VUFOLD®

The difference is in the detail

Vufold External Composite Front Door Set

Assembly Instructions

Standard & Bespoke sizes

About your Composite Front 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.

All Vufold external composite front doors, uPVC 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.

Door, frame and sidelight components
The doors are manufactured using the latest technology, constructed using a PU foam core, encased with an LVL subframe and reinforced GRP skins, reducing heat loss and providing strength and rigidity.
The outer frames are constructed from uPVC, providing strength and low maintenance.

Protective finish and maintenance
The composite doors are fully factory finished and ready for installation. The door leaf should be cleaned using warm soapy water only and wiped dry with a microfibre cloth, or non-aggressive composite door wipes.

Do not use solvents or abrasives as they can damage the surface area of the skin, cause fading of the finish and invalidate the guarantee.

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 paint finish 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 door and / or frame reported 72 hours following delivery, and / or after installation has commenced.

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.

Installation
Our composite front doors are supplied with all the essential items, most hardware is factory fitted and pre-machined. This design allows for simple installation by a competent DIYer or experienced trades person(s). Loose components include: handles,hinge end caps and covers, and drip cill end caps.

These products are heavy so a single person must NEVER carry out the installation alone.

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

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.

About your Composite Front 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.

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 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.

Hardware components
The exterior hardware for your Vufold composite front door can deteriorate from everyday use, and also because of the weather and the 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. Even stainless steel products require maintenance to prevent deterioration in these environments.

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 three to six months if you live in a more general location otherwise your guarantee will not be valid.

Hinges
Using a microfibre cloth, wipe down the visible surfaces with warm soapy water and then rinse off by wiping with a clean, damp cloth. 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 timber 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 during operation, you do not continue to operate the doors as this may eventually cause the lock to fail and will invalidate your guarantee.

If you experience problems with locking or unlocking the doors, first eliminate actual lock problems by opening the access door and checking if the locks work in the open position. If the lock operates as it should then this would indicate an alignment issue.

Handles, letter plates and letter boxes
The surface should be cleaned with a soft damp cloth to remove any dust or grime, taking care not to scratch the surface.

For stainless steel furniture we recommend that all exposed stainless steel surfaces should be wiped over with a clean cloth and warm water with a mild detergent on a frequent and routine basis.

For more stubborn dirt or stains use mild, non-scratching abrasive powders such as typical household cleaners. These can be used with warm water, bristle brushes, sponges or clean cloths. For more aggressive cleaning a small amount of vinegar can be added to the powder.

Carbon steel brushes and steel wool should be avoided as they may leave particles embedded in the surface, which can lead to rusting. Cleaning should always be immediately followed by rinsing in clean hot water and the surface then wiped completely with a dry towel.

To maintain any stainless steel product in the best condition, we recommend routine cleaning once a month and more often in areas subject to heavy soiling or frequent use.

Door operational adjustments
When your door is first installed, it should not require any adjustment. All our composite front doors have been fully assembled at our production facility, and checked for smooth operation, including the locking and unlocking of the door.

From time to time, due to changes in the seasons or because of wear and tear in use, or if the lock is difficult to operate, it may be necessary to carry out some hinge adjustments.

If you experience any difficulty operating your doors, including, opening, closing and locking of your doors, do not continue to use your doors as this may cause further issues and damages.

Should you need to carry out any minor adjustments to the hinges, please follow the instructions on page 14.

Contents

Your Vufold External Composite Door set is supplied as a complete set, already assembled with the glass and the majority of the hardware already fitted. Loose components include handles, hinge end caps and covers and drip cill / end caps.

Please check the contents of the packages to ensure all parts are present before beginning removal of previous door and assembly of your new door.

Composite door and uPVC frame components

Fitted

Qty 1 Door
Qty 1 Frame head
Qty 2 Frame jambs, Left (1) and Right (1)
Qty 1 Threshold (aluminium)

Loose

Qty 1 Drip cill (uPVC)
Qty 2 Cill end caps (uPVC)

(For sidelight door sets only)

Single sidelight

Qty 1 Sidelight, glass and beading (temporary glazed)
Qty 1 Steel coupler (fitted to door frame)
Qty 2 Internal (1) and external (1) coupler cover strip
Qty 18 Glazing clips
Qty 4 70mm self-drilling screws and washers
Qty 2 50mm self-drilling screws and washers
Qty 2 Bridging packers (glazing packers)

Double sidelights

Qty 2 Sidelight, glass and beading (temporary glazed)
Qty 2 Steel coupler (fitted to door frame)
Qty 4 Internal (2) and external (2) coupler cover strip
Qty 36 Glazing clips
Qty 8 70mm self-drilling screws and washers
Qty 2 50mm self-drilling screws and washers
Qty 2 Bridging packers (glazing packers)

Standard hardware

Fitted

Qty 3 Hinges and cover caps
Qty 1 Multi-point lock
Qty 1 Euro cylinder & keys
Qty 2 Top (1) and bottom (1) hook keep
Qty 1 Centre lock keep

Loose

Qty 1 Pair lever handles

Upgraded hardware options

Fitted

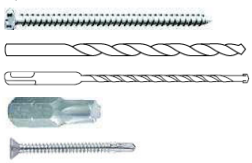
Qty 1 Auto multi-point lock
Qty 1 Euro lock cylinder (thumb turn) & keys
Qty 1 Escutcheon
Qty 2 Top (1) and bottom (1) hook keep
Qty 1 Centre lock keep

Loose

Qty 1 Long, short or double bar handle

Installation fixing kit (loose)

Qty 12 92mm concrete screws
Qty 1 6.5mm x 100mm HSS drill bit
Qty 1 6.5mm x 210mm SDS masonry drill bit
Qty 1 1/4 Hex PH2 insert bit
Qty 1 1/4 Hex T30 insert bit
Qty 2 25mm self-drilling screw



Qty 1 Bag assorted glazing and frame packers

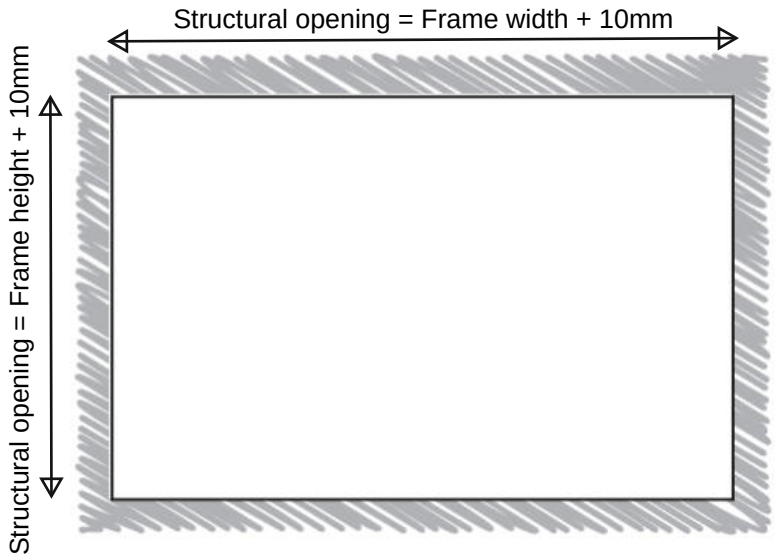
Qty 1 Silicone

Preparing the site

Before preparing the site and commencing the installation, double check the opening is the correct size and the items you've received are to the correct specification including size, handing, colour and glass before discarding any packaging. This includes any components that may be supplied fitted or loose. Check the items are free from damage.

Important; do not remove the existing door until all checks have been completed and you are happy your new door is ready to be installed.

When preparing the site, please prepare the overall opening to be 10mm more in height and in width than the outside assembled frame size. It is essential that all the internal surfaces of the structural opening are level before installation. Please ensure that all structural opening and outer frame dimensions are correct for installation before proceeding as the door set must be installed square and level into the opening.



Fitting the handles

Lever lever handles

Your lever handles will be supplied loose and simply require attaching to the door using the 2 handle fixing screws supplied.

Long bar handles

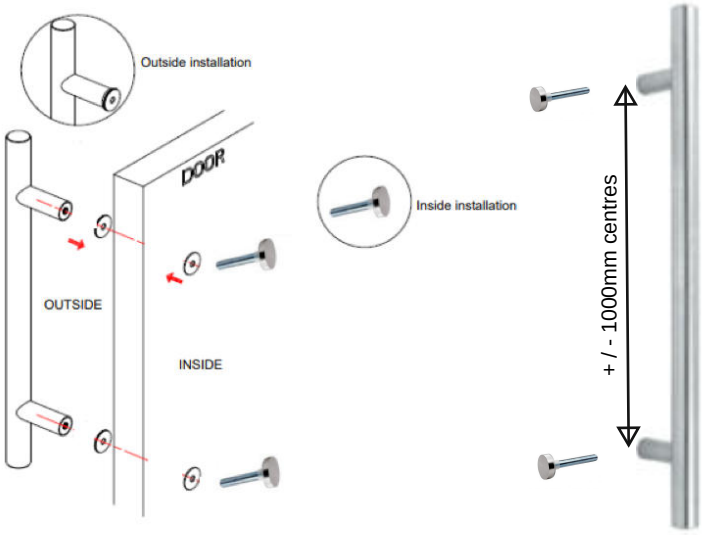
Your long bar handle will be supplied loose and the door will require drilling for the 2 fixing points before securing the handle to the door;

- Before fitting the long bar handle, ensure the handle location on the outside of the door will not prevent any access to any other door hardware.

- Check the 'centre' distance on your handle. Using 2 strips of masking tape, mark the two hole positions on the face of the door.

- Drill holes in the door using a 12mm drill bit.

- Insert the bolt cap screw through the plastic washer and then through the door, threading on another washer before finally screwing into the handle and tighten.



Fitting the handles (Cont)

Double long bar handles

Your double long bar handles will be supplied loose and the door will require drilling for the 2 fixing points before securing the handle to the door;

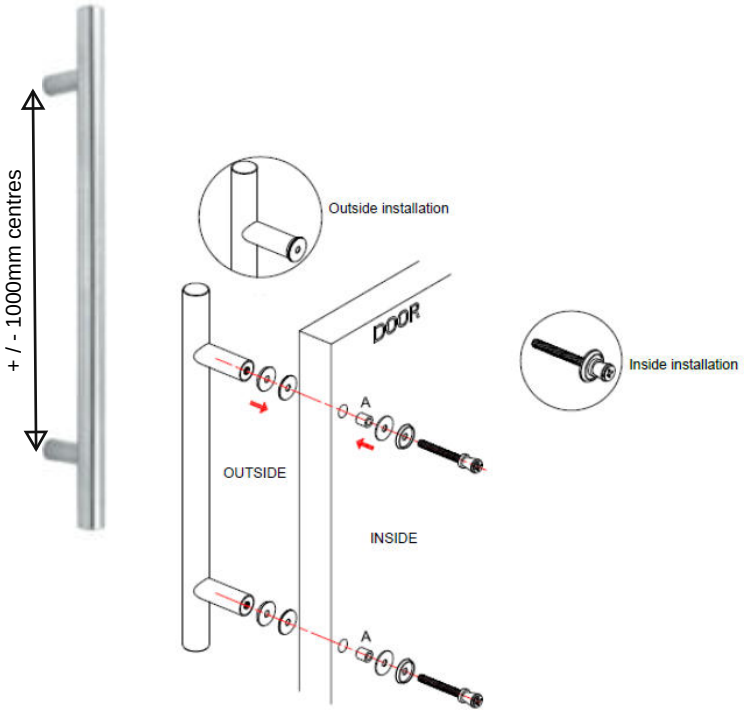
- Before fitting the double long bar handles, ensure the handle location on the outside of the door will not prevent any access to any other door hardware.

- Check the 'centre' distance on your handles. Using 2 strips of masking tape, mark the two hole positions on the face of the door.

- Drill holes in the door using a 4-4.5mm drill bit.

- Arrange the fixings as shown opposite. Note the pull bar with the small hole is installed outside, the pull bar with the bigger hole is installed inside.

- Fit the inside handle over the protruding brass ferules until it is tight up against the surface of the door, then secure in position by tightening the four grub screws with an Allen key.



Short bar handles

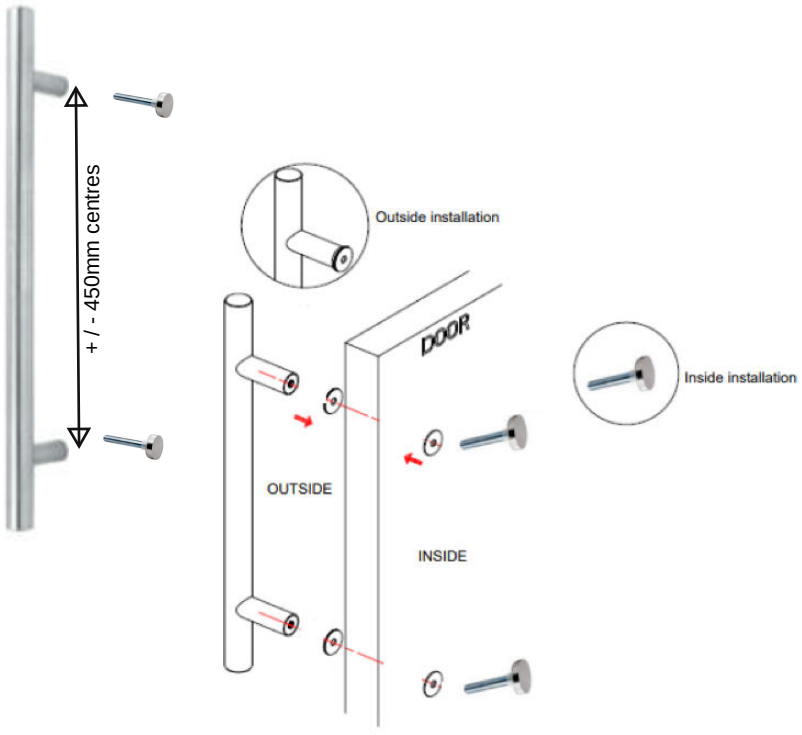
Your short bar handle will be supplied loose and the door will require drilling for the 2 fixing points before securing the handle to the door;

- Before fitting the short bar handle, ensure the handle location on the outside of the door will not prevent any access to any other door hardware.

- Check the 'centre' distance on your handle. Using 2 strips of masking tape, mark the two hole positions on the face of the door.

- Drill holes in the door using a 12mm drill bit.

- Insert the bolt cap screw through the plastic washer and then through the door, threading on another washer before finally screwing into the handle and tighten.



Installing the drip cill (Cont)

First locate the drip cill and the Qty 2 cill end caps and glue the cill end caps onto each end of the cill.

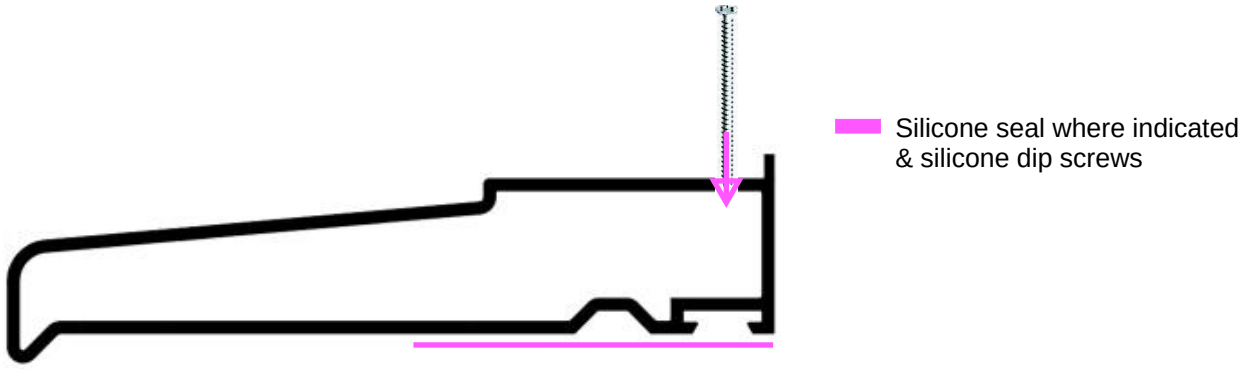
Before fitting the cill into position, ensure the structural opening has been cleared of any debris, removing any old silicone, screws / nails if present as the cill will require sitting perfectly level.

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.

Temporarily secure the cill in position using Qty 2 of the direct frame fixings provided. Position 1 fixing at each either end of the cill where the outer frame jambs will be positioned.

Drill through the back edge of the cill using the HSS drill bit and then use the SDS drill for the brickwork.
For sidelights, place an additional fixing under where the sidelight(s) sit and centrally where the door would also sit.

Important; all fixings must be silicone dipped prior to securing to the opening.



Attaching the sidelight(s)

Door sets with sidelights come with the sidelight(s) supplied loose to enable fixings to be hidden when securing to the brickwork opening and outer frame. The sidelight(s) have been temporarily glazed for transportation.

Please note; sidelights are internally beaded and so the beaded side should face to the inside of the property.

To attach the sidelight, remove any temporary beading from the inside face of the sidelight and carefully remove the glazing unit, setting it safely to one side.

IMPORTANT- Glazing units can be sensitive to rapid changes in temperature. Ensure the glazing unit is set down on a protective surface and avoid placing directly onto concrete etc. paying particular attention to the edges and corners of the glazing units which are most vulnerable to breakage. We will not accept any claims for scratched,damaged or smashed glass that has not been reported on delivery, and before installation has commenced.

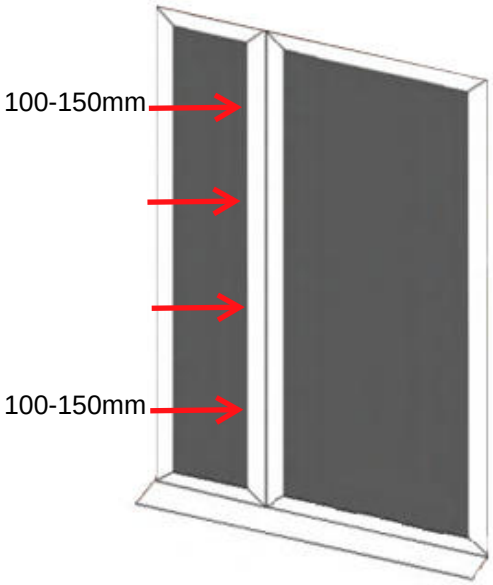
With the aluminium coupler now attached to the door frame, align the sidelight and door frame, ensuring they are plumb and level and push the frame sections together. Position quick grip clamps up the edge of the frame and sidelight to ensure the frames do not distort.

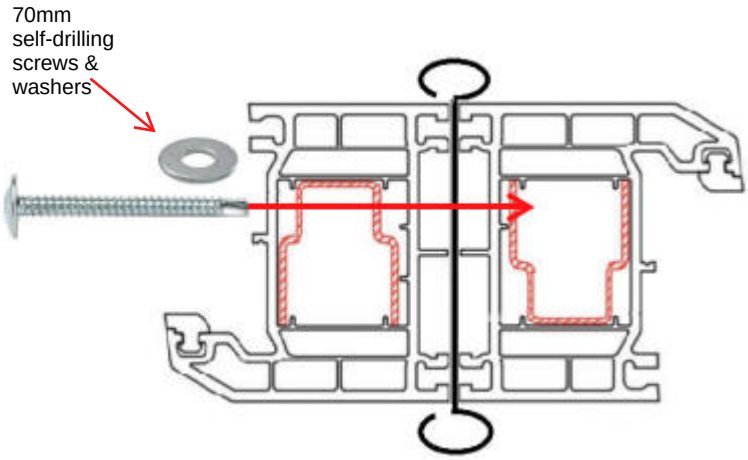
Attaching the sidelight(s) (Cont)

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 approx. 100-150mm from the top and bottom of the sidelight and the 2 central screws should be evenly spaced.

The screws should be staggered between the edges of the frame profiles approx. 100-150mm from the top and bottoms and then 2 fixings positioned centrally and evenly spaced.

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



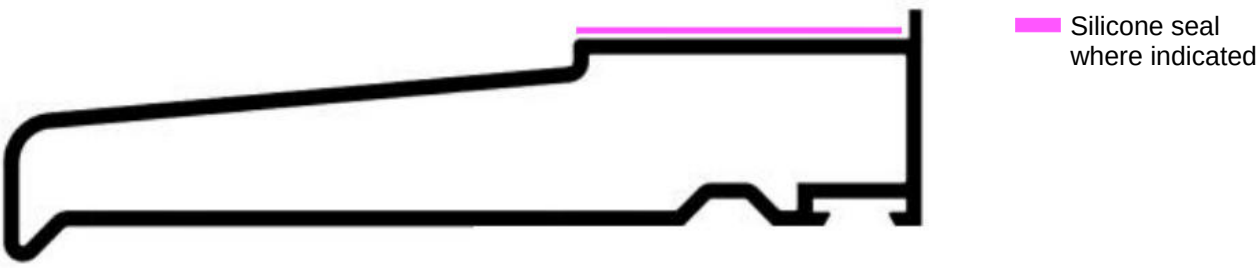


Internal and external trims are supplied to cover the coupler once fully installed.

Installing the assembled frame

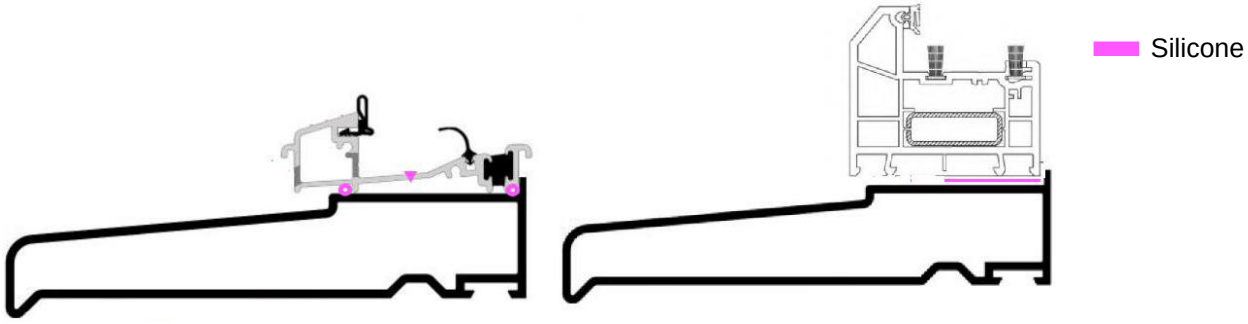
IMPORTANT During the installation it is advised to repeatedly check the alignment and squareness of the outer frame. Measure the distance across diagonally to check squareness. Without these checks the installation may be unsatisfactory, causing damage to the door and incorrect operation.

Before lifting the frame into the opening and sitting it on top of the cill, silicone all along the very back edge, and both sides of the cill creating a bed for the door frame and threshold to sit on.



Installing the assembled frame (cont)

Carefully lift the door set (two people required) and fit it into the brickwork opening (figure 1), resting the frame and threshold on the cill and bed of silicone.

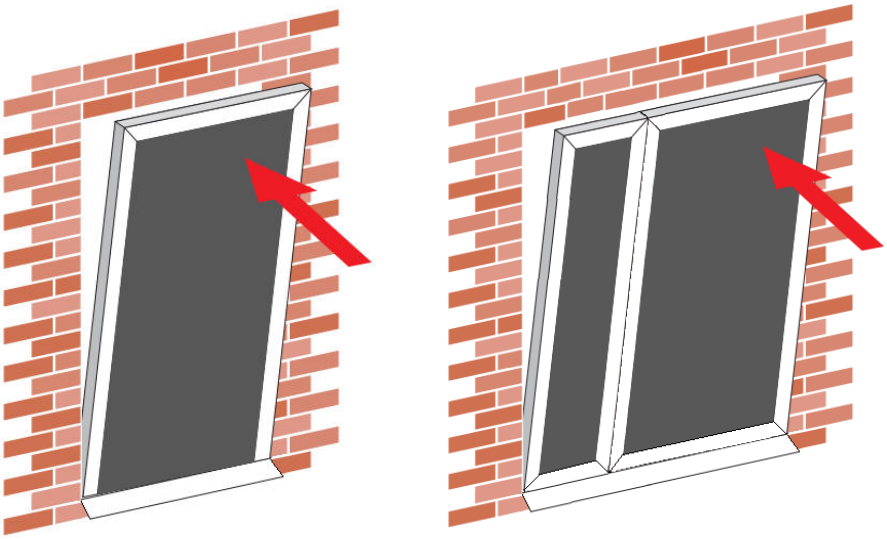


Without sidelight(s)

With sidelight(s)

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

fig. 1

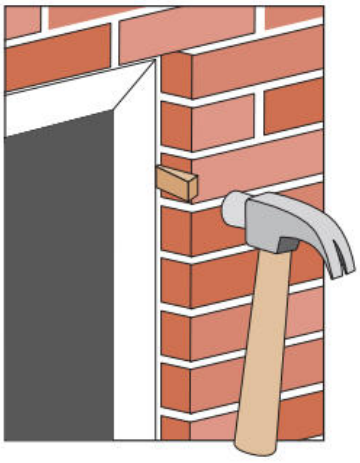


Without sidelight(s)

With sidelight(s)

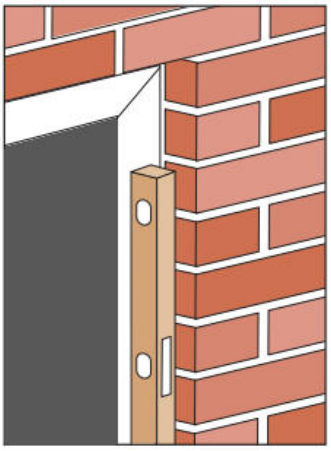
Using packers if necessary, level the door set until it is completely flat and level in the opening. Use wedges or packers at both sides of the frame to temporarily hold the door set in the brickwork opening (figure 2)

fig. 2



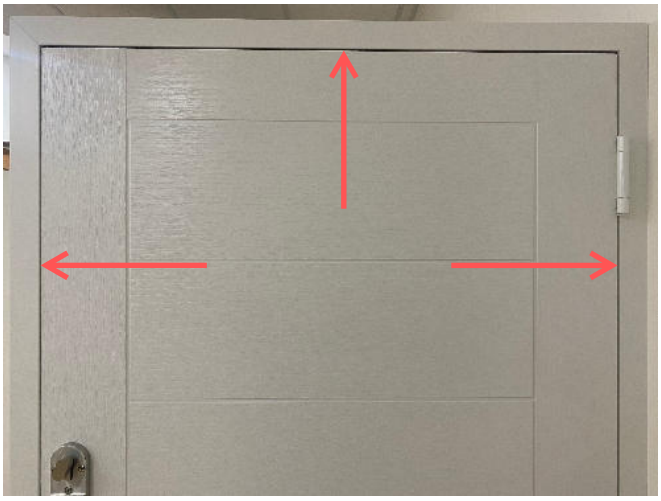
Use wedges or packers to adjust the door set in the opening, to ensure it is square and level in every plane (figure 3)

fig. 3



Installing the assembled frame (Cont)

We recommend you use a spirit level that is at least 2M in length. Frame packers should appropriately sized and placed adjacent to the frame screws used to secure the frame to the brickwork to ensure the frame is not distorted.

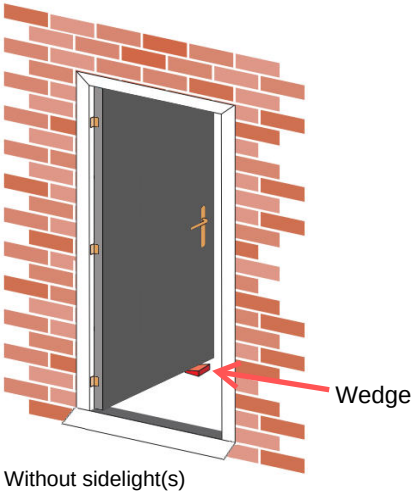


Make sure you have an even air gap between the door leaf and frame from top to bottom. If it is not equal you must correct it before moving on.

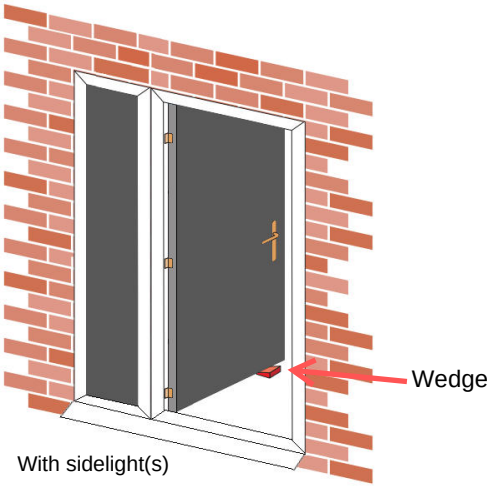
Open the door and support it underneath (figure 4). Then check again to ensure the frame is square and level in the opening, with an equal air gap.If it is not equal this must be corrected before proceeding.

Close the door and again check the air gap is even. if not continue to pack the frame until equal before moving on.

fiG. 4

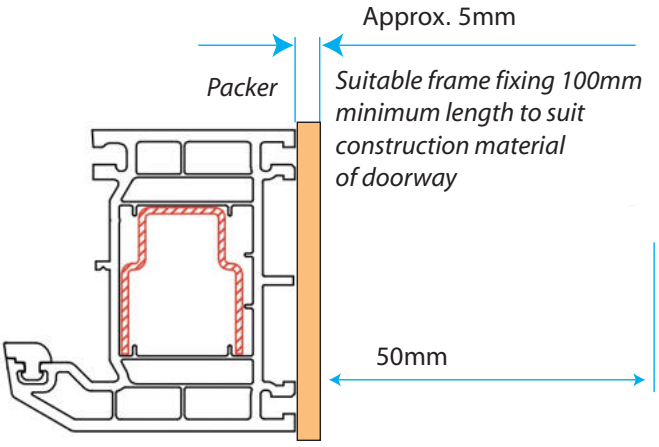


Without sidelight(s)



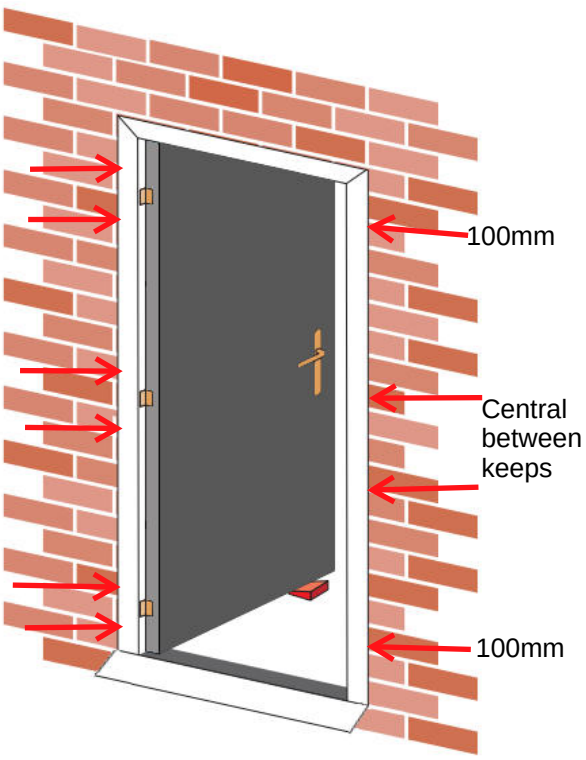
With sidelight(s)

Once you are happy the door set is in correctly, that is with an even air gap all the way round, fix through the outer frame into the brickwork through both jambs, with fixings at spacing shown on Page 7 (figure 5) using the direct frame fixings (A) provided (unless the construction of your building requires more appropriate fixings to suit the individual dwelling).

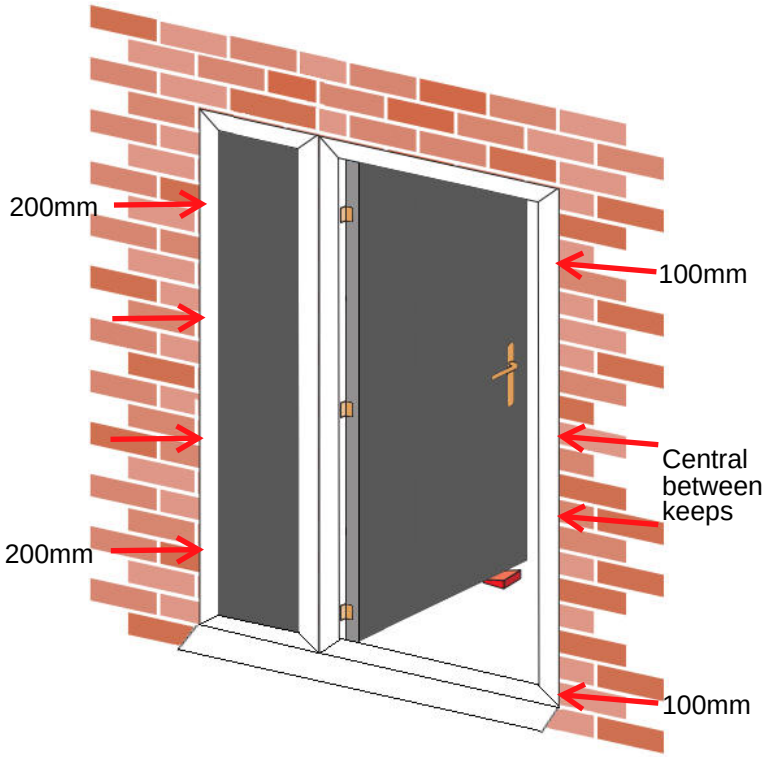


Installing the assembled frame (Cont)

fig.5



Without sidelight(s)



With sidelight(s)

Take care to avoid mortar joints as all fixings need to be secure. Use the direct frame fixings as follows:

1) Use the 6.5mm HSS drill to drill holes in the frame jambs.

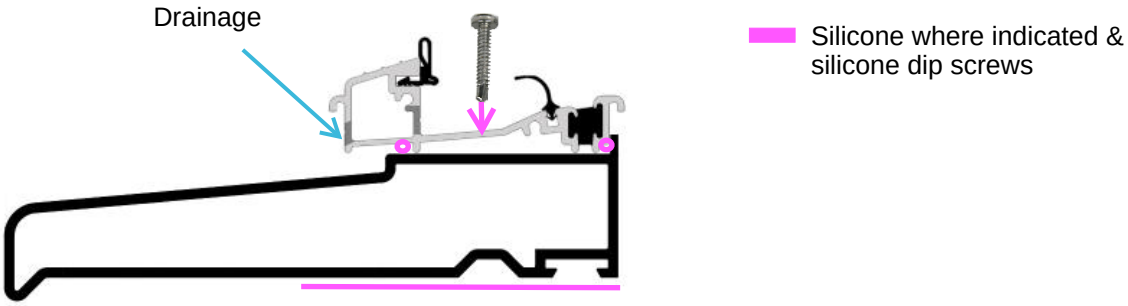
2) Use the 6.5mm SDS masonry drill to drill into brickwork.

3) Use the Torx 1/4 hex T30 Bit to screw in the direct frame fixings.

Do not over tighten the fixings and distort the frame.

<u>For door sets without sidelights</u>

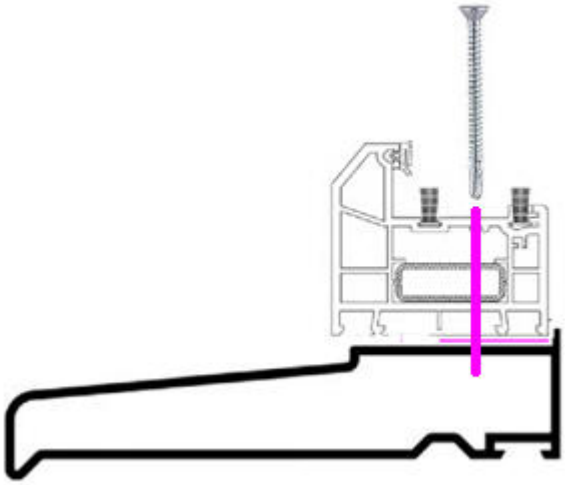
Secure the aluminium threshold to the bottom cill using the 2 x 25mm self drilling screws provided. Silicone dip the screws and fix 100-150mm from the inside of both the frame jambs.



Installing the assembled frame (Cont)

For door sets with sidelights

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. Silicone dip the fixings and position them approximately 100 - 150mm from each edge of the frame. The sidelights do not fix down into the cill, they rest on top.



Silicone where indicated & silicone dip screws

When all the fixing points are loosely secured, check the frame again to ensure it is level in every plane and square in the opening with an equal air gap. Finally, remove any temporary wedges and tighten the fixings, leaving the packers in place, and do one last check with the spirit level.

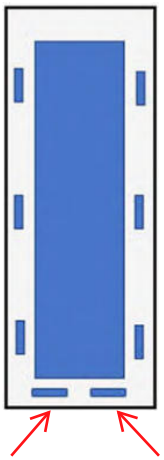
Installing the sidelight glass

Packers will need to be siliconed in place and they should be evenly spaced as shown in the diagram below. Please ensure bridging packers are installed at the bottom.

Fit the sidelight glazing unit(s) into position by sitting it on the bottom bridging packers and push it into place.

Ensure equal spacing on either side and use packers to secure in place.

The sidelights have glazing clips in order to meet PAS 24 requirements. There are 18 clips per sidelight which fit into the sidelight frame and adhere to the glass. To fit them, remove the blue plastic backing off the sticky tab.



Bridging packers

Installing the sidelight glass

Line the clips up as shown in Fig. 6 These should be positioned 100mm from each corner, so Qty 2 clips per corner.

Angle the clip as show below (Fig. 7)

Push the clip down so the sticky tab is on the glass and the metal part sits under the lip on the frame as shown below (Fig. 8)

Repeat for all other clips round the corners and then situate the rest of the clipsup the sides of the frame, 5 each side spaced evenly between the glazing packers.

fig. 6

fig. 7

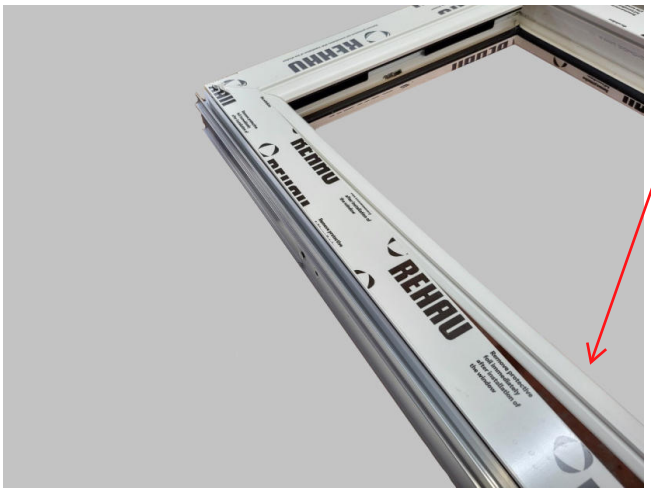
fig. 8

Installing the sidelight beading

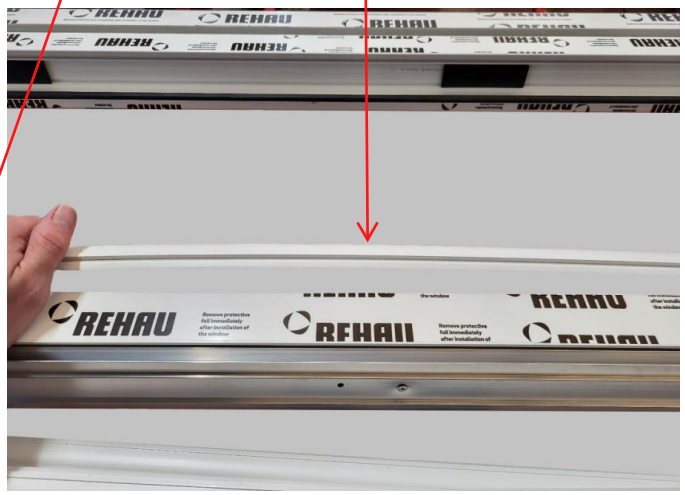
Once the glass is in place put the 2 small beads in top and bottom. A small rubber hammer will be needed to gently tap the beads into the bead chamber

Installing the sidelight beading (cont)

Place the long side beads into each corner



This will require a slight bending of the bead to get it in place.



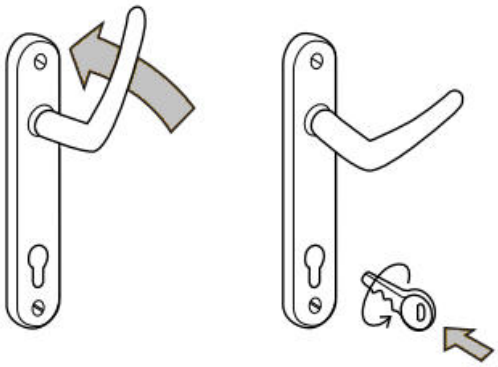
Once each corner of the bead is in place it will require a small amount of pressure to straighten the bead and again tap into place with the rubber hammer into the bead chamber.

The beads should sit nice and flush once its been tapped into place.

Operation

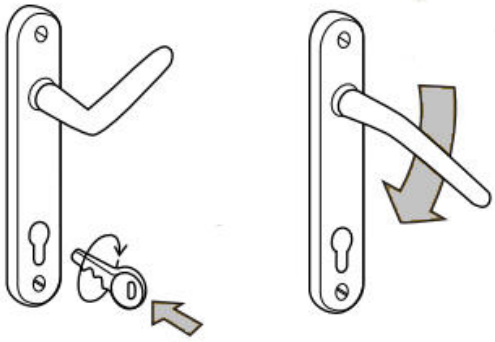
Before fully sealing the frame into the opening, try opening and closing the door and then try locking the door. If the door is not opening and closing easily, small adjustments can be made using the adjustable hinges.

Door set with standard Handle & Lock



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 this disengage 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.

Door set with Auto lock / Escutcheon with thumbturn

Unlocking- From the outside turn the key away from the edge of the door. This disengages the hooks and retracts the latch. The door is then free to open, use the handle to push the door open.

From the inside, turn the thumbturn away from the edge of the door to perform the same action. Use the escutcheon (or handle if selected) to push / pull the door.

Locking - As you close the door the multi-point locking duo hooks automatically engage.

Please note; the auto lock features an 'eye level' key location and an auto latch feature for added security as standard. Certain users may find it more difficult to operate an ‘eye level’ auto lock compared to a ‘hip level’ manual lock due to operation via an ‘eye level’ thumb turn cylinder only and lacking a traditional lever handle. Extra force may be required during operation to relive pressure by pushing or pulling the door and then unlocking.

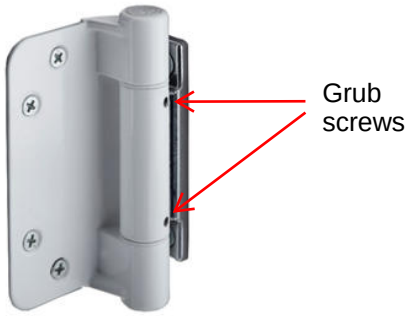
Operation (Cont)

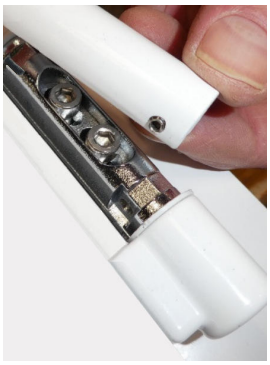
Hinge adjustment

The hinges can be adjusted + / - 4mm both Horizontally and Vertically (both adjustments can be carried out simultaneously).

It is recommended that air bags / wedges are used to aid with the adjustments.

To access the hinge adjustment screws, open the door to expose the grub screws, loosen off the grub screws using a 2mm Allen key and remove the cover from the hinge knuckle on all 3 hinges.





Vertical adjustment:

Using a 4mm Allen key, loosen off the M5 screws on all 3 hinges. Place air bags / wedges under the door and raise or lower the door into the desired position. It may also assist placing a wedge in between the side edges of the door and frame jambs, so the door remains horizontally aligned. Finally, re-tighten all M5 adjustment screws.

Horizontal adjustment:

Using a 4mm Allen key, loosen off the M5 screws on all 3 hinges. Place air bags / wedges in between the side edges of the door and frame jambs and locate the doors into the desired position. It may also assist placing a wedge under the door, so the door remains vertically aligned. Finally, re-tighten all M5 adjustment screws.

Please note; If you are experiencing any difficulties carrying out the adjustments, try loosening both screws in the middle hinge first then repeat the process adjusting the top and bottom hinges separately, tightening the centre hinge to secure in the adjusted position.

Once you are happy the door is operating correctly, refit the hinge knuckle cover and tighten the grub screws using a 2mm Allen key.

Operation (Cont)

Lock keep adjustment

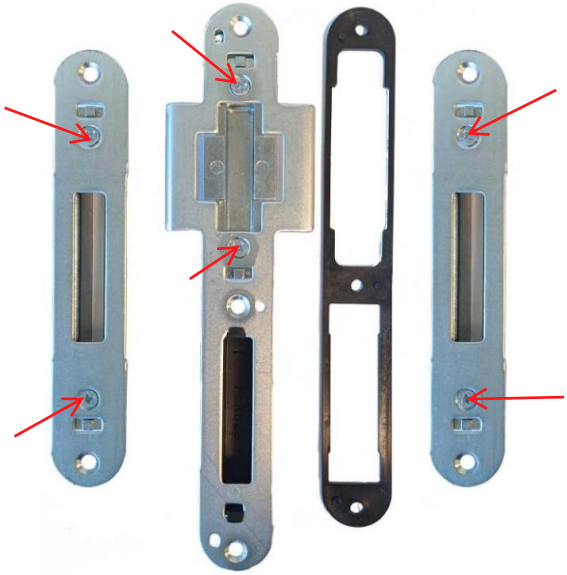
Contact pressure adjustment can be made using the central, top and bottom lock keeps.

Auto-lock keeps

Insert a T15 headed screwdriver into the slots highlighted below and turn clockwise / anticlockwise to re-position. Try closing the door and checking the operation following adjustment of each keep.

Multi-point lock keeps

Insert a Phillips headed screwdriver into the screws highlighted below, loosen the screws, manually adjust to the required position and then re-tighten the screws to secure in the adjusted position.



Try closing the door and checking the operation following adjustment of each keep. The frame can now be fully sealed into the opening.

Installing the assembled frame (Cont)

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 and 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 (figure 9). Remove any protective film before sealing.

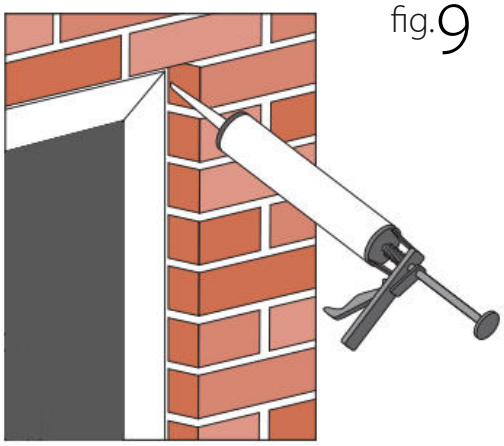


fig.9

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.

Take care to ensure any drainage holes are kept clear of debris and sealant.