ace DOORS

Installation Instructions

Version 1.0

IMPORTANT NOTE TO THE INSTALLER:

This installation may be required to comply with local building regulations.
Please leave these instructions with the householder after installation has been satisfactorily completed.

Contents

Before you start

These instructions must be read and completely understood before any work commences.

Do not remove existing door until you have checked:

- The sizes are correct and you have everything as ordered.
- The paperwork to ensure it is the correct specification.
- Any damage to the door (do not install a damaged door).

Health and Safety

Care should be taken when handling the door - help should be sought due to its weight.

Avoid sharp edges.

Keep electrical leads and cables away from sharp and abrasive surfaces and protect against tension and moisture. An RCD breaker should be used as per manufacturer's instructions to protect from electric shocks.

Keep children and pets away from building operations.

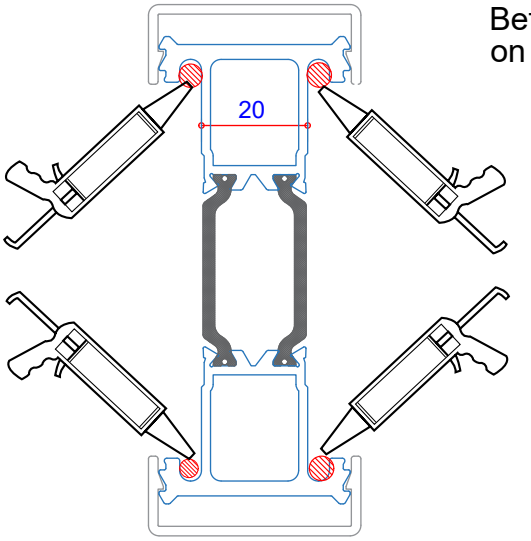
All waste products should be disposed of correctly and safely.

Recommended tools

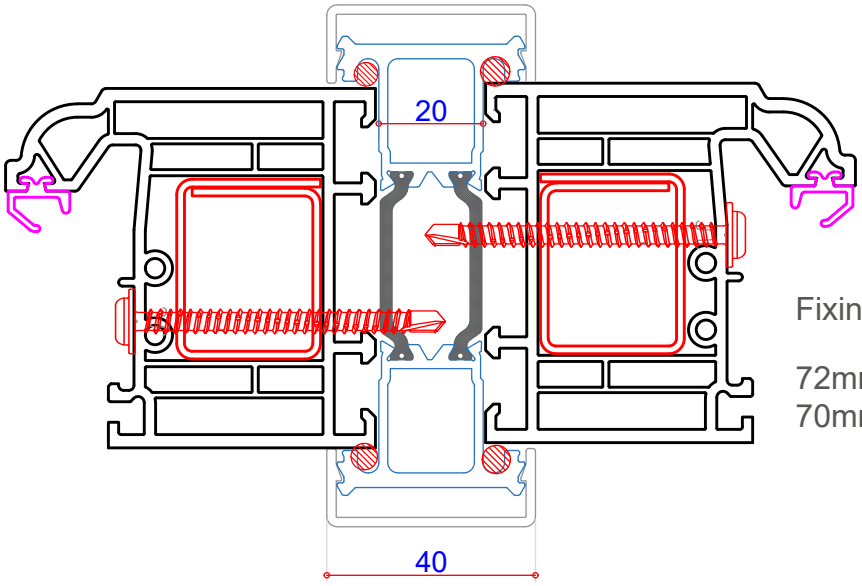
- Tape measure
- Hammer
- Stanley knife
- Crowbar
- Chisel
- Electric drill with hammer action
- Screwdrivers
  (both Phillips and flat head)
- Silicone sealant gun
- Saw
- Rubber mallet
- Spirit levels
- 5mm allen key
- 4mm allen key
- 2mm allen key

Fixing Couplers

20mm Aluminium Coupler



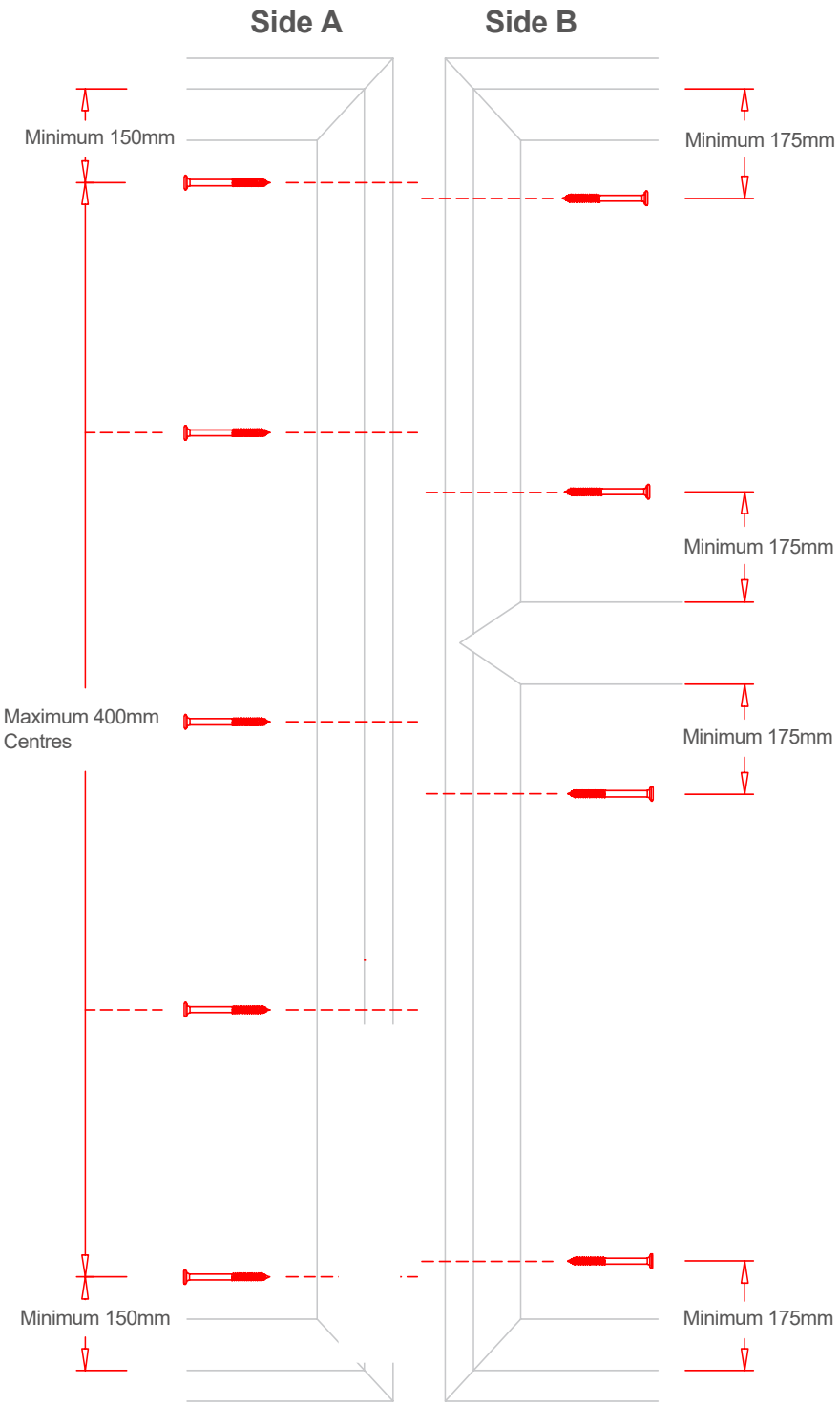
Before coupling, there should be a continuous seal on the coupler's edges, full length on both sides.



Fixing Details:

72mm Outer Frame 4.8 x
70mm Bay Pole Screws.

FIXING DETAILS (COUPLERS)



Screw positions are a minimum of 150mm from the inside edge of the profile as shown on the drawing (side A). However, when screwing through both sides, the opposite side must have the screws staggered an extra 25mm, therefore the first screw on the opposite side must be positioned at a minimum of 175mm from the inside edge as shown (side B).

It is also advised to use a silicone sealant at the junction of the frame and coupler / coupler cover so as to help with weather protection.

Door Set Installation

Removing the Existing Door

Remove the existing door leaf.

To help reduce the damage to wall decorations and plaster, score around the perimeter of the frame with a craft knife. Saw through the jambs and remove. The best way to do this is by sawing diagonally in the centre and removing them in two sections.

Do not saw them all the way through as this can cause damage to the internal reveals or structure. If there is a chance this will happen, use a bearing block to protect the plaster and render, then lever the jambs away from the walls and complete the cuts.

Remove the top and bottom rails in the same way.

Preparing the Opening

Once the door has been removed, ensure the opening is free from screws, nails, fillers and mastic. Repair as required in accordance with BPF recommendations.

The opening should be complete before fitting the door.

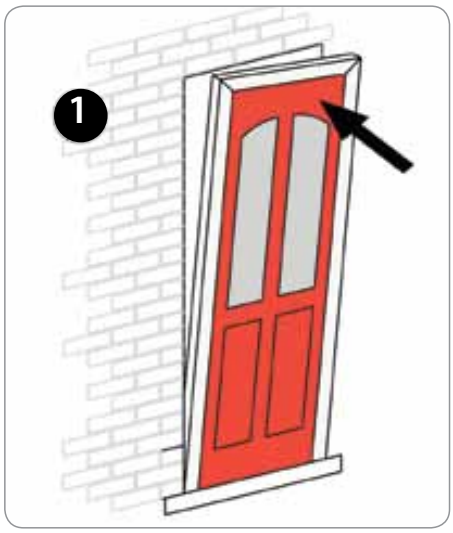
Check there's a lintel or other load transferring structure fitted above the doorway.

Door Alignment

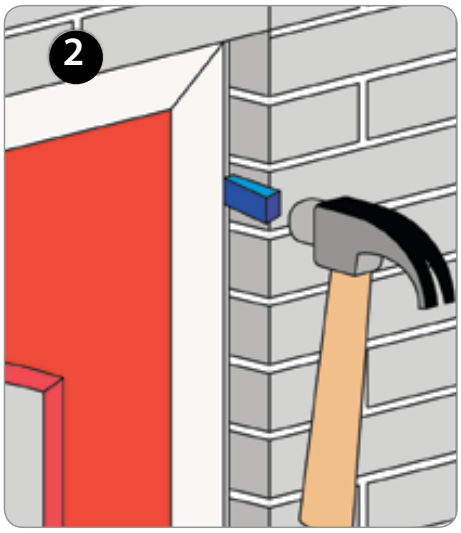
The positioning of the door within the brickwork is vital to the correct functioning of the door.

- Frame is square and plumb in both planes.
- Door outerframe set back as far as possible to reduce exposure to elements.
- Bridge the wall cavity.
- Cover the DPC.
- Frame is square and not twisted.

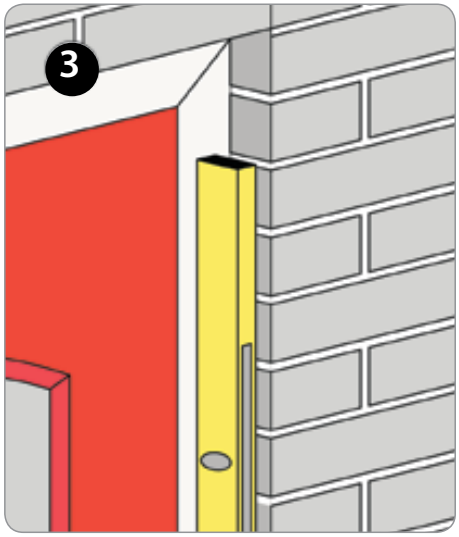
Door Set Installation



Offer complete door unit into brickwork opening.



Hold frame into position using appropriate size wedge packers. Packers must be located adjacent to fixing positions to prevent distortion of the outer frame when frame fixings are tightened. Failure to adhere to this may result in door function issues.



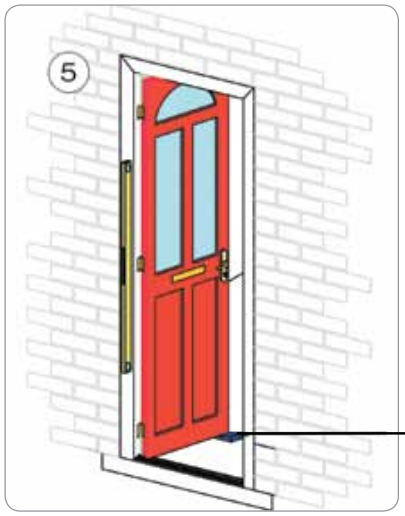
Spirit level (1.5m long) should be used to ensure jambs are square and plumb in all planes.

Refer to separate hinge instructions on Page 12

If you want you can remove the door leaf from the frame to make the outer frame easier to fix into brickwork aperture. Once square, level and plumb, door leaf can be refitted. Fix as per instructions.

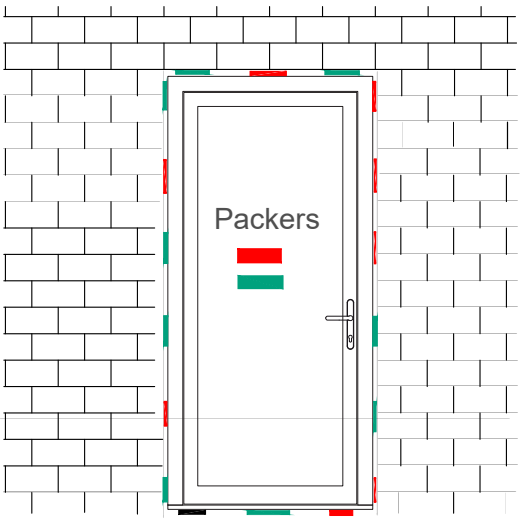
(See fixings & positions)

Or you can leave the door leaf in the frame

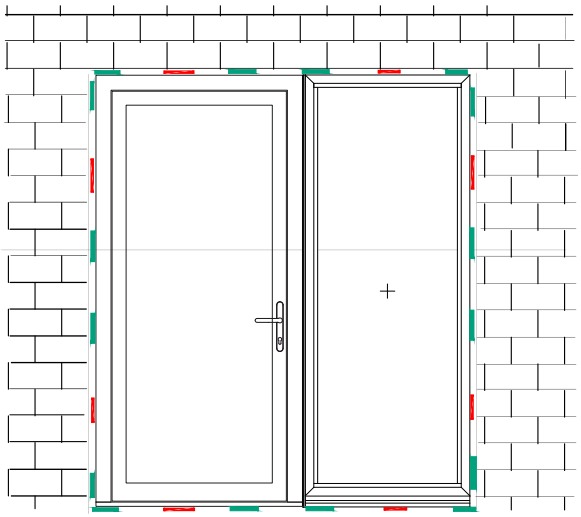


Pack the bottom of the door leaf at the leading edge to assist getting the frame square, level and plumb into the wall aperture.

Use plastic packers to help secure the frame in the aperture.



Door only



Door & Sidelight

Fixing Positions

These positions are for guidelines only.

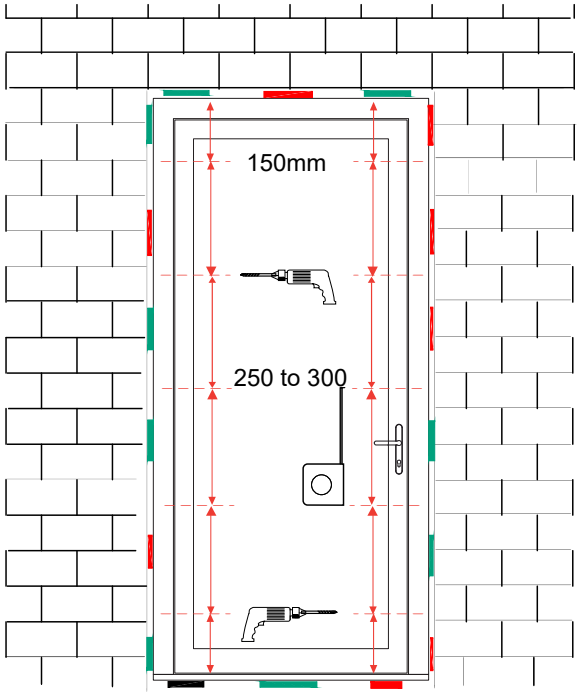
Ensure fixings are into secure substrate. Recommended fixing positions are as follows:

Frame fixings: **150mm** approximately from the frame corner and min 250mm to max of 300mm.

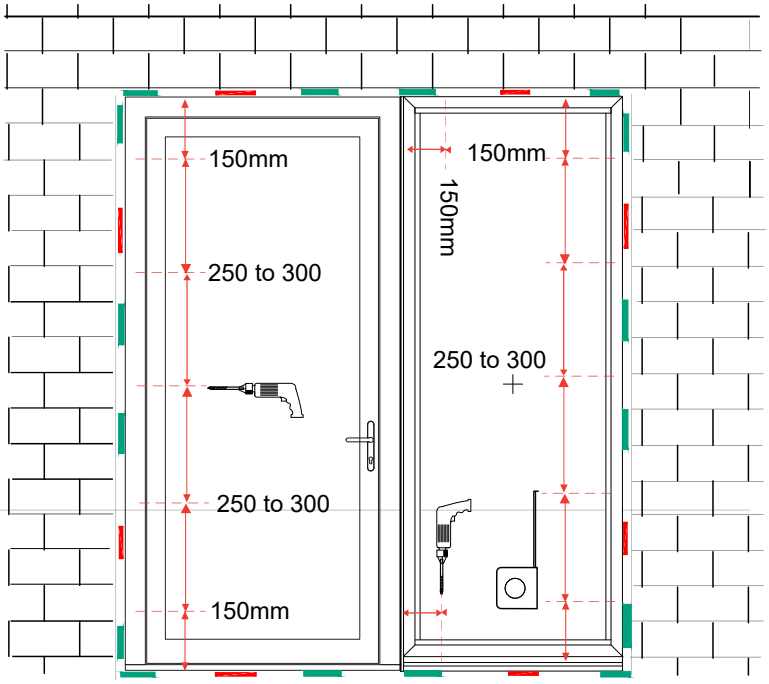
Alternative fixing may be required due to frame location.

Drilling

Drill holes through the frame as indicated (ensuring the holes are as recommended by the frame fixing manufacturer). Secure the frame to the brickwork (NOT MORTAR) with suitable frame fixings. Ensure the fixing is secure and correctly positioned in the brickwork.



Door only



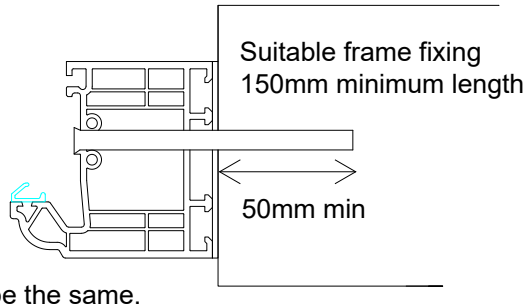
Door & Sidelight

Fixings

The outerframe should be secured into the brickwork using industry standard frame fixings. These should be a minimum of 150mm long and fixed into the masonry by a minimum of 50mm.

Tighten and secure all the fixings to ensure the frame is square.

Care should be taken not to overtighten the frame fixings to avoid distortion of the frame.



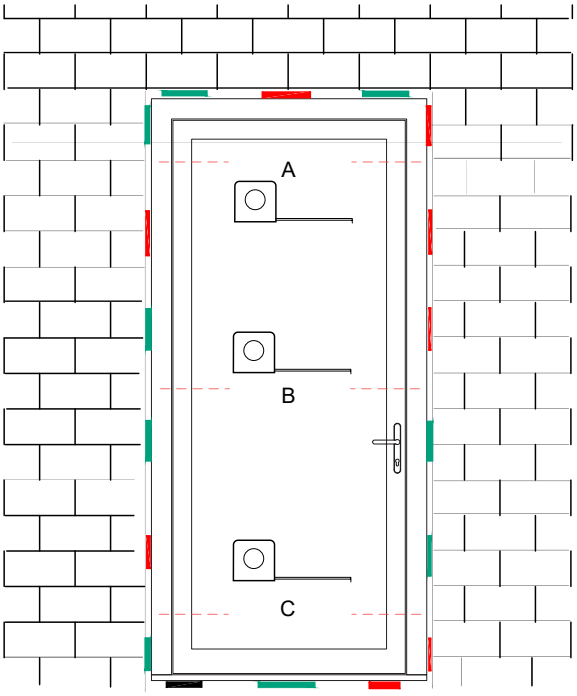
Checks

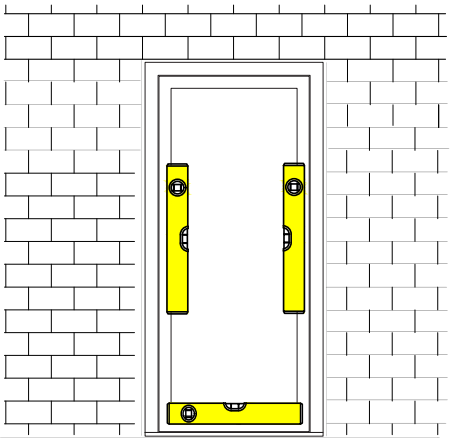
Check the frame is correctly fitted and measurement A, B and C should be the same.

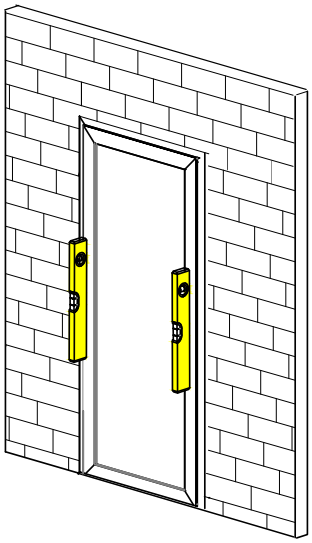
Check the required packers are inserted.

Check the frame is square, level and plumb.

Check the fixings are tightened up making sure not to overtighten to avoid frame cracking.



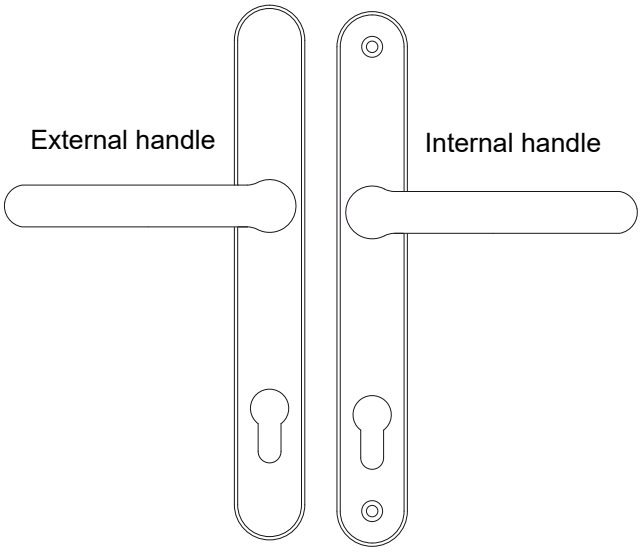




Fixing Decorative Hardware

To fit this Door Handle you will require the following tools:

- Pencil
- Tape Measure
- Crosshead Screwdriver
- Hacksaw



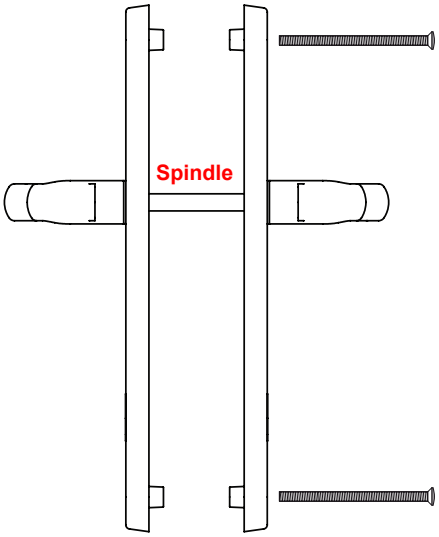
Installing a Door Handle

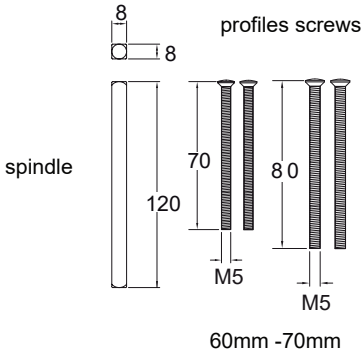
One half of the handle has no screw holes, this is the external backplate and should be fitted to the outside of the door. The internal backplate has two screw holes, top and bottom of the backplate and is for the inside of the door.

The handle is non-handed and can be used on left and right hung doors. To ensure the correct handing, hold the external handle on the door with the lever at a 90° facing towards the hinges. When the lever is in the correct position, insert the spindle into the back of the external backplate and position on the door.

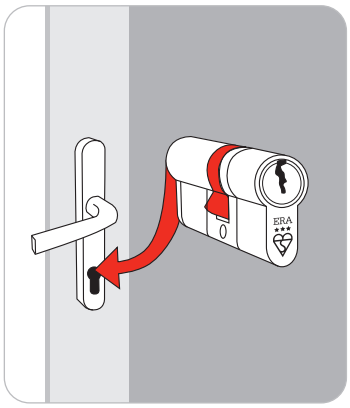
NB: if the spindle is not inserted into the handle when the lever is in the correct position it may cause the spring cassette in the internal and external handle to clash.

The internal handle can then be placed on the door and screwed into place. Please ensure screws are tightly fixed to secure the handle. To check operation, push the lever downwards - it should spring back into place when released.





To fit your cylinder you will require: screwdriver

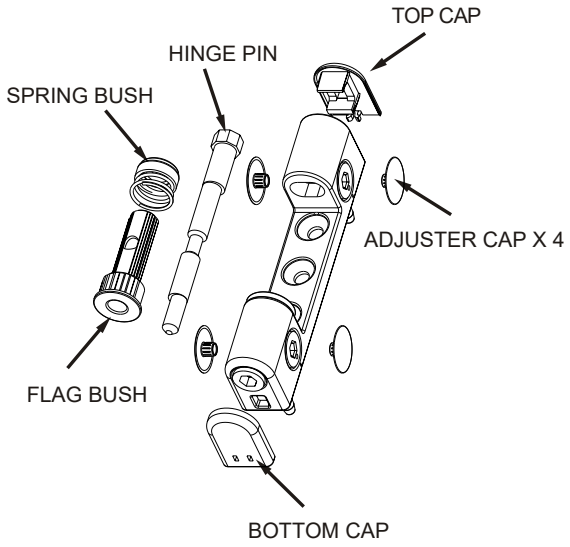


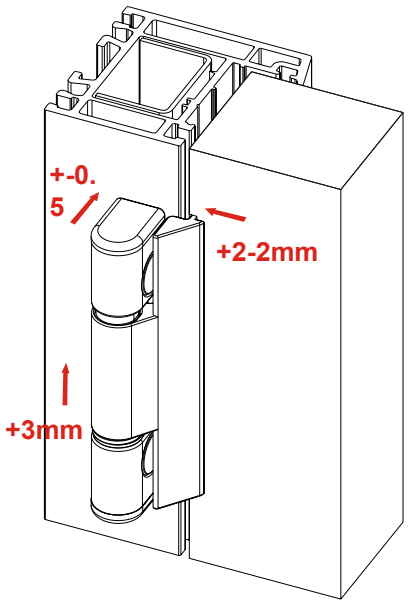
How to fit your cylinder

With the key inserted into the cylinder, turn slightly while pushing to enable the cylinder to be inserted.

On the open edge of the door look for the larger screw hole which falls in line with the bottom of the cylinder. Insert the screw and tighten.

3D Adjustable Hinge

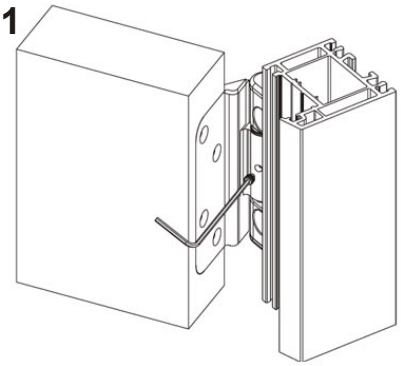




Remove the door sash

Remove the top cap and security screw (using 2mm allen key).

1



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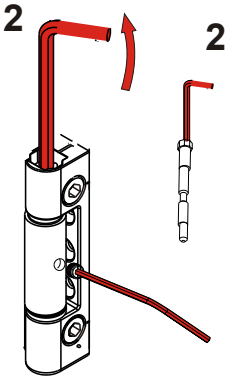
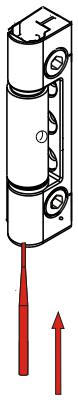


2 Insert a 5mm allen key into the top of the hinge pin, lift the end of the allen key and waggle from side to side. The hinge pin should lift out easily.

If the hinge pin is stuck go to 3 & 4

3

4

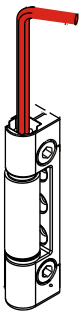


3 Using a 5mm allen key, remove the vertical adjustment screw.

4 Insert a 2mm pin punch into the hole in the bottom bush and tap the pin out.

Challenger 3D Butt Hinges Adjustment Instructions

Tools required
4mm Allen Key
5mm Allen Key



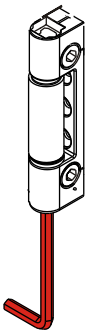
Compression adjustment +0.5mm -0.5mm (5mm Allen Key)

Remove the top cap.

Check pin alignment via mark on top of pin. If the mark is pointing towards the door sash, the adjustment is in the neutral setting.

To increase compression, turn the pin so that the alignment mark is moved towards the door frame.

To reduce compression turn the pin so that the alignment mark moves away from the frame.

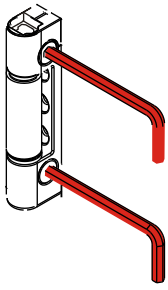


Vertical adjustment +3.0mm - 0.0mm (5mm Allen Key)

Remove the bottom cap.

To raise door sash, rotate the vertical adjustment screw clockwise. Ensure that all other hinges are adjusted equally.

To lower door sash rotate the vertical adjustment screw anti clockwise. Ensure that all other hinges are adjusted equally.



Lateral adjustment +2.0mm -2.0mm (4mm Allen Key)

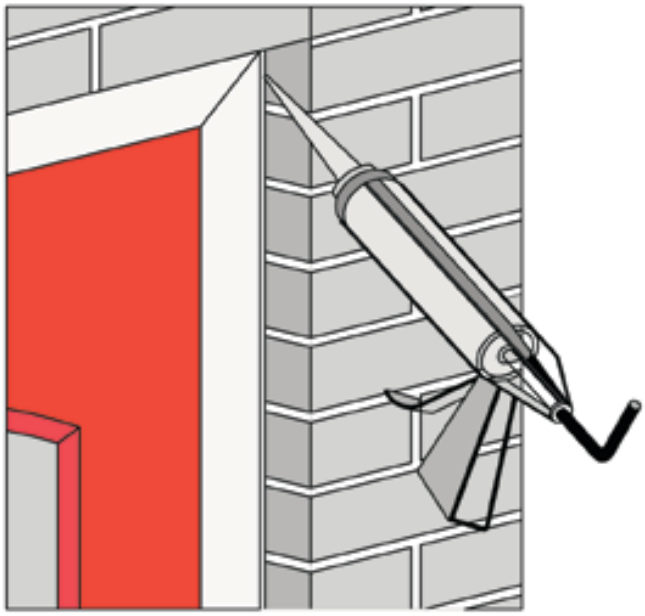
Remove the side cover caps.

Rotate the lateral adjustment drives in the direction required. Ensure that each pair of alignment marks are at the same point.

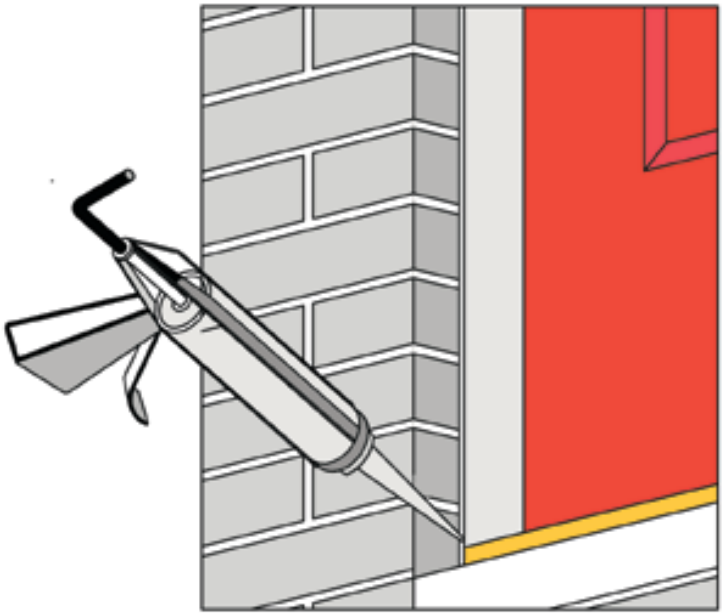
WARNING

It is not recommended to fully adjust either one adjuster only or one hinge only. Adjustments should be made gradually, aligning each pair of marks on each hinge until the desired adjustment is achieved.

Sealing around the Perimeter



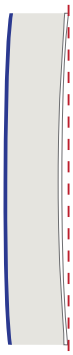
Silicone sealant or similar suitable product should be used to seal around the perimeter of the newly installed composite door frame. Ensure that an adequate barrier is formed to prevent water ingress/air leakage.



NB: Care must be taken to ensure that the drainage slots are not blocked when sealing around the aluminium wheelchair threshold.

Thermal Movement Definition and Tolerances

All composite slabs, as with UPVC and timber, experience thermal movement. The slab will recover to its flat plane, to a maximum bow of 3mm side to side and 5mm top to bottom, when the installation recommendations are applied (see below).



Vertical

Deflection of the slab inwards and outwards from top to bottom.

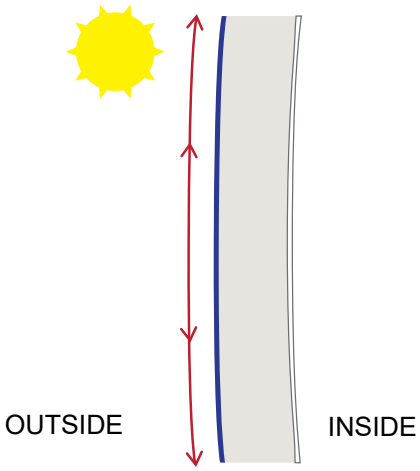
Maximum bow permitted is 5mm measured from the middle of the slab.

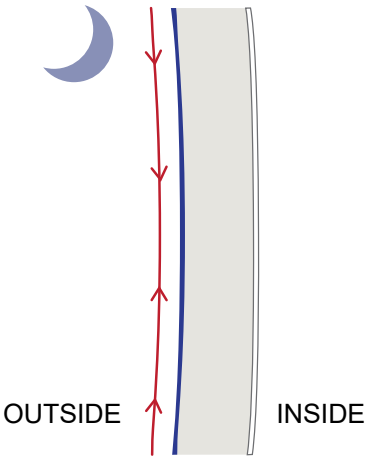
Horizontal

Deflection of the slab inwards and outwards from side to side.

Maximum bow permitted is 3mm measured from the middle of the slab.

Slackening off the lock keeps will compensate for the movement of the slab within these tolerances. The hooks of the multipoint lock must be in compression with the inner edge of the pocket keep. If this does not happen the door may move to the inside of the property (towards the cold side) and give the impression the door is bowed. It is important to ensure the centre keep for the latch only allows the door to become flush with the inner face of the outer frame and not any tighter as this could also cause the door to appear bowed.





If the hooks on the multipoint lock are not thrown throughout the day and the centre keep setting is too tight, the top and bottom of the door will be in unsupported tension and will eventually stand proud of the inner face of the profile. This will make the hooks on the lock become stiff, as they cannot draw themselves into the hook keep. Protect your door from natural thermal distortion. Make sure the top and bottom locking points are engaged by pulling the handle up every time you shut the door.

If these points are not observed the warranties on the functionality and operation of the door could be affected.

GLASS AND GLAZING FEDERATION

Condensation issues are typically building ventilation related, not product related.
For further information refer to http://www.ggf.org.uk