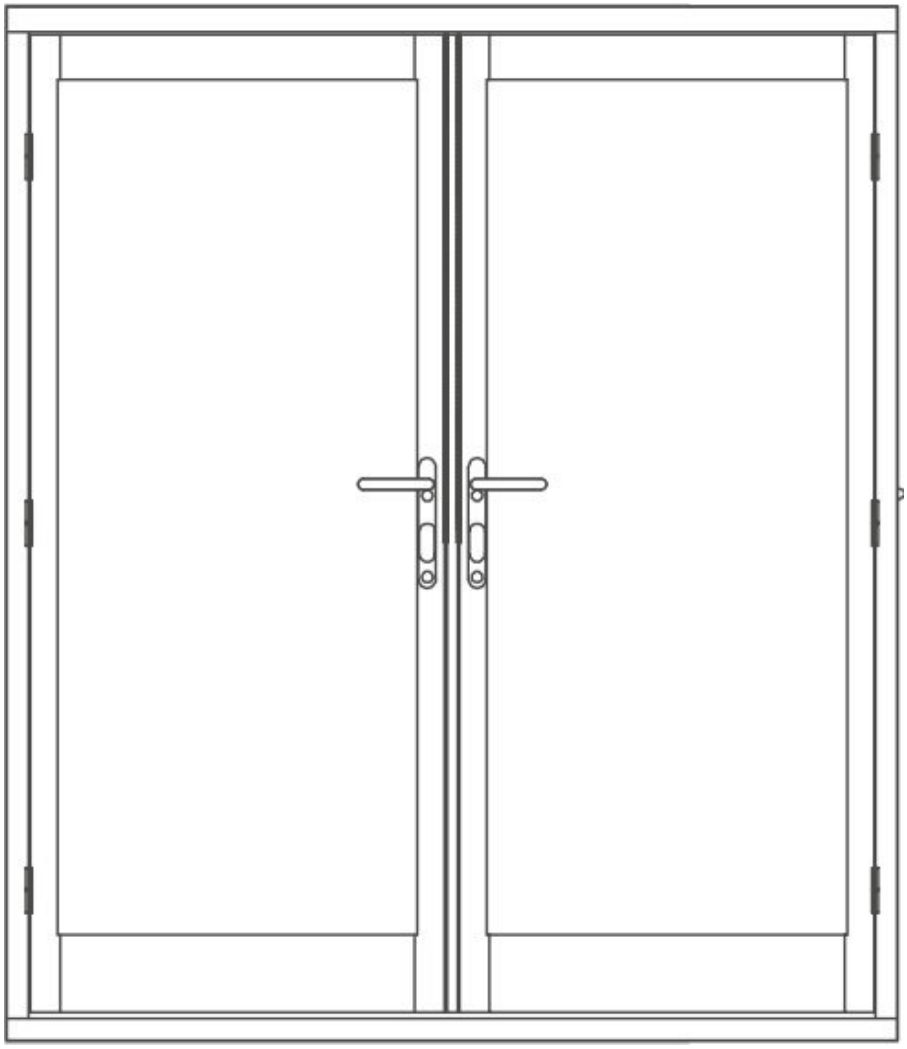
UPVC EXTERNAL FRENCH DOOR SET

Assembly Instructions

Bespoke and Standard Sizes



About your UPVC French 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.

Important Information

All external UPVC doors, frames, sidelights, double glazed sealed units and hardware components are guaranteed for a full 10 years against the occurrence of manufacturing faults, all subject to correct installation and regular maintenance and care in use as detailed below.

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

Handling and storage

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.

Failure to install and maintain the products according to these instructions will void any warranty.

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

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.

The outer frame needs to be securely fixed into the opening perfectly square and level on all planes.

Our French Doors are supplied with all the essential items and virtually everything pre-machined.

All glass will be supplied loose and will require installation by a competent trade's person(s), experienced with installing glass into doors and windows.

UPVC

The profiles may have protective plastic 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 UPVC 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.

About your UPVC French Door (Cont)

The UPVC frames should be cleaned on a regular basis using warm soapy water. Any stains that are hard to remove can be cleaned using a specialist UPVC cleaner, in-line with manufacturers guidelines. As a minimum, all external door and frame surfaces must be washed at least every three months, and monthly if within 5 miles of the sea or in an industrial area. The UPVC / finish is not guaranteed unless they are installed at least 800 metres away from the sea.

Hinges and Handles

Using a microfibre cloth, wipe down the visible surfaces with warm soapy water and then rinse off by wiping with a clean, damp cloth. A thin film of light machine oil or silicone spray can be applied to any moving parts, removing any excess with a cloth.

Stays

Applying a thin film of light machine oil or silicone spray, wiping with a dry cloth to remove any excess, will help to maintain the original lustre of the metal finish. Be careful not to get these liquids on the door and frame as this can cause staining.

Locks

All moving parts should be lubricated using a silicone spray and the surface cleaned with a soft damp cloth to ensure there is not a build-up of dust or debris that can damage the surface areas.

It is important that if you feel any resistance when operating the lock in the closed position, you do not continue to operate the doors as this may eventually cause damages and will invalidate your guarantee. If the lock works smoothly when the doors are in the open position, this indicates a door / frame alignment issue. This should be addressed by re-checking the outer fame levels, and hinge adjustments.

Double glazed sealed units

All glass is supplied to the GGF (Glass and Glazing Federation) standards.

To reduce carbon emissions from the home and to keep heating and cooling bills down, the government has recommended that all manufacturers use special Low E thermal glass within the sealed unit 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, but 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.

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 nor bunched. The glass used in sealed units is processed glass, therefore certain blemishes are unavoidable. More blemishes maybe 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.

About your UPVC French Door (Cont)

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.

Introduction to Assembly

QUICK GUIDE

Outer Frame (built up) - Supplied with the outer frame built up and the doors fully assembled within the frame, unglazed. Optional drip cill's and frame add-ons will be supplied loose.

The frame can be direct fixed into the opening.

Temporarily secure the doors in the opening using air wedges or packers. Once the frame is secure, open the doors and fix the frame directly into the opening.

Ensure the frame is perfectly plumb, square, and level on all planes, and free from twisting before permanently fixing it into the brickwork opening.

Glass - Supplied loose, for your fitter to balance on site.

It is recommended that Glass lifters / suction cups, and protective gloves are used during handling of the glass (not supplied). These guidelines are to ensure the safety of those handling our products.

The glass will require toe and heeling to ensure the weight is distributed to the correct areas and the unit is fully brace in the door.

Install the glass by placing packers in the relevant locations.

Once the glazing units are fully installed, and the doors are operating correctly, fit the internal glazing bead.

Contents

UPVC Doors, Frames and Glass

Qty 1 UPVC Doors and Frames (built up) Qty 2 Glass (loose)
Qty 1Cill optional extra (loose) Qty 2 Cill end caps (loose)
Qty 2 Trickle vents- optional extra (loose) Frame add-ons- optional extra (loose)

(For Sidelight Door sets only)

Single sidelight
Qty 1 Sidelight and beading
Qty 1 Glass
Qty 2 Coupler cover
Qty 4 70mm Self-drilling screws & washers

Double sidelight
Qty 2 Sidelight and beading
Qty 2 Glass
Qty 4 Coupler cover
Qty 8 70mm Self-drilling screws washers

Hardware
Qty 3 Keys (loose Qty 1 Pair of handles

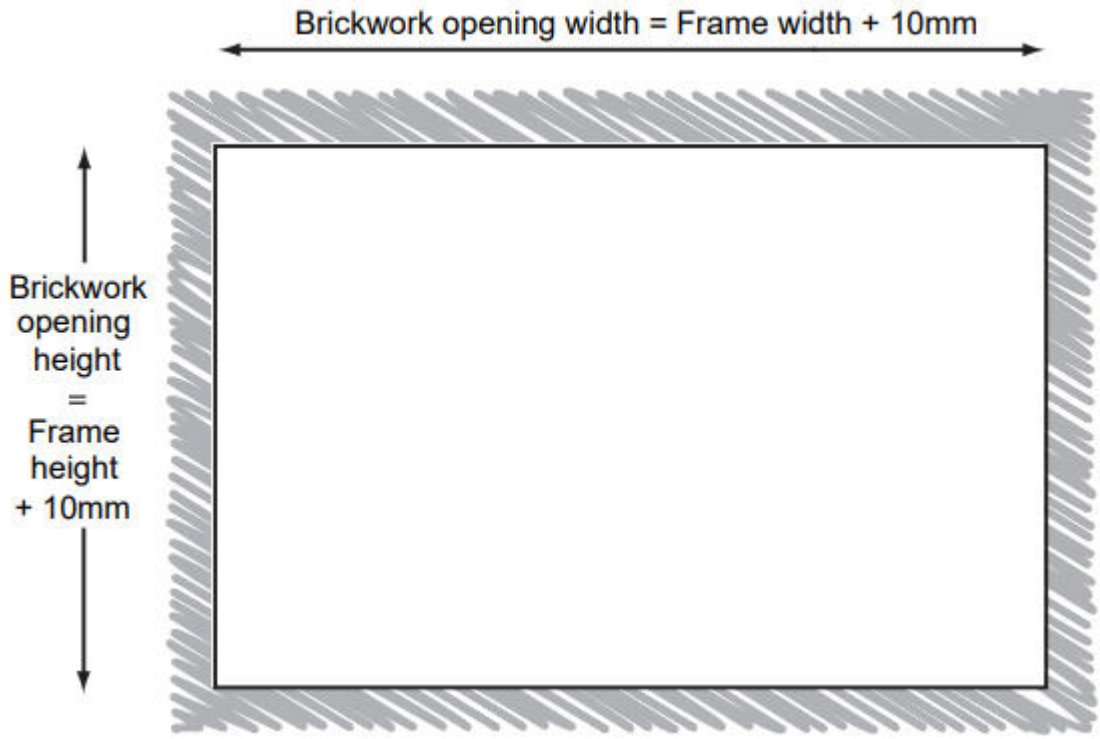
Fitting Kit
Qty 14 90mm Direct frame fixings
Qty 1 TX30 bit
Qty 1 6.5mm x 100mm HSS drill bit
Qty 1 6.5mm x 210mm SDS masonry drill bit
Qty 2 50mm self-drilling screws and washers
Qty 1 PH2 bit
Glazing / bridging packers
Frame / flat packers
Qty 1 Silicone (clear)

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.

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.



Example sizes:

Outer Frame	**Brickwork Opening**
1190mm W x 2090mm H	1200mm W x 2100mm H
1490mm W x 2090mm H	1500mm W x 2100mm H
1790mm W x 2090mm H	1800mm 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.

Fitting the drip cill

If you have ordered a cill, first locate the drip cill and the Qty 2 cill end caps, glue and seal the cill end caps onto each end of the cill.

Before fitting the cill into position, ensure the structural opening has been cleared of any debris, removing any old silicone, screws / nails if present as the cill will require sitting perfectly level. Please also ensure you have the relevant DPC in place.

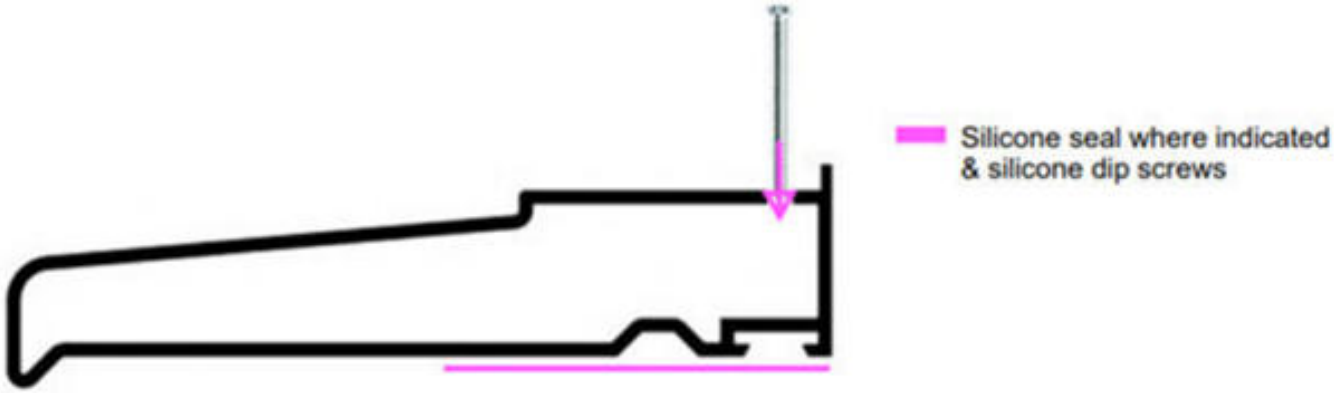
Place the cill into the opening and level using packers if required until it is completely flat and level. Carefully remove the cill and silicone the packers into place and apply a bead of silicone for the cill to sit on. Reposition the cill and ensure it is flat and level.

The Cill should be positioned so the frame jambs are sitting 5 – 10mm back from the face of the brick work.

Secure the cill in position using the direct frame fixings, ensure all fixings are silicone dipped. Position 1 fixing at each end of the cill where the outer frame jambs will be positioned and 1 fixing centrally.

Drill through the back edge of the cill using the HSS drill bit and then use the SDS drill for the brickwork.

IMPORTANT: All fixings must be silicone dipped prior to securing to the opening.



Please note: If preferred, the cill can be fitted to the frame before the whole unit is fitted into the opening.
The cill will require screwing to the frame jambs and window profile (screws not supplied) from the underneath and all touching faces appropriately silicone sealed.

Fitting sidelights

It is recommended that quick grip clamps are used during this process.

Your sidelight will be supplied unglazed to allow access to the fixing points.

The metal couplers will be pre-fitted to the sidelight and require securing to the outer frame.

Carefully open the door(s) to 90 degrees and support the weight at the bottom to avoid distorting or damaging the frame.

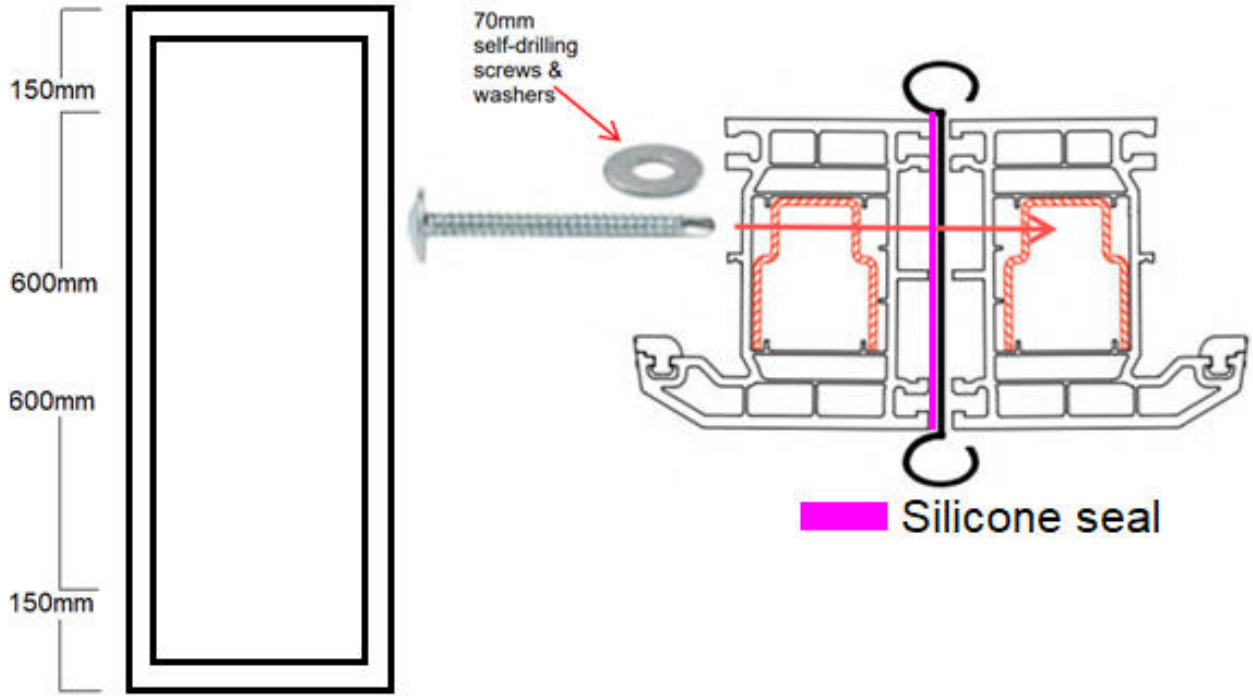
Using the 70mm self-drilling screws (Qty 4 per sidelight), washers and PH2 bit provided, attach the sidelight to the door frame from the sidelight side. Qty 2 screws should be positioned 150mm from the top and bottom of the sidelight and the 2 screws at 600mm centres.

The screws should be staggered between the edges of the frame profiles 150mm from the top and bottoms and then 2 fixings at 600mm centres.

Fitting sidelights (Cont)

Apply silicone to the touching faces.

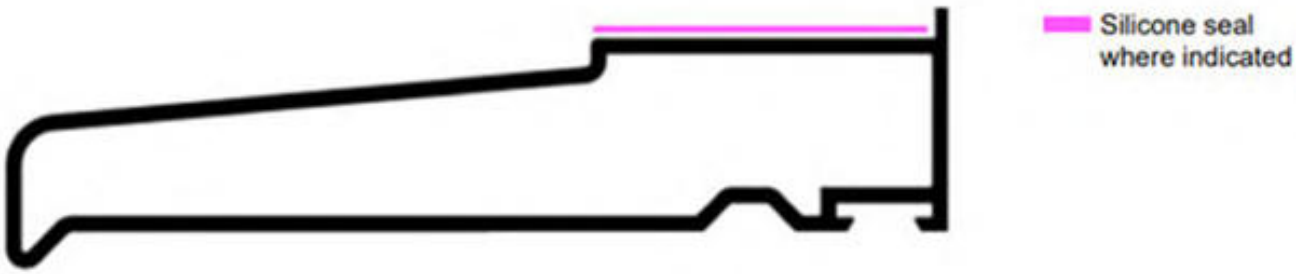
Repeat the process if a double sidelight set has been ordered.



Installing the assembled frame

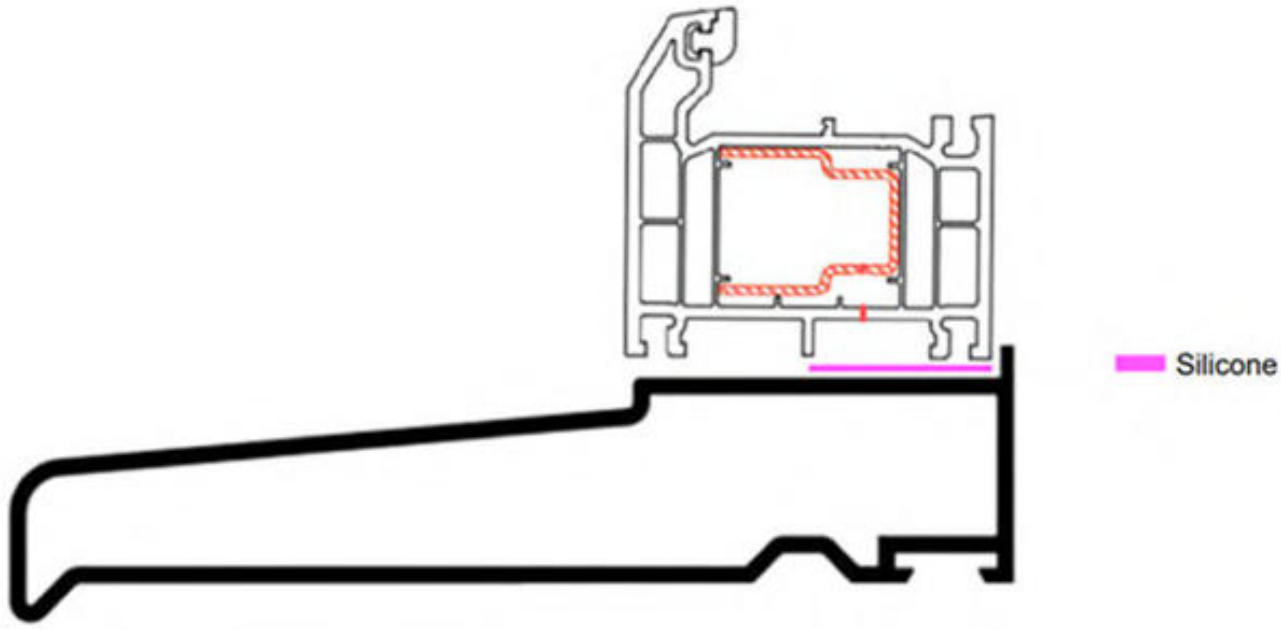
IMPORTANT: During the installation it is advised to repeatedly check the alignment and squareness of the outer frame. Measure the distance across diagonally to check squareness. Without these checks the installation may be unsatisfactory, causing damage to the window(s) and / or incorrect operation.

Before lifting the frame into the opening and sitting it on top of the cill, check the cill is perfectly flat and level, packing accordingly. Silicone all along the very back edge, corners and both sides of the cill creating a bed for the door frame to sit on.



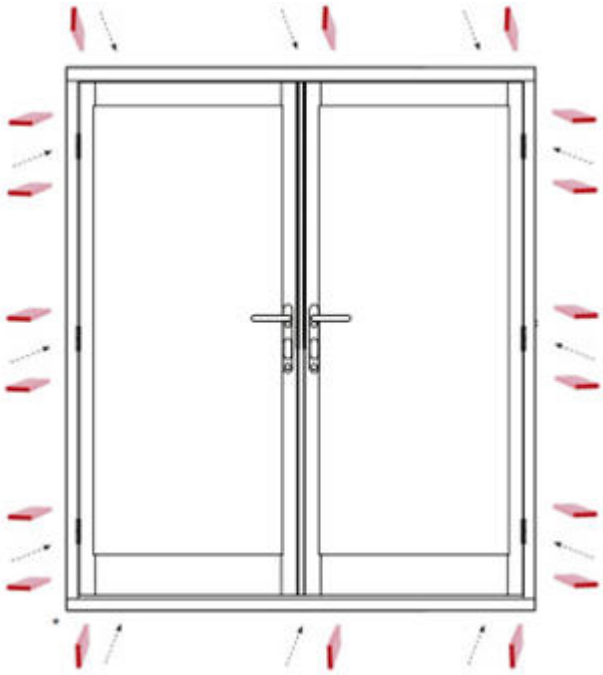
Installing the assembled frame (Cont)

Carefully lift the frame and fit it into the brickwork opening, resting on the cill and bed of silicone.



IMPORTANT: The frame should not be pushed tight back to the plaster line as this can lead to the door being fitted in twist.

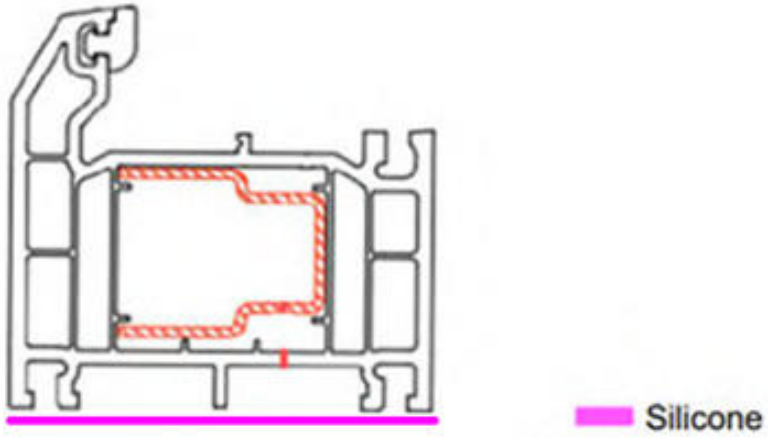
Temporarily secure in place using air wedges (not provided) and / or packers, ensuring the frame is perfectly square and level on all planes. The frame should be positioned 5 – 10mm back from the face of the external brickwork.



*Bottom packers to be used for installations without a cill.

Installing the assembled frame (Cont)

Without a cill

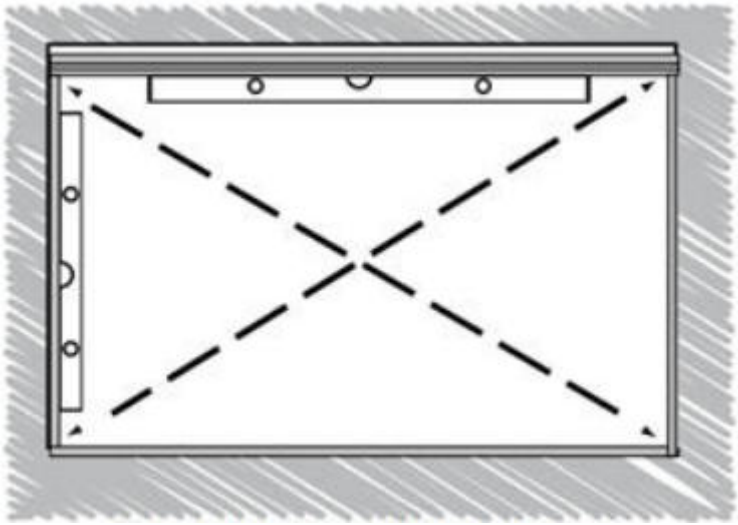


Once the frame is secured in place you can now open the doors to allow access to the fixing points in the outer frame, ensuring you support the weight to prevent the frame from moving.

Please ensure the frame is securely held in the opening before proceeding.

Re-check the levels and then fix the frame into the opening using the direct frame fixings (alternative fixings, window lug fixings / fixing straps (not supplied) may be used to suit the individual dwelling).

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



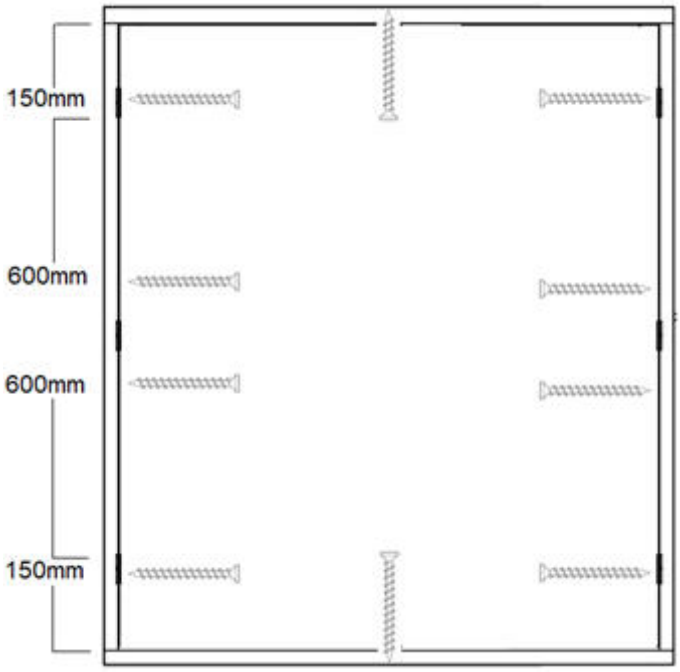
The diagonals must be the same

Frame fixing points will vary depending on the construction of the opening. It is recommended that corner fixings should be 150mm from the external corner and intermediate fixings should be at centres no greater than 600mm.

Insulated cavity closer's may be required before fitting the frame.

Installing the assembled frame (Cont)

Take care to avoid mortar joints as all fixings need to be secure. Use the direct frame fixings as follows (including doors with sidelights):



(Bottom fixing for doors without a cill only)

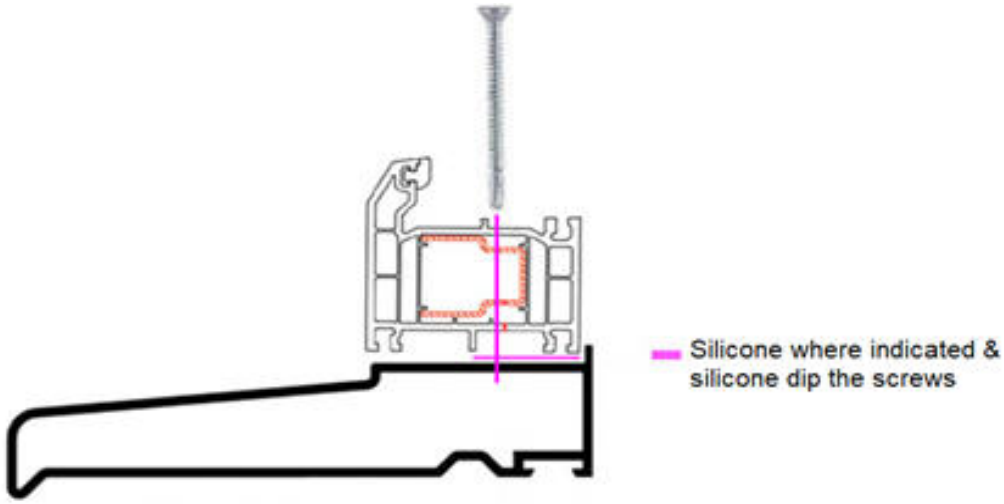
1) Use the 6.5mm HSS drill to drill holes in the frame jambs
2) Use the 6.5mm SDS masonry drill to drill into the brickwork.
3) Use the Torx ¼ Hex T30 bit to screw in the direct frame fixings.
4) Use the 90mm direct frame fixings to secure the frame into the opening.

IMPORTANT: Use one additional direct frame fixing per sidelight to fixing through the top of the sidelight, into the aperture.

Do not over tighten the fixing to avoid distorting the frame

You will need to fix the bottom of the door frame to the cill using Qty 2 50mm self-drilling fixings supplied with the PH2 bit, position them approximately 100 - 150mm from each edge of the frame.

IMPORTANT: Silicone dip the fixings



Installing the assembled frame (cont)

The sidelights do not fix down into the cill, they rest on top.

Check the frame again to ensure it is level in every plane and square in the opening. Finally, remove any temporary wedges and tighten the fixings if necessary, leaving the packers in place, and do one last check with a lazer or spirit level.

Installing the glass

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

Before glazing the door, check they are operating correctly.

Remove any temporary fitted glazing beads, taking note of their location.

Secure the glass into the doors and sidelights using packers and bridging packers where required, toe and heeling the doors accordingly.

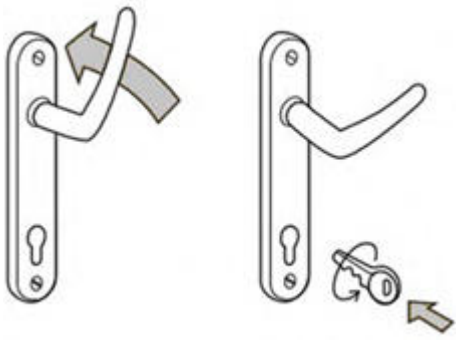
Once the glass is in place, fit the top and bottom beads, using a glazing mallet to tap the beads into the chamber.

Place the side beading into each corner, bending the bead in the middle. Once each corner of the bead is in place, it will require a small amount of pressure to straighten the bead and again, tap into place with the mallet.

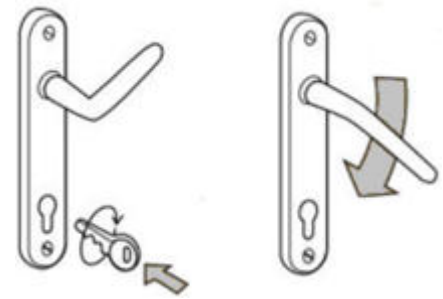
The beads should fit nice and flush.

Operation

Before fully sealing the frame into the opening, try opening and closing the door and then try locking the door.
If the door is not opening and closing easily, small adjustments can be made using the adjustable hinges.



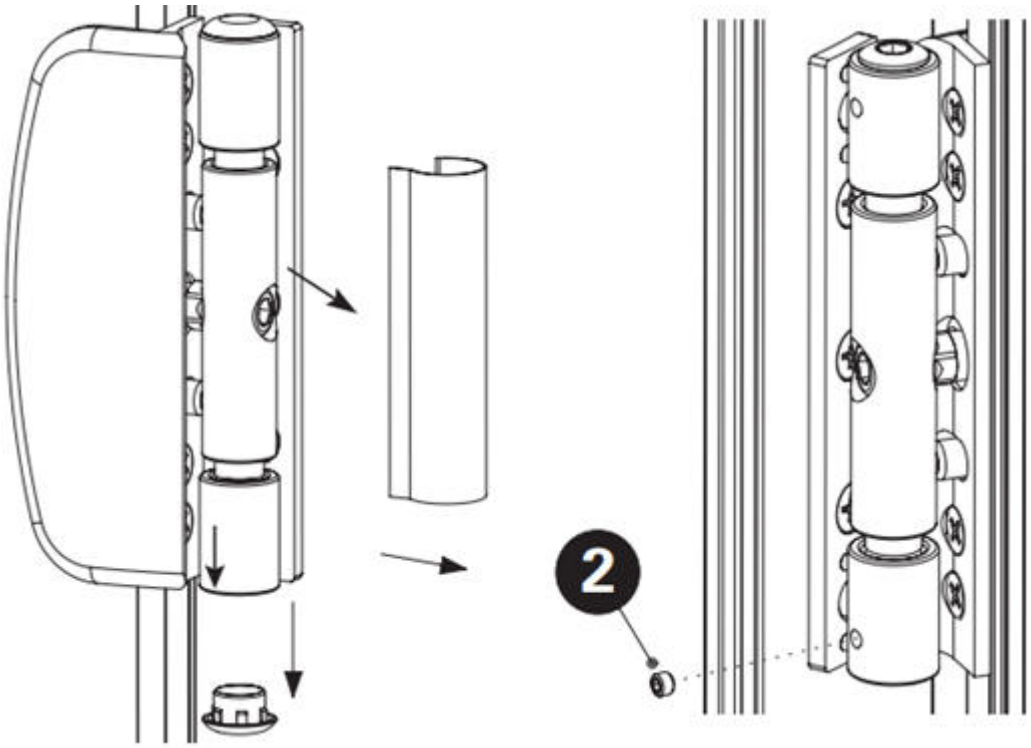
Locking - to lock, lift the handle lever in an upwards direction to throw all security bolts. This will engage all locking points into the keeps. Allow the handle to return to the horizontal position. To deadlock, turn the key one full turn towards the edge of the door. This will secure all bolts. In this condition the handle cannot be pushed down. Remove the key.



Unlocking - turn the key one full turn away from the edge of the door. This disengages the deadlocking security.In order to retract the security bolts, push the handle lever in a downwards direction and the door is then free to open.

Hinge adjustment

If you are finding it difficult to operate the doors, including locking and unlocking; it is important to **open** both doors, and check the lock with the doors in the fully **open** position, lift he handles and turn they key, then reverse the process. If the locks are working when the doors are in the **open** position, then this would indicate an alignment issue.



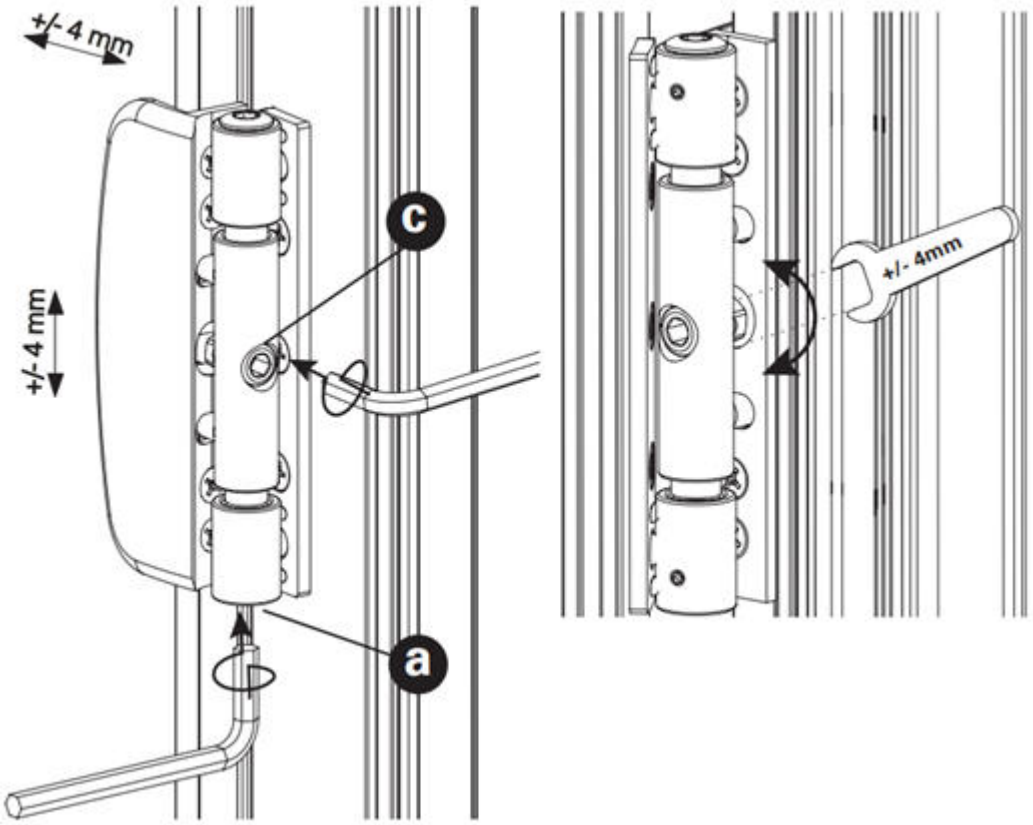
Remove the cover cap and lower cap.

Open the doors and locate the lower security screw 2. Loosen off the screw but do not fully remove it.

The doors can now be adjusted.

Reverse this process once the necessary adjustments have been carrier out and the doors are operating correctly.

Hinge adjustment (Cont)



Horizontal Adjustment (+/- 4mm):

Locate screw **C**, adjust by inserting a 5mm Allen key and turning clockwise / anti clockwise.

In difficult situations, it is also possible to adjust the width of the doors from the inside. Locate the central hexagonal nut and turn clockwise / anti clockwise using a 9mm spanner.

Vertical Adjustment (+/- 4mm):

Locate screw A, adjust by inserting a 5mm Allen key and turning clockwise / anti clockwise.

Finishing around the frame

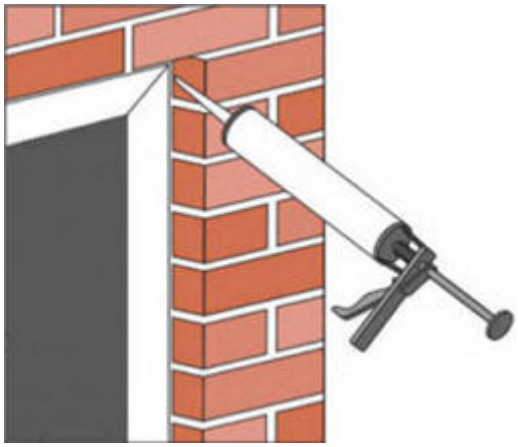
The final finish you wish to achieve comes down to personal preference and is to be discussed with your installer before commencing. Below is a general guide to sealing around the outer window frame.

If necessary, use expanding foam to fill the gap between the frame and the brick work taking care not to get it on the frame & door. Ensure just enough is used not to distort the frame when it expands. Once this has dried it can be cut away.

Silicone sealant or similar used to seal around the outside perimeter of the door frame. Ensure the frame is free from dust and debris before applying to ensure an adequate barrier is created to prevent any water or air leakage.

Remove any protective film before sealing.

Seal under and around the outside of the cill, ensuring you do not block any of the drain holes. Repeat the frame sealing on the inside using decorators caulk and/or PVC trims.



Trickle vents (optional extra)

Trickle vents will be supplied loose and will need screwing to the UPVC.

First identify the internal and external side of the trickle vent(s). The moveable / opening and closing vent will be to he inside.

Offer the vents up to the predrilled ventilation location, carefully mark the screw points by offering the loose trickle vent(s) up to the relevant location(s).

Security fix the trickle vents to the UPVC.

Fitting the coupler covers

Locate the internal and external coupler covers and push into place. Silicone can be used if required.