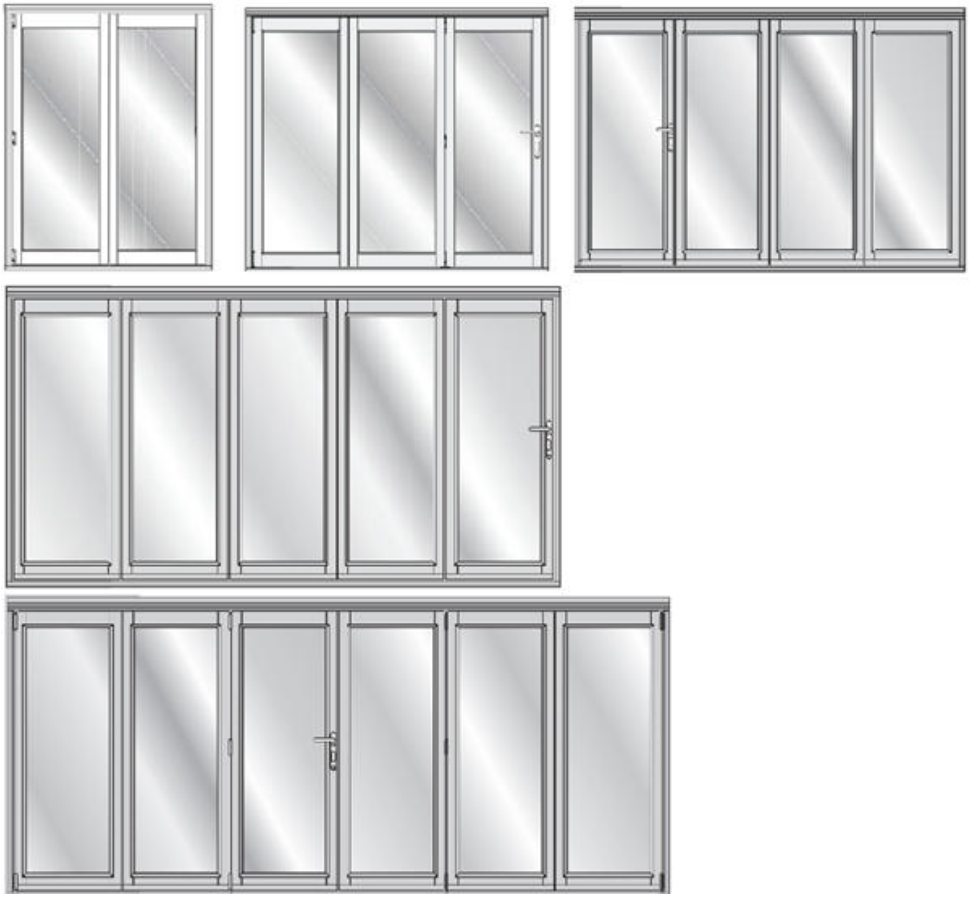
STATUS ALUMINIUM BIFOLD
ASSEMBLY INSTRUCTIONS

Standard configurations - opening out



About your Status Bifold Door

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.

The advice given in this document assumes fitting will be carried out by a qualified professional following the Code of Practice for the Survey and Installation of Windows and External door sets, where applicable.

Important Information

All of our external aluminium bifold doors and frames, glazing units and hardware components are guaranteed for a full 10 years against the occurrence of manufacturing faults and the powder coating finish is guaranteed for 15 years, all subject to correct installation, regular maintenance and care in use as detailed below.

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.

Handling and Storage

Take care when unloading the products as they may have shifted during transportation. The products are heavy. Always wear gloves, use specialized equipment such as glass lifting suction cups and have at least two people to unload / carry them.

You are responsible for safe handling of the products, and for selecting appropriate handling equipment.

Conduct a thorough inspection of the product(s) immediately after receiving them, including temporarily removing any protective tape, and then reapplying before installation.

Important: All damages or missing parts must be reported within 72 hours of receipt and before commencing installation.

When storing the doors / frames and glass before installation, and once all items have been fully checked, they should be handled with care and stored in a dry, ventilated building.

Loose glass should never be placed directly onto hard floors such as concrete, but should be placed on cardboard, sheeting or wooden batons, on edge rather than flat. The glass should be stored on its edge and at a 3-6 degree angle. Glass should not be stored horizontally or on top of each other and should not come into contact with anything harder than itself.

Important: The glass must be inspected before being fitted. We cannot accept claims for any missing items, damages or scratched glass after 72 hours following delivery or after installation has begun.

Installation

This door set is designed to be installed by competent trades persons with good knowledge and previous experience of installing bifold doors. Thoroughly read and understand these instructions before you begin installation. It is presumed that the installer possesses basic skills and an understanding of door, window, wall and roof installation, and joint sealant guides.

Before commencing the installation, carry out a final check to make sure the aperture is the correct height and width to accommodate the outer frame size. The brickwork opening should be approximately 10mm greater in both height and width than the outer frame size when measuring at the tightest points.

Our aluminium doors are supplied with 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 bifold doors are bottom hung, the weight of the doors is supported via the bottom rollers and threshold.

Important: 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.

About your Status Bifold Door (Cont)

Care and Maintenance

Aluminium Door and Frame Components

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

The profiles may have protective tape applied to interior and exterior surfaces to protect them during manufacturing and handling. Protective tape must be fully removed before or on installation. Protective tape and masking tape should not remain on exterior surfaces for an extended period of time. They will begin to fuse to the surface making the adhesive residue difficult to remove. Failure to remove tape may permanently damage the frame finish.

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.

The threshold should be kept clear of debris and regularly cleaned to ensure the drainage channels remain clear, which can be done whilst cleaning the rest of the door set. The threshold should be stepped over when entering and leaving and not used as a step, to avoid damage to the threshold and seals.

Important: 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.

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 detect.

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

About your Status Bifold Door (Cont)

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 bifold 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

Important: 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.

Hinges, pivots and brackets

A light spray application of a suitable lubricant such as WD40, followed by a light wipe with a dry cloth to remove excess, is recommended to all hinges, pivots and brackets. Exposed surfaces should first be wiped with warm soapy water and a soft rag, and then rinsed clean before applying preventative.

Twin point locks

Spray application of a suitable lubricant such as WD40 silicone spray. A tube attached to the nozzle will help concentrate the spray where you want it to go. There are access holes or slots on all twin point locks, so that this can be done without removing the locks from the doors.

Frequency

The procedures mentioned above need to be carried out as often as is necessary to prevent deterioration in the installed environment, however we recommend the following minimum frequency of application; General environment – 6 months Close to marine environment - 3 months

Introduction to Assembly

QUICK GUIDE

Supply Option 1 – Frame and doors built up with loose glass

Temporarily secure the frame perfectly, plumb square and level on all panes into the opening using packers. Once the frame is fully secure in the opening, the doors can then be opened and folded back to allow access to the frame fixing points. Direct fix all around the frame ensuring the fixings are silicone dipped. Re-check the frame levels and then the glass can be installed, and toe and heeled. Once the glazing units are fully installed, and the doors are operating correctly, fit the internal glazing bead

Supply Option 2 – Frame built up, doors loose and fully glazed

Temporarily secure the frame perfectly, plumb square and level on all panes into the opening using packers. Once the frame is fully secure in the opening, direct fix all around the frame ensuring the fixings are silicone dipped. Re-check the frame levels and then hang the pre-glazed doors.

Supply Option 3 – Frame broken down, doors loose and fully glazed

Assemble the frame and temporarily secure the frame perfectly, plumb square and level on all panes into the opening using packers. Once the frame is fully secure in the opening, direct fix all around the frame ensuring the fixings are silicone dipped. Re-check the frame levels and then hang the pre-glazed doors.

Contents

Please check the contents of the packages to ensure all parts are present before beginning assembly

Doors, Frames and Glass

Supply Option 1 Frame and Doors (built up) Glass (loose)

Supply Option 2 Frame (built up) Doors (loose) Glass (fitted)

Supply Option 3 Frame Pack (broken down) Doors (loose) Glass (fitted)

Hardware and additional options

Qty 1 Cill Nose – optional extra (fitted to threshold)

Qty 2 Cill End Caps - optional extra

Trickle Vent – optional extra (fitted to frame head)

Qty 3 Keys – (loose, located inside the frame pack)

Qty 1 Pair Handles (located inside the frame pack)

Frame Fixings (supply options 2 and 3)

Qty 1 T25 Handheld Driver

Qty 4 Corner Chevrons (located inside the frame pack)

Qty 8 Corner Cleats (located inside the frame pack)

Corner cleats

Corner chevrons

Hinge fixing screws (supply options 2 and 3)

Qty 1 Bag of M5 x 10mm Machine screws (loose, located inside frame pack)

Qty 1 Bag of 3.9 x 25mm Countersunk screws (loose located inside frame pack)

Fitting Kit (Optional) -

Qty 1 6.5 x 210mm SDS Masonry Bit

Qty 1 6.5 x 100mm HSS Drill Bit

Qty 30 7.5 x 90mm Direct Frame Fixings

Qty 1 TX30 Drill Bit

Qty 1 Clear Silicone

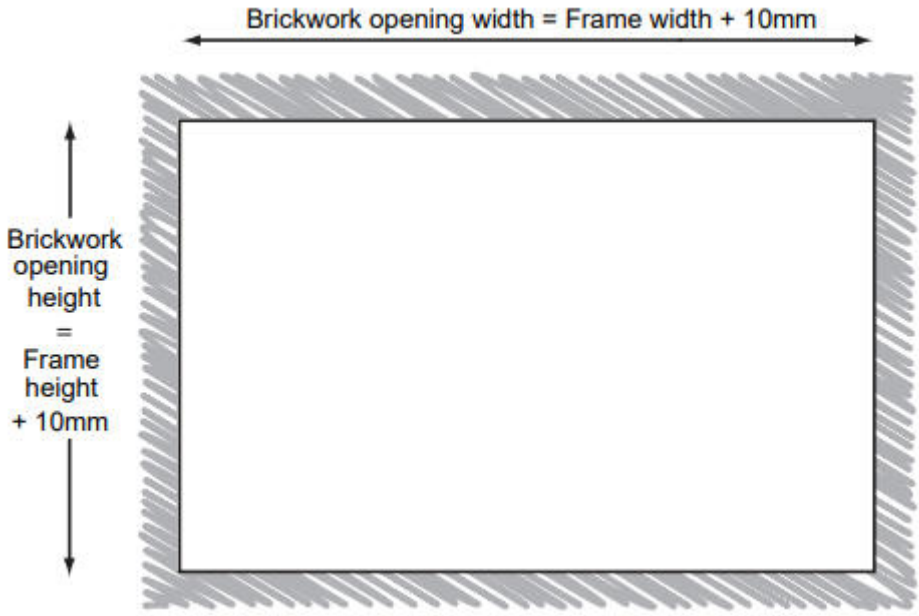
Qty 1 Frame Packers

Important: The assembly and installation method as detailed in this manual is based on the purchase and use of the optional fitting kit. If you have not chosen to purchase a fitting kit, please ensure you use appropriate fixings suitable for external door and window installations.

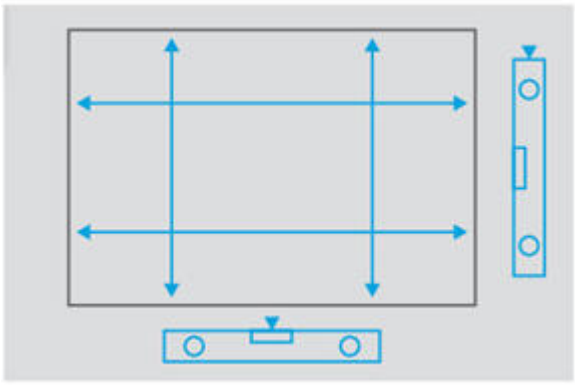
Preparing the site

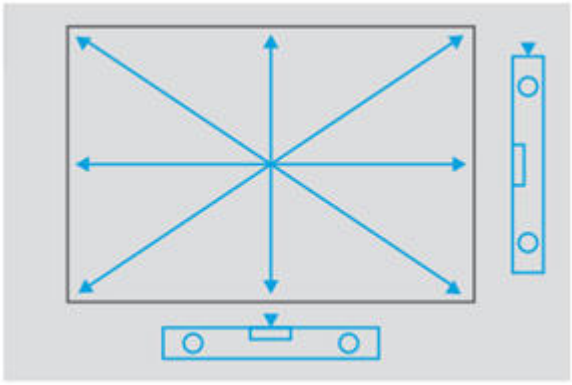
Brickwork opening:

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 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.





Check the aperture to make sure there is no loose plaster or brickwork, and that it is free of any debris or brick dust. Ensure that a solid, level base is present at the required dimensions and can provide packing points at 250mm centres and fixing points at 600mm centres. Ensure floor levels do not obstruct door operation or impede drainage.

Preparing the site (Cont)

Example sizes:

Outer Frame:	**Brickwork Opening:**
2090mm W x 2090mm H	2100mm W x 2100mm H
2390mm W x 2090mm H	2400mm W x 2100mm H
2690mm W x 2090mm H	2700mm W x 2100mm H
2990mm W x 2090mm H	3000mm W x 2100mm H
3590mm W x 2090mm H	3600mm W x 2100mm H
3990mm W x 2090mm H	4000mm W x 2100mm H
4190mm W x 2090mm H	4200mm W x 2100mm H
4790mm W x 2090mm H	4800mm W x 2100mm H
4990mm W x 2090mm H	5000mm W x 2100mm H

The brickwork opening is classed as a finished opening size, so it is important you have allowed for any additional plaster work, trims, architraves, etc.

Finishing around the frame is a personal preference and should be decided between yourself and the installer.

Insulated cavity closer's may be required.

Assembling the frame (supply option 3)

If your frame has been supplied built up (supply option 1 and 2), please skip this section and refer to ‘Installing the assembled frame’.

Lay all 4 pcs of the frame on top of cardboard or similar protective covering to prevent damage to the aluminium.

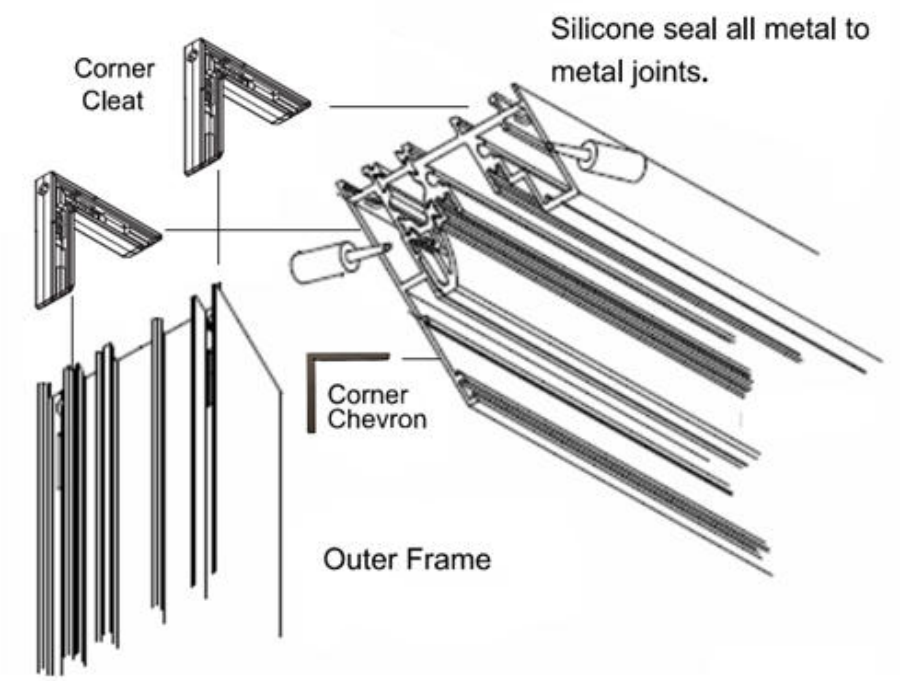
Identify the frame head, left and right-hand jambs and bottom threshold.

For standard door sets a clip-on cill nose will be supplied.

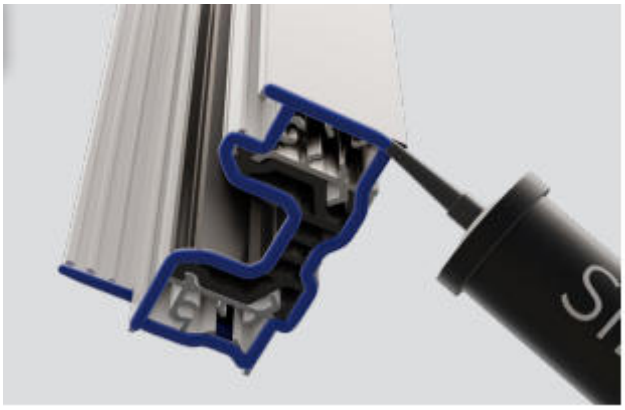
Please note: For open out door sets, the frame rebates will be to the inside. For open in door sets, the frame rebate will be to the outside.

Before joining the frame sections together place 1 metal chevron in each of the 4 corners. The chevrons will help form a neat corner / right angle when tightening the mitred frame sections together using the corner cleats.

Assembling the frame (Cont)



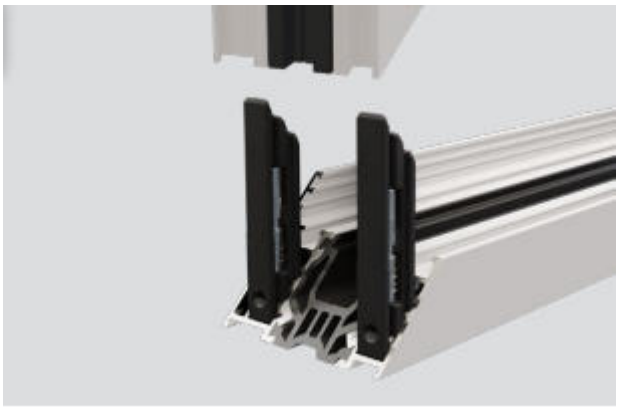
Before inserting the corner cleats into the frame, ensure the metal threaded bullets have not come loose and are held firmly in line with the access holes. Check by inserting the T25 driver head into the cleat screw slot, that it engages and turns. If any of the bullets have moved, click back into place and re-test.

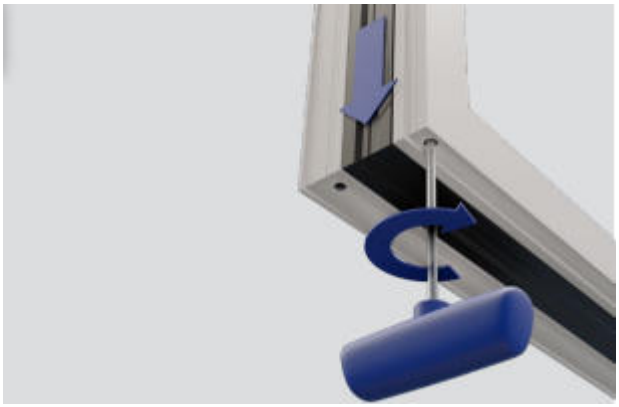


Run a continuous bead of silicone sealant around the joint between the frame sections.

Assembling the frame (Cont)

Mitred corners are constructed using 2 corner cleats that fit into locating channels in the aluminium profiles. First fit the cleats into one length of profile using a T25 Torx driver. The Torx driver fits through the pre-drilled holes as shown below.Tightening the fitting will draw the corner cleat into place. Fit the next length to form a corner using the same method.





Fine adjustment of the corner joint can be done with a hand-held T25 Torx driver. Turning the cleat screw in a clockwise direction will draw the opposing profile toward you. It is important not to over tighten too much. We also advise gradually working on each cleat in turn to avoid stressing the corner cleat.

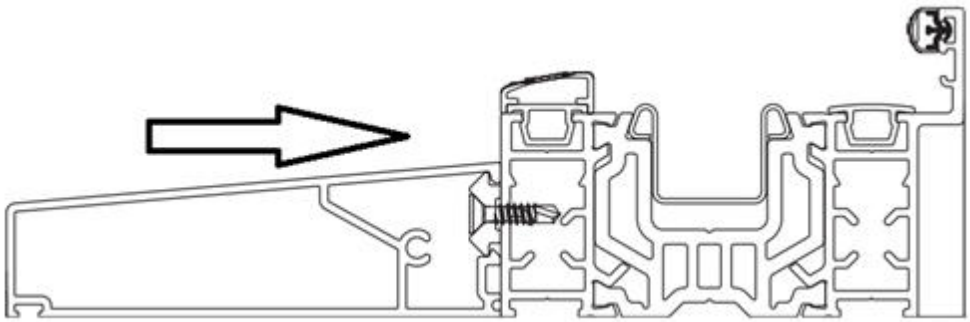
Installing the assembled frame

Before lifting the assembled frame into the opening, clear the aperture of any dirt / debris, ensuring you have a clean level surface to fix to.

Ensure you have the correct structural damp proof course in place.

Important: During the installation, repeatedly check the alignment and squareness of the outer frame. Measure the distance across diagonally to check squareness. Without these checks the installation may be unsatisfactory, causing damage to the doors and / or incorrect operation.

If you have selected a drip cill, clip the cill nose in position as below.



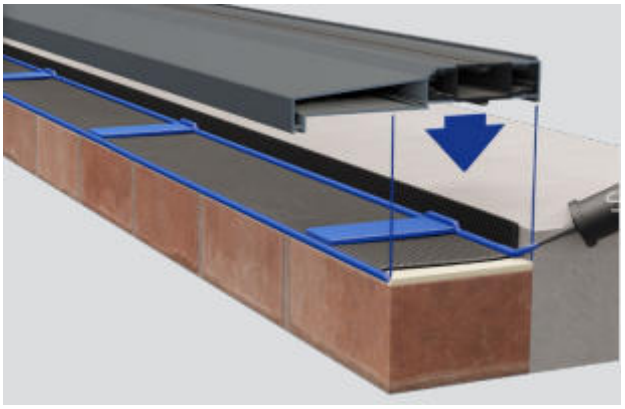
Installing the assembled frame (Cont)

Place packers along the bottom of the opening to create a level bed for the cill to sit on, place at each end of the frame and then approximately 600mm centres or where each fixing point will be located.

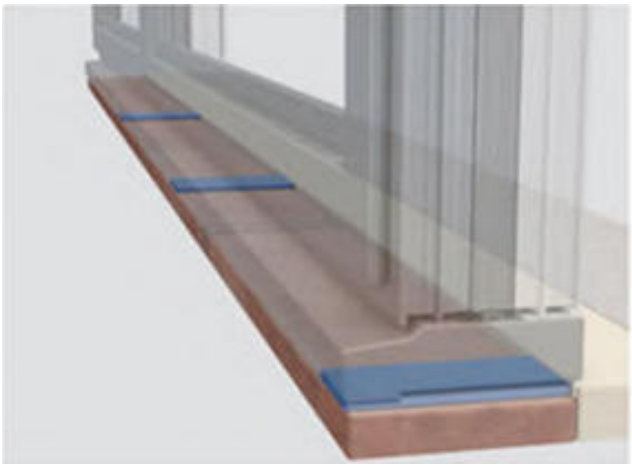
Temporarily lift the frame into the opening and check the bottom of the frame is sitting perfectly level. Remove the frame and silicone the packers in place. If the surface is uneven then a mortar bed may be necessary. If a mortar bed is not required then seal along edge using silicone sealant as shown below.

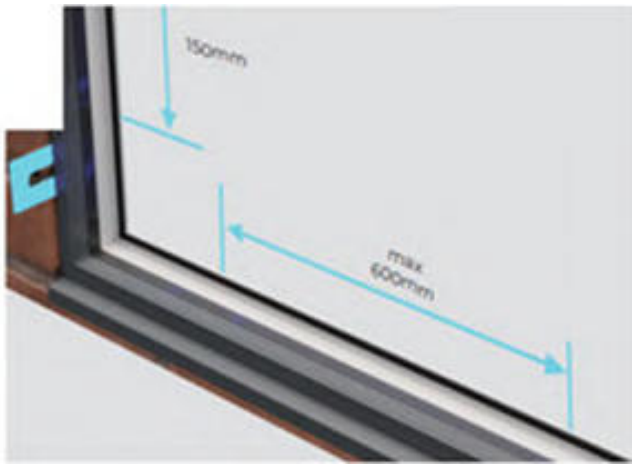
Ensure you have packers located where the bottom roller(s) come to rest in the closed position.

Create a bed of silicone or mortar for the frame to sit on the lift the frame into the opening ready for securing to the brick work.



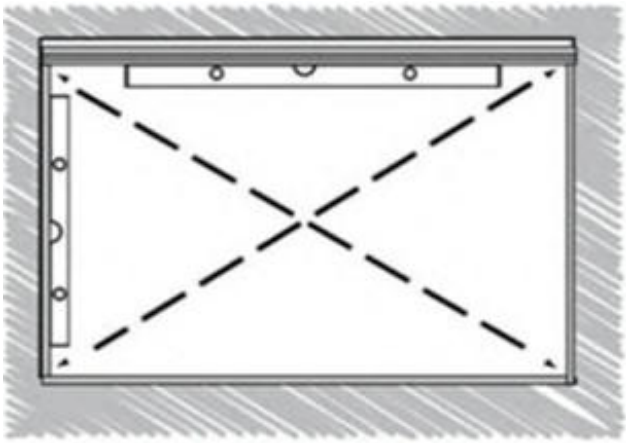
Pack around the frame ensuring it is square and level,maintaining a 5mm gap all the way around. Pack either side of where each fixing point will be located. Air wedges can also be used to help temporarily secure the frame and level into the opening.





Do not proceed with the fixing of the frame unless you are 100% confident the frame is in upright, plumb, square and level on every plane.

Use a 1.8m level or preferably a laser level to ensure the bottom threshold and frame is perfectly level on all planes.

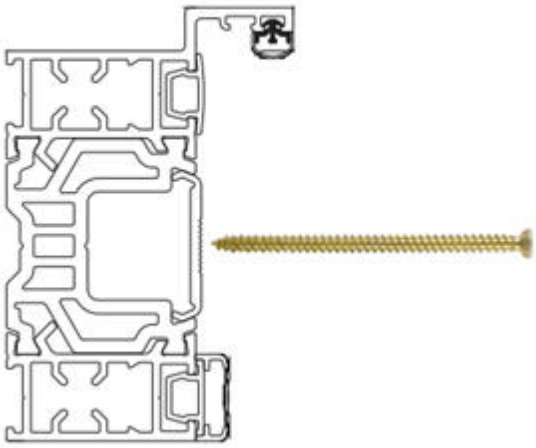


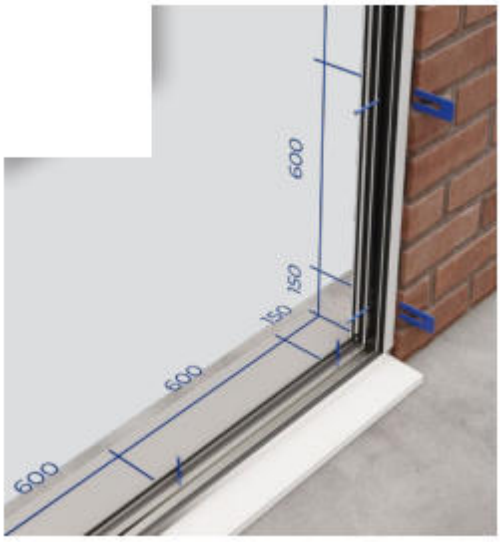
The diagonals must be the same

Installing the assembled frame (Cont)

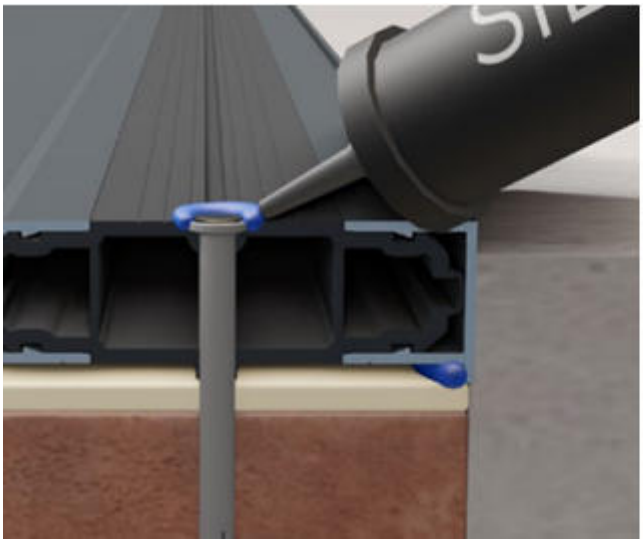
Once you are happy the frame is sitting perfectly plumb, square and level on all planes, the doors can now be opened (supply option 1) to allow access to the fixing points.

Using a 6.5 x 100mm SDS drill bit, pilot holes all the way around the frame and then use a 6.5 x 210mm Masonry drill bit to drill holes into the brickwork. Fix 150mm from each end, and no more than 600mm between centres using 90mm direct frame fixings and TX30 drill bit.





Important: Silicone the bottom fixing locations and screws to prevent water ingress. Ensure the head of screws are below the bottom of the track, to prevent the rollers colliding.



Fitting the doors (supply options 2 and 3)

If your frame has been supplied built up with the doors pre-fitted (supply option 1), please skip this section.

Do not rest the door on the bottom threshold during this process, ensure you have adequate protection and suitable support in place.

The images below are an example for a left opening door set.

Locate Door 1, which fixes to the jamb of the frame. Look for the glass beads to determine the interior side. The hinges will be pre-fitted to the outer frame.

Secure the door to the frame using qty 2 M5 x 10mm machine screws into each hinge, do not fully tighten at this stage.

Open and close the door to check you are satisfied with the alignment.

Once satisfied with the door alignment, tighten the screws and then insert the 3.9 x 25mm final fixing screws in the central locations.

Fitting the doors (Cont)

With Door 1 remaining open, locate Door 2, lift the door, locating the roller in the bottom track. Leaning the door, locate the top roller into the top track and secure the door to the hinges using the same method as above. Re-check the door alignment and insert the final fixing screw.

Repeat this process for any additional connecting doors.

When fitting single ‘traffic’ doors, make sure the other doors are closed and secured with the shoot bolts.

Fix using M5 x 10mm machine screws and check for alignment as before, then tighten the M5 screws and insert the final 3.9 x 25mm countersunk centre screws.

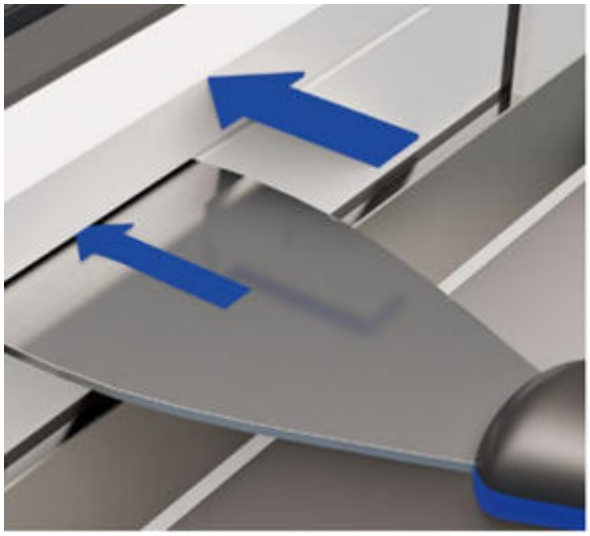
Glazing the doors (supply option 1)

Before glazing the doors, check they are operating correctly.

Do not proceed with glazing the doors if you are not experienced with this process.

Remove beads carefully and place them to one side.

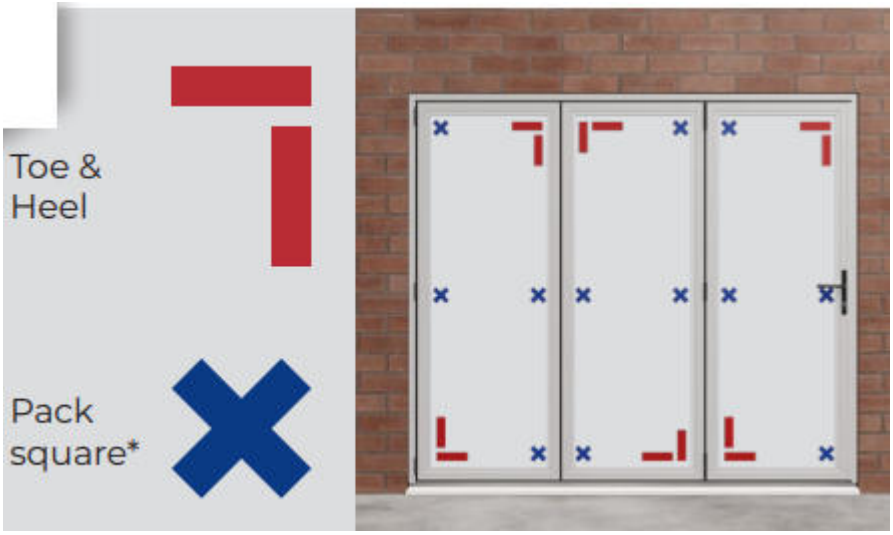
Important: The glazing beads must be returned to their original positions and in the correct order, so make so make sure you take note of their original location.



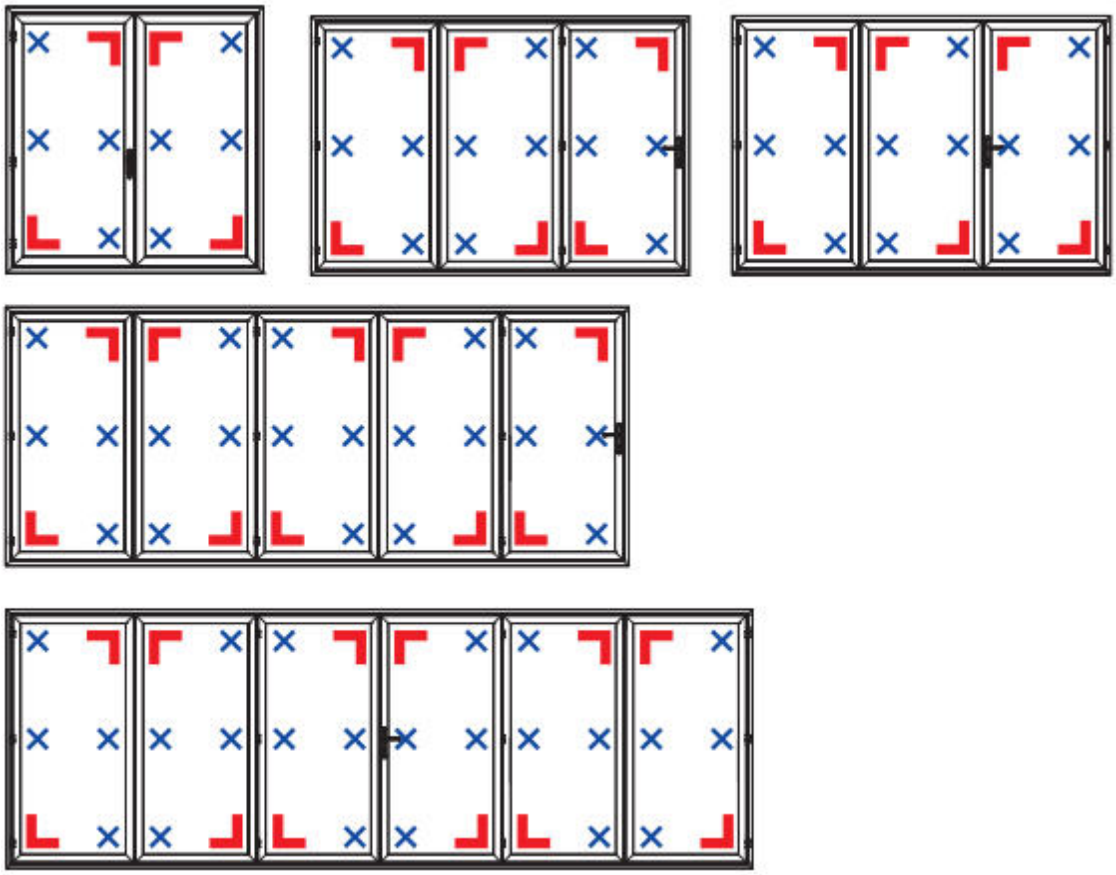
Ensure all gaskets are inserted into each bead before glazing. Install the glazed unit and pack using 3-4mm glazing packers (sizes may vary due to glass and door manufacturing tolerances.

Important: Fit the glazed unit into the sash and pack / toe & heel in the appropriate places using glazing packers. The incorrect balancing of the glass will affect the door operation.

Toe & heeling should distribute the weight of the glass correctly to ensure the door is square and aligned as shown in the example below.



Glazing the doors (Cont)



Re-fit the glazing beads.

We advise spraying the units with a mild soap/water mixture or glass cleaner to make beading easier. Ensure you have toe & heeled/packed the units correctly.

Fit the top bead in place to secure the glazing unit (rotating the beads until they clip in to place as shown below) and then fit the bottom bead.

Next, fit the two vertical beads, being careful not to scratch the painted profile while fitting. Finally run your finger along the gasket edge to check they have seated correctly, adjusting if required.

Operational adjustments

Adjustments are only designed for minor tweaks to the doors. they should only be carrier it if you are completely confident that the frame has been installed perfectly plumb, square and level, with no dips or rises on the frame head and cill, and has been checked using a lazer level. The cill must be checked to see if it has been sufficiently packed and supported where the rollers sit. All toe and heeling must be competed to the correct standard.

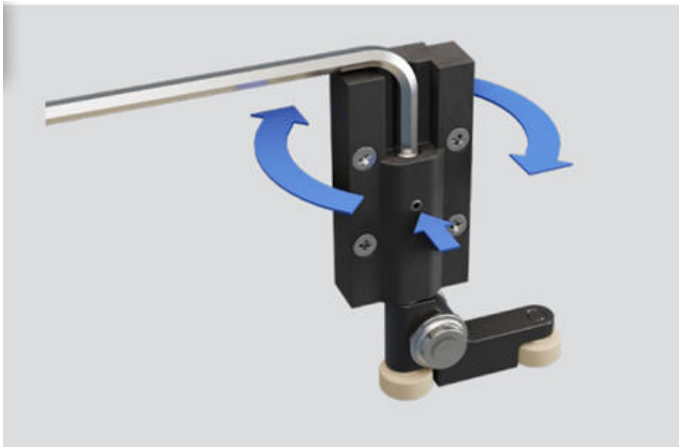
Bottom roller height adjustment - rollers should require minimal adjustment.

Double Roller

Loosen the two grub screws using a 2.5mm Allen key prior to adjusting and re-tighten once adjustment has been made. Adjust roller using a 6mm Allen key so that an equal gap of 12mm +/-1mm is maintained above and below between frame and sash. Clockwise = downwards adjustment. Anticlockwise = upwards adjustment.

Single roller

Loosen grub screw using a 2mm Allen key prior to adjustment and re-tighten when adjusted. Adjust roller using a 4mm Allen key so that an equal gap of 12mm +/- 1mm is maintained above and below between frame and sash. Clockwise = upwards adjustment. Anticlockwise = downwards adjustment. NB. This is different from double roller.



Operational adjustments (Cont)

Hinge width adjustment / packer placement

Hinge adjustment packers are available if required to square up the doors in the frame, and each packer gives you 0.5mm of adjustment. Note: Maximum of 2 packers per hinge. Fit the necessary packers prior to fitting the hinge.

Fit final fixing screws in hinges once all adjustments have been made.

Latch plate adjustment

If the door will not close properly you can adjust the latch using the two screws in the diagram below using a Phillips screwdriver.

Operational adjustments (Cont)

Hook keep adjustment

The keeps can be adjusted using a T15 driver. This will ensure smooth operation and good compression, preventing drafts and ensuring a good weather-tight seal.

External finishing

Once you are satisfied with the correct installation of the frame and door operation, break off any protruding packers where necessary.

Remove protective tape from all profiles. Clean down aluminium and glass with warm, soapy water.

Expanding foam can be used to fill any large apertures around the frame. Be careful not to overfill. Trim or silicone around outer frame and seal below external cill if applicable.

Check the bi-folding door for correct function, and instruct the homeowner on their correct operation.

To avoid mishandling, always fold back each door fully before opening the next section. Ensure doors are held in place via the magnets when open.

Reverse this process when closing, never close the doors by dragging / pulling the access door first. The access door should be the last section to close.