluminium add-on which sits on top of the frame head. The add-on will be pre-fitted to the frame head when it arrives with you.

# Installing the assembled frame

Please refer to the below for diagrams detailing the dimensions of the frame threshold and standard cill nose option, when considering finished floor heights. If you've selected a bespoke cill option please contact us for further information.





The outer frame should be positioned in the brickwork opening with the jambs to the outer edge, up to a maximum 5mm - 20mm back from the face of the brickwork. Most importantly, the frame jambs should have a secure fixing, the bottom threshold should be fully supported from front to back, levelled without dips or raises, with the cill nose (if selected) overhanging the brickwork.

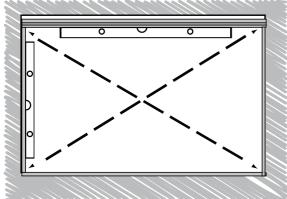
# Installing the assembled frame

Run a bead of silicone the length of the threshold, as shown on Page 7.

## IMPORTANT: It is critical that the frame is fitted square and level, and checked using a laser level.

Using the packers supplied, level the frame starting at the bottom and insert the first packer DIRECTLY UNDER THE FRAME JAMB starting at whichever side of the frame looks highest. Then continue to pack all around the frame.

Continually check the frame using a long spirit level as you go. It is very important the frame is installed into the brickwork opening completely upright, square and level in every plane. Measure diagonally across the frame and ensure the measurements are the same.



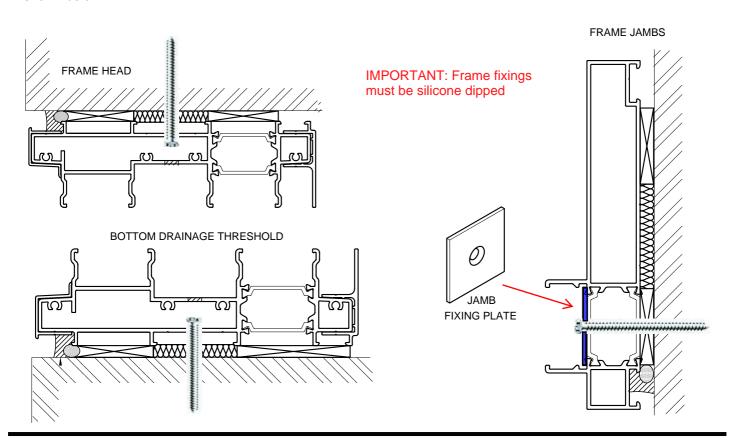
The diagonals must be the same

Do not proceed unless you are 100% happy the frame is in upright, square and level in every plane and checked using a laser level

The door set uses a bottom rolling system so it is vitally important the bottom frame threshold section is level and adequately supported from front to back, without dips or raises, all the way along using packers as necessary.

When the frame is in the opening square and level, drill fixing holes 150mm from each edge, then a further 3 fixing holes evenly spaced. Use the HSS drill provided to drill the frame sections and the SDS masonry drill for the lintel / brickwork.

Finally fix in place with the direct frame fixings and T30 bit provided, through the central channel, ensuring the fixings in the bottom section are silicone dipped. When fixing the frame jambs, use the jamb fixing plate as shown below.



# Installation of the doors into the frame

Regardless of if your sliding door set is received glazed or unglazed, the doors should be installed in the frame next. The doors will be clearly marked for you during production to identify which door panel installs where.

Our standard lift and slide patio doors are 2 door sets, with configuration specified at the time of ordering, available with either both doors opening, or with a fixed panel. If you have a fixed panel, this should be installed second, ie. after the sliding panel.

All drawings and instructions are looking from the outside towards the inside here after.

IMPORTANT: Glass lifters / suction cups must be used during the installation of these doors

## FOR INSTALLING SLIDING PANELS

Fix the sliding panel to the inner track. Working from the outside, carefully lift the sliding door panel into the inner track of the frame head, and swing the bottom of the door over the bottom tracks until the wheels are correctly located on the inner bottom tracks.



You may find it useful to insert the door towards the middle of the outer frame and once located on its tracks, slide it to the desired side.

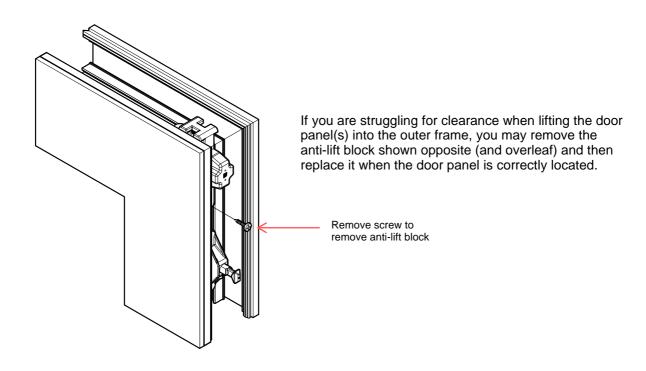
Take care not to attempt to move the door panel until he wheels are correctly located onto the track to avoid damage.

If you have a double opening lift and slide patio door set, repeat the process with the second sliding panel, lifting this onto the outer track, again working from the outside.

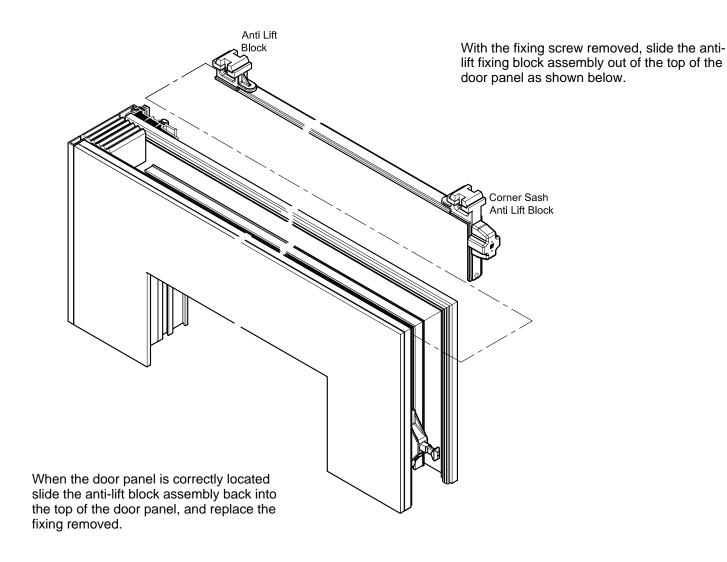
## FOR INSTALLING FIXED PANELS

For lift and slide patio doors with a fixed panel, the fixed panel must be installed after the opening / sliding one. Working from the outside, carefully lift the fixed door into the outer track of the frame head, and swing the bottom over the bottom tracks until the plastic blocks located underneath the fixed door panel are correctly located onto the outer bottom tracks.

IMPORTANT- to avoid damage to the track, wheels or plastic blocks, do not attempt to move the doors until the wheels and plastic blocks are correctly located onto the tracks.

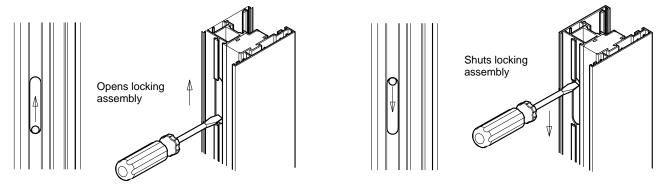


# Installation of the doors into the frame (cont)



# Locking a fixed door into position

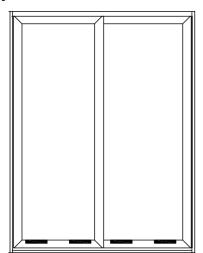
If your lift and slide patio door has a fixed door, this must be locked into position. Locate a screwdriver into the slide bar hole and slide the lock assembly upwards. When the fixed door is located close to the frame jamb, pull the slide bar locking assembly downwards, engaging the locking points into the top and bottom keeps. **NOTE: you may need to slightly move the door from side to side until the locking point engages.** 



If the door panels have been supplied pre-glazed, to allow access to the slide bar hole, the glazing bead and wedge gasket adjacent to the slide bar hole are packed separately. After locking the fixed door into position, install the glazing bead and wedge gasket as shown on page 11.

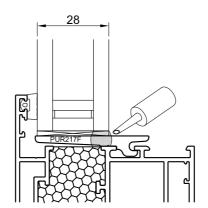
# Glazing the doors

## If your doors have been delivered glazed, please skip this step.



This is the glass installation for standard doors.

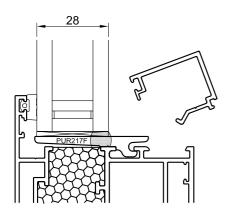
For doors which need to comply with PAS 24:2012. See below.



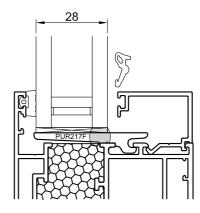
Fit the special glass supports as shown.

Silicone seal along the bottom of the glazed unit and 150mm up either side, as shown opposite. Ensure the silicone used is compatible with the Butyl on the glazed units.

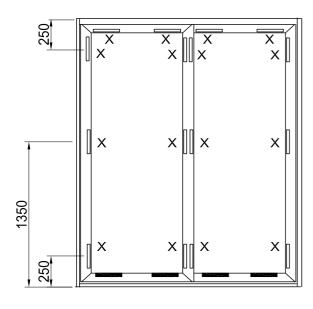
Locate the internal glazing beads as shown below and clip into position.



Finally insert the internal wedge gasket to secure, as shown below. The joint should be in the centre of the top rail. Insert the corners first and ensure at least 1% - 2% over length.



# Glazing to comply with PAS 24:2012



In order to comply with the requirements of PAS 24:2012 security rating, additional glazing packers are required in the glazing aperture.

When establishing the correct depth of the glazing location packer, a minimum 1mm clearance needs to be achieved.

Door Sash Heights up to 2500mm

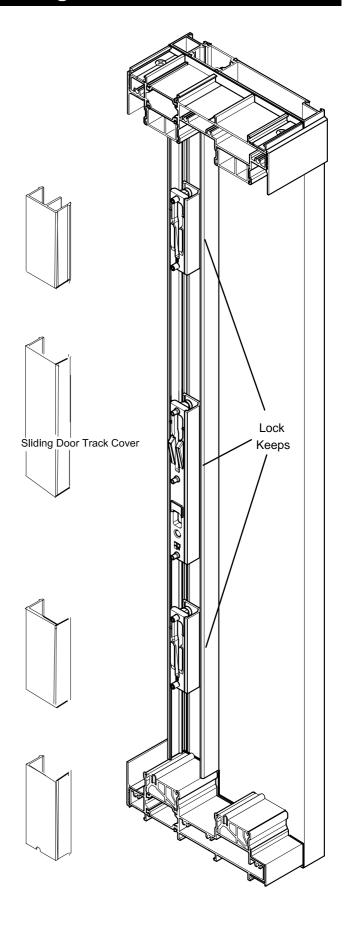
- Special glass supports PUR 217F
- X Packers to be located to leave 1mm clearance only.

# Lock keep adjustment and sliding door track cover

Try sliding and closing the access door, ensuring the lock is operating and the door can be locked.

If necessary adjust the location of the keeps by loosening the screws and sliding them up or down until the lock works perfectly.

When the lock keeps are in the final position cut the sliding door track cover to fit in between and at the ends of the keeps by clipping into position.



# Removal of the sponge blocks

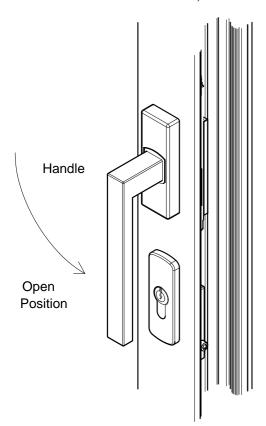
Finally, remove the sponge blocks in the bottom rail before use.



# Operation of your lift and slide patio door

**OPENING:** With the handle facing downwards, slide the doors open.

**CLOSING:** Slide the doors closed, rotate the handle 180 degrees so it faces upwards, then turn the key to lock.





## **DECLARATION OF CONFORMANCE**

DoC No: JCI/LSDALI70D

Product Type: Aluminium Lift and Slide Double Glazed Door

Intended Use: For use in domestic

Not intended for use on escape route

Declared System of Assessment Performance: 3

**Provisions to which the Product Conforms:**Annex ZA of BS EN 14351-1:2006+A1:2010

Reference to Supporting Product Certification and/or Test

**Reports** (supportive of compliance):

Exova - Weather Tightness Report: BMT/MTP/F15195/01 Rosenheim - Thermal Performance Report:12-000309-PRO1

**Declared Performance:** 

Essential Characteristics Performance

Resistance to Wind Load: Class B3 (1200Pa)
Watertightness: Class 9A (600Pa)

Dangerous Substance: No emissions of dangerous substances emitted

Load Bearing Capacity of Safety Device: Npd
Acoustic Performance Npd

Thermal Transmittance: 1.4 W/m2K

Radiation Properties: Npd

Air Permeability: Class 4 (600Pa)

This declaration of performance is issued under the sole responsibility of JCI Limited.

Signed for and on behalf of the Company by

Name of Representative: John Collins Job Title: Managing Director

Representative Signature: Date of Issue: 1st June 2022

**Product CE Marking Detail:** 

CA

**JCI Limited** 

Macclesfield. SK10 2BN

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BS EN 14351-1:2006+A1:2010 Aluminium Lift and Slide

Double Glazed Door DoC No: JCI/LSDALI70D

Not intended for use on escape route