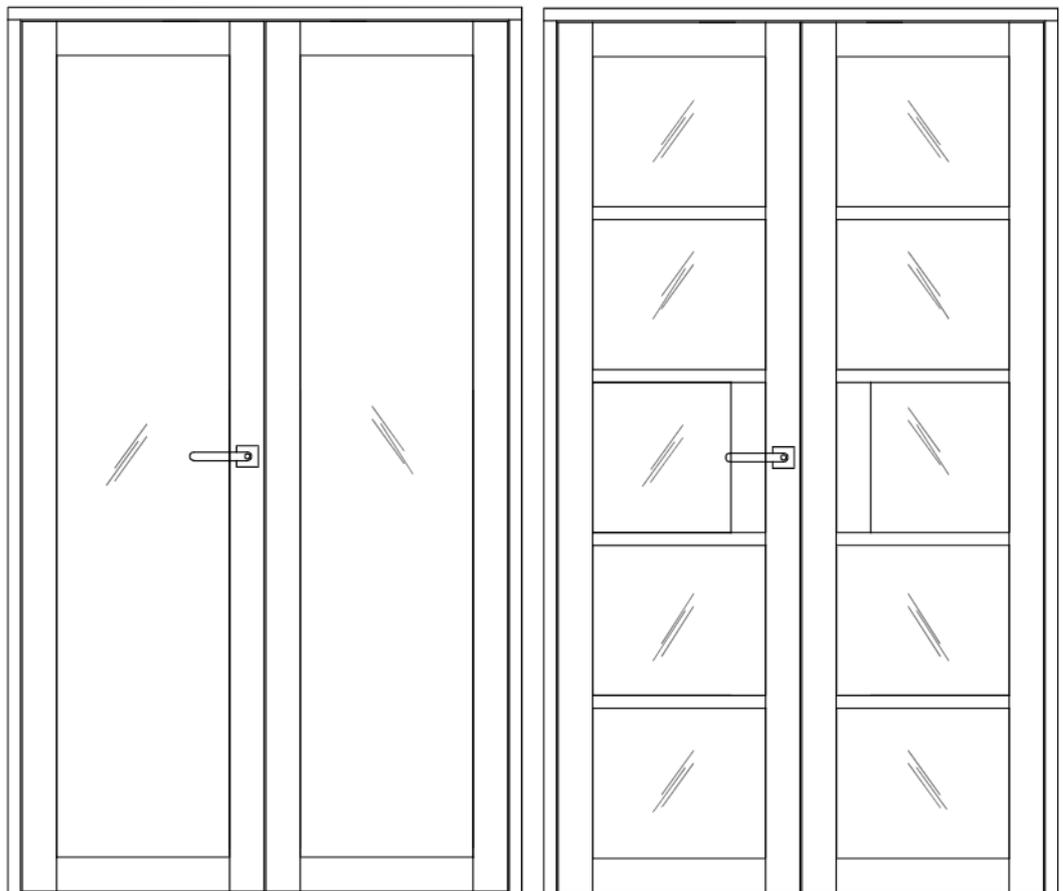


INTERNAL FRENCH DOOR PAIRS

Assembly Instructions
Bespoke and Standard Sizes



About your internal French door set

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

Door and frame components

All our timber components are manufactured using the latest technology to reduce warping or twisting. They are constructed using an engineered wooden core, solid wood lipping's and faced using real wood veneers.

No two trees produce identical grains or colour of wood, and this adds to the beauty of a natural product. We therefore cannot guarantee that all door and frame components will look exactly the same in grain and colour.

Veneers are natural products and prone to deterioration if not fully sealed with superior quality finish. If moisture penetrates the finish this may cause cracks to appear or splits.

Unfortunately, we cannot change the properties or performance of the timber components which are natural products. We cannot therefore accept claims for any variation in the components, or cracks or splits that may appear due to moisture going into the timber. If all faces and edges, including the tops and bottom edges of the doors, are not fully sealed then this can cause excessive movement in the doors due to temperature changes and natural moisture in the air. What is more, warping of wood is not a defect if it is not more than 1/4 inch (6mm) when it is in its installed position.

Protective finish and maintenance

Pre-finished door sets

Our standard internal oak French door pairs are fully finished and ready for installation. Our black and white primed plus door sets have been primed with a polyurethane wood finish. Whilst this base coat finish offers good protection against natural moisture in the air and general temperature changes, a final finish can be applied on installation.

All internal pre-finished doors sets must be checked every 2-5 years for deterioration in the finish, and re-coated as and when necessary. Moisture must not be allowed to penetrate the timber. The length of time between re-coating depends greatly on the environment / location the doors are installed in. The coating may require more regular attention if installed say between a kitchen and living area or separating a lounge and dining area with a log burner, or directly next to a radiator due to regular varying temperature changes and moisture rich environments.

We do not recommend re-finishing with any other finish other than polyurethane finishing systems. The RAL (colour match) paint code for our internal French pairs are;

- White RAL 9016 Traffic White - 35% Gloss level
- Black RAL 9011 Graphite Black - 8-10% Gloss level
- Clear (no RAL) - 30% Gloss level

Unfinished door sets

If you have bespoke ordered an unfinished oak door set the door set must be fully finished according to our guidelines BEFORE the door set is installed. Failure to do so will invalidate the guarantee.

Please note, that use of steel wool or allowing steel or iron fragments to come into contact with the untreated oak timber or veneers may cause oxidisation resulting in black staining.

Internal unfinished oak door sets must be finished with an internal polyurethane varnish or paint in your preferred colour and gloss level. This should consist of a minimum of 3 coats to ALL faces and edges of the doors and frame components to ensure the product is fully sealed, including the tops and bottom edges of the doors. If you are looking for a durable and more natural finish, we recommend using Dulux Trade clear polyurethane varnish in a satin finish. It is important that you have tested and checked that you are happy with your choice of finish before applying to your door set. Please note, even clear finishes will darken the timber from its original appearance.

IMPORTANT: Do not use any oil or wax based finishes, or any quick drying products such as (but not limited to) Ronseal, or any finish other than a polyurethane finish as this will invalidate your guarantee.

See pre-finished doors sets section for maintenance advice.

Single glazed units

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.

Glass must be regularly maintained and cleaned. 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 glass are a natural phenomenon and not a fault.

Toughened 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 is a processed glass therefore certain blemishes are unavoidable.

About your internal French door set (cont)

For carrying out a glass inspection, stand at least 3 metres away from the glazing, view at 90-degree angle and look directly through the glass unit(s). The glass must be viewed in natural daylight but not with the sun directly on it.

Hardware components

The hardware in your internal French door set can deteriorate from everyday use. That's why regular maintenance of your door hardware is important.

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 six months otherwise your guarantee will not be valid.

Hinges and bolts

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 a 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.

Door latches and handles

The handle and latch should operate just as smooth with the access door in the open position as what it does when it is fully closed.

It is important that if you feel any resistance when using the handle, you do not continue to operate the doors as this may eventually cause the latch to fail and will invalidate your guarantee.

All moving parts should be lubricated with silicone spray.

The handles should be regularly cleaned with a soft damp microfibre cloth to remove any dust or grime, taking care not to scratch the surface.

If you experience problems opening and closing your doors, first eliminate any actual latch problems by opening the access door and pressing the handle downwards. If this can be done, and the latch is moving in and out, the latch is operating normally. The problem is likely to be due to incorrect door alignment / adjustment.

Please refer to page 11 for correct spacing and adjustment guidance.

Introduction to Assembly

QUICK GUIDE

Your internal French doors are supplied with the frame unassembled and in 3 pieces, ready for assembly on site. Thresholds where ordered will also be supplied loose.

Our standard doors are all pre-glazed and factory pre-finished. Our black and white primed plus finishes are base coated, therefore additional finishing may be required on site prior to assembly.

Every internal French door set is factory pre-machined for hinges, latch, striker plate, spindle, bolts and seals.

When you receive your internal French door set, to install it, assemble the frame then install it into the opening using the fixings and drill bits supplied.

Attach the hardware to the doors and install the doors into the frame.

Check the final spacing and operation of your internal French doors, and should adjustment be needed refer to the 'Final adjustment of the concealed adjustable hinges' section of these instructions, page 11.

Full and detailed installation instructions are contained within this Instruction booklet

Contents

IMPORTANT: Please check the contents of the packages to ensure that all parts are present and in good condition before booking your installation

Timber parts

Our internal French door pairs come as standard in 3 different sizes and finishes.

Each door set comprises of;

- Qty 1 x Access door
- Qty 1 x Slave door
- Qty 1 x Frame pack (includes 1 x left jamb, 1 x right jamb, 1 x frame head and 1 x astragal mullion)

The following product codes cover all size and finishing options available as standard

	CLEAR FINISHED	WHITE PRIMED PLUS	BLACK PRIMED PLUS
Access door	40IFDCPU04FB-1 40IFDCPU05FB-1 40IFDCPU06FB-1	40IFDPFW04FB-1 40IFDPFW05FB-1 40IFDPFW06FB-1	40IFD5LBCB04-1 40IFD5LBCB05-1 40IFD5LBCB06-1
Slave door	40IFDCPU04FB-2 40IFDCPU05FB-2 40IFDCPU06FB-2	40IFDPFW04FB-2 40IFDPFW05FB-2 40IFDPFW06FB-2	40IFD5LBCB04-2 40IFD5LBCB05-2 40IFD5LBCB06-2
Frame pack	40IFDCPU04FB-3 40IFDCPU05FB-3 40IFDCPU06FB-3	40IFDPFW04FB-3 40IFDPFW05FB-3 40IFDPFW06FB-3	40IFD5LBCB04-3 40IFD5LBCB05-3 40IFD5LBCB06-3

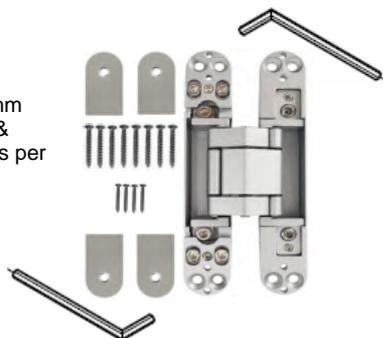
Hardware

Concealed hinges

Qty 4

(supplied with Qty 8 x M5 x 25mm Phillips screws, Qty 4 x covers & Qty 4 x 6mm self tapping screws per hinge. 3mm & 4mm Allen keys)

Black DDCH-G40BLK
Silver DDCH-G40SIL



Flush bolts

Qty 2

(supplied with Qty 2 x 30mm screws, Qty 2 x 20mm screws and Qty 2 x striker plates per bolt)

Black DDDB006-8BLK
Silver DDDB006-8SIL

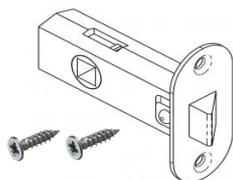


Tubular mortice latch

Qty 1

(supplied with Qty 2 3/4" x 6s pozi wood screws)

185-55-RFBODY-B



Long striker plate

Qty 2

(supplied with Qty 2 x 20mm Phillips screws per plate)

Black BSPLATE
Silver SSSPLATE

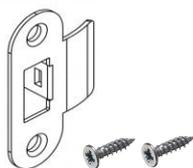


Striker plate

Qty 1

(supplied with Qty 2 x 3/4" x 6s pozi wood screws)

189-56RFKEEP



Pozi wood screws

Qty 5

(black sets supplied with 3 x 20mm pozi black wood screws all other door sets supplied with 3/4" x 6s pozi wood screws)



Seals

AQ21 Draft seal 2.3m
Qty 2



AQ21BLK2.3

AQ48 Draft seal 2m
Qty 1



AQ48BLK2

5mm Bubble seal 2.3m
Qty 1



R9885

Contents (cont)

Installation kit

A) M5 x 70mm Hardened steel wood screws
Qty 8



B) Hardened steel direct frame fixings
Qty 10



C) Direct frame fixing cover caps
Qty 15



D) 1/4 Hex T30 insert bit
Qty 1



E) 1/4 Hex pozi no.2 insert bit
Qty 1



F) PH2 insert bit
Qty 1



G) HSS 6.5mm x 148mm drill bit
Qty 1



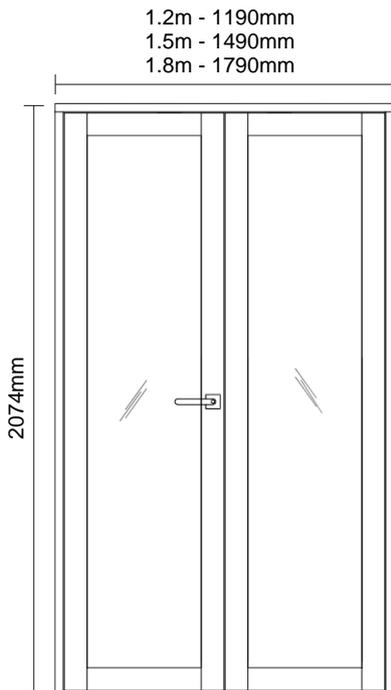
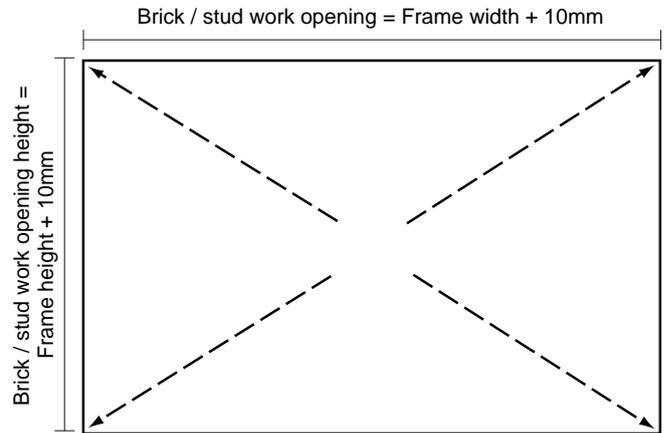
H) SDS 6.5mm x 160mm drill bit
Qty 1



Preparing the site

When preparing the site, please prepare the brickwork / stud wall 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 brick / stud work are level before installation. Please ensure that all dimensions are correct for installation before proceeding, as the door set must be installed square and level into the opening.



(Based on standard door set without optional threshold)

Standard sized internal French door sets outer frame dimensions are as follows;

- 1.2m Door set = 1190mm wide x 2074mm high
- 1.5m Door set = 1490mm wide x 2074mm high
- 1.8m Door set = 1790mm wide x 2074mm high

The brick / stud work opening (based on fished floor level) sizes are;

- 1.2m Door set = 1200mm wide x 2084mm high
- 1.5m Door set = 1500mm wide x 2084mm high
- 1.8m Door set = 1800mm wide x 2084mm high

VERY IMPORTANT.

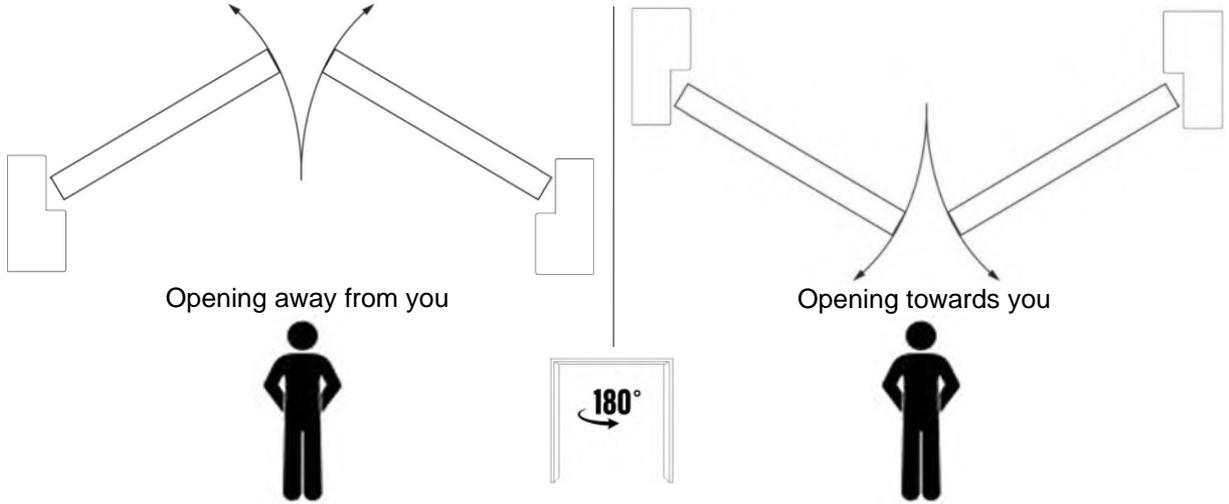
The frame and doors are designed to be installed **ON TOP OF THE FLOORING** or floor covering. If installing onto a sub floor, which will then have flooring on top of it, you will need to install the frame allowing for the thickness of the flooring / covering.

Opening options

Our internal French door pairs are reversible and therefore can be installed to open in any of the following ways;

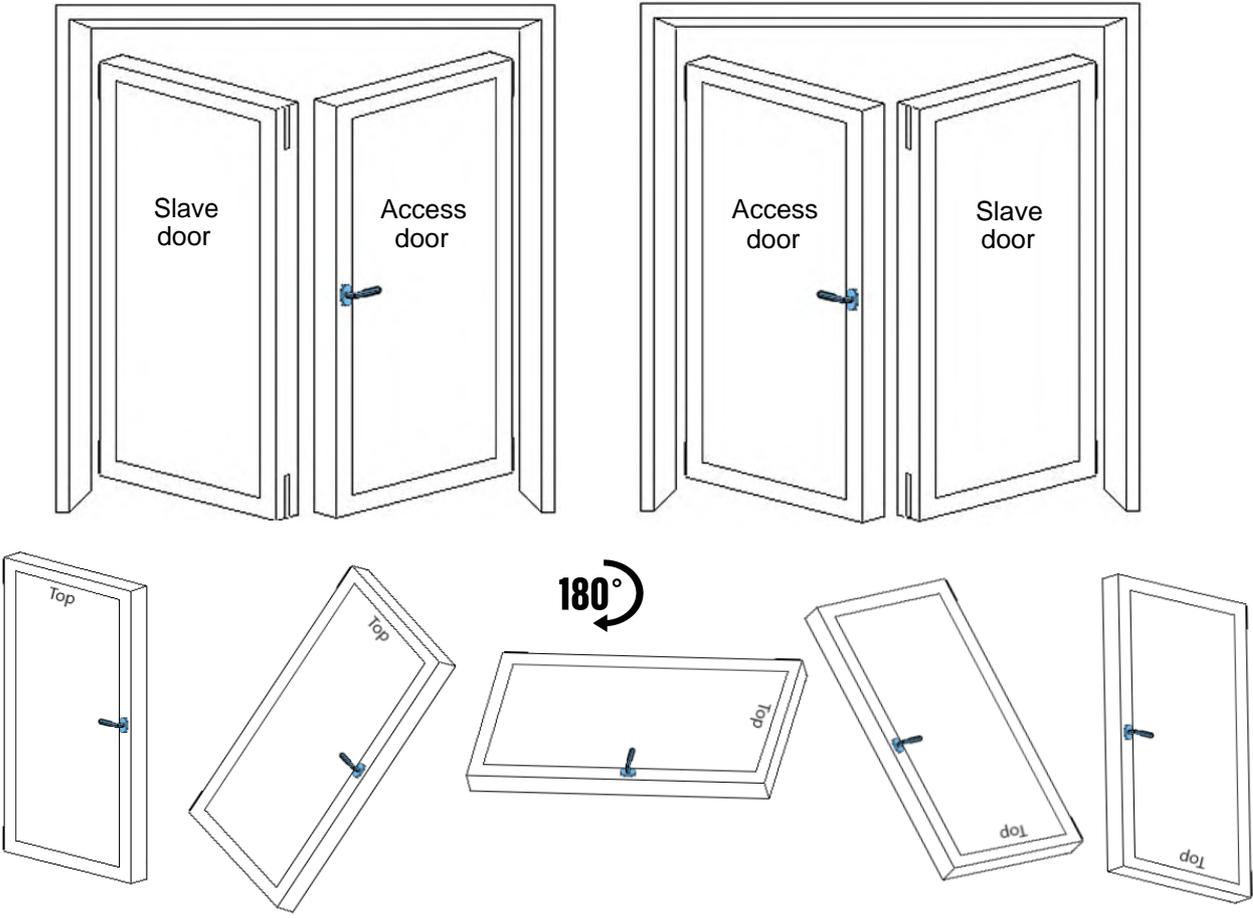
Opening direction

The direction the doors open towards will be determined by which way round you install the outer frame into the opening. The same frame can be installed to have the doors opening towards or away from you by rotating the assembled outer frame 180 degrees.



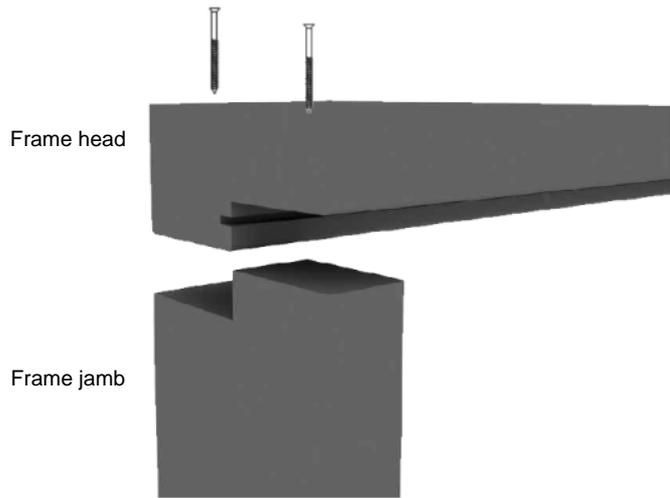
Door configuration

Which side you have the Access and Slave door can be determined by which side of the outer frame you hang the doors. The same doors can be installed to achieve either of the options shown below by rotating the doors 180 degrees. (Not inside out, upside down so the top of the door becomes the bottom and vice versa.)



Assembling the frame

Assemble the jambs to the frame head with the M5 x 70mm wood screws (A) and pozi no.2 bit (E) provided through the pre-drilled holes, Qty 2 on each side.



Installing the assembled the frame

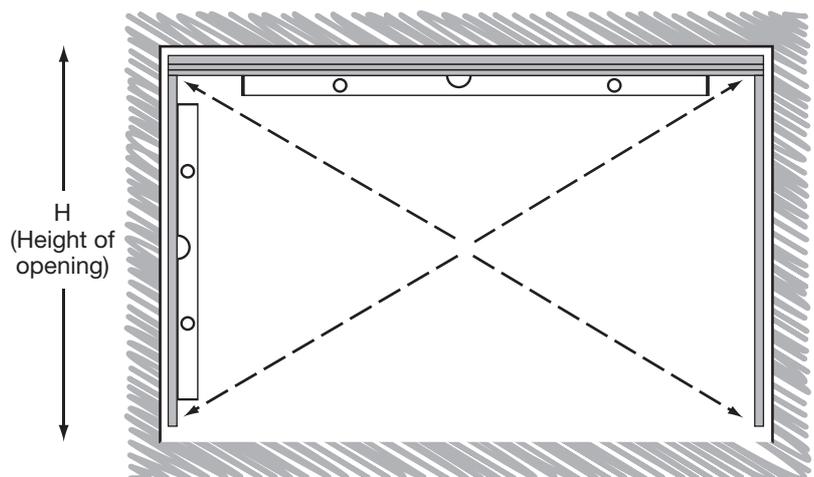
The outer frame supplied is rebated, with a combined frame and door stop in one piece. The frame can be rotated 180 degrees prior to installation to alter if the doors will open towards you or away from you, see page 6 for diagrams.

Proceed to install the assembled frame. *It is critical that the frame is fitted square and level.* Ensure the frame is installed straight and square. Use shims / packers between the frame and the opening.

The height (H) must be the same across the whole width of the opening.

The diagonals must be the same.

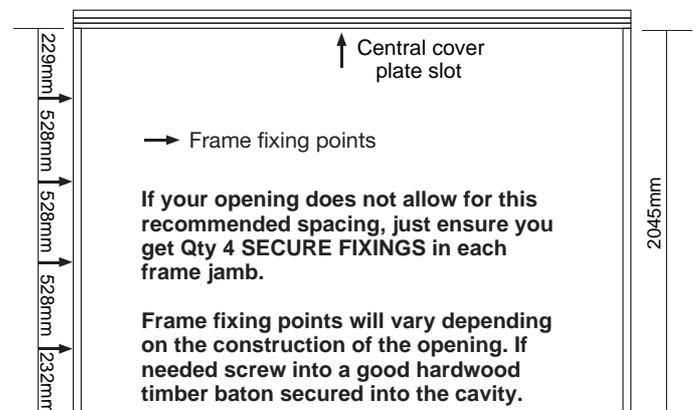
It is very important the frame jambs are level. Place a spirit level on the face and sides of each jamb and check before proceeding.



Secure the assembled frame into the brickwork / stud wall opening by countersinking Qty 4 direct frame fixings supplied in each jamb and Qty 1 in the frame head (unless the construction of your building requires more appropriate fixings to suit the individual dwelling).

Use the direct frame fixings (B) as follows;

- Use the 6.5mm x 148mm HSS drill (G) supplied to drill the holes in the frame jambs.
- Use the 6.5mm x 210mm SDS masonry drill (H) supplied to drill into the brickwork.
- Use the Torx T30 bit (D) supplied to screw in the direct frame fixings.
- Cover using the cover caps (C) provided or plug to your own personal choice.

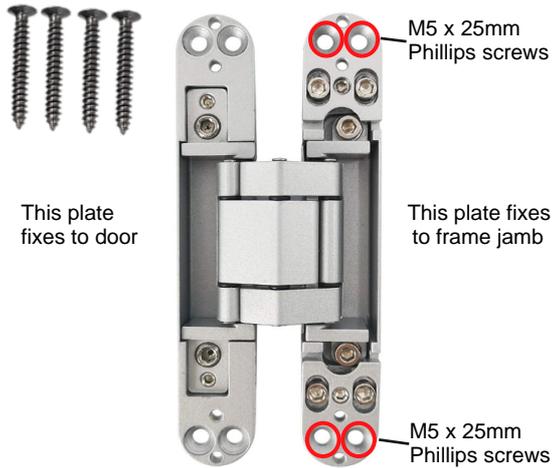


Very important: Carefully check the frame is tightly fixed together and is square. Diagonals of the frame must be equal. Do not proceed with installation if the frame is not square.

Attaching the hinges to the frame

Identify the concealed, adjustable hinges and adjust all 4 hinges so they are at their highest point (see page 12 for height adjustment).

Establish the correct location for the hinge plates as shown opposite and secure the hinges to the outer frame with the M5 x 25mm Phillips screws and PH2 drill bit (F) provided Qty 4 screw per hinge plate. **Careful not to round off the screwheads, use a low driver setting.**

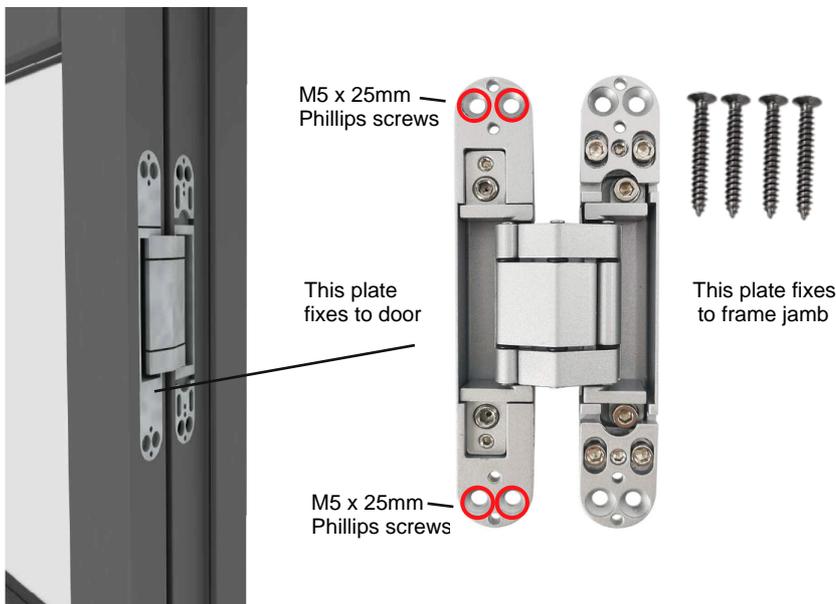


Installing the doors into the frame

The doors themselves are pre-machined to be a Slave or Access door. See page 6 for opening configurations.

Identify the Slave door (the one without the pre-machined spindle hole) and position it adjacent (when viewed from the non-rebated side of the frame) to the desired frame jamb.

Offer the Slave door up to the hinge plates carefully and check if the pre-machining in the Slave door aligns with the hinge plate. If needed, adjust the height on the concealed hinge. (See page 12 for height adjustment)



With a second pair of hands to steady the door, or with the door packed up on blocks / discarded packaging, fix the hinge plate to the door with the M5 x 25mm Phillips screws and PH2 drill bit (F) supplied, Qty 4 per hinge plate. **Careful not to round off the screw heads, use a low driver setting.**

Repeat the process with the Access Door

Fitting the flush bolts and frame head keep

Fit the Qty 2 flush bolts into the pre-machined positions on the side edge of the Slave door, using the 30mm Philips screws supplied in with the bolts, PH2 bit (F) Qty 2 screws per flush bolt.



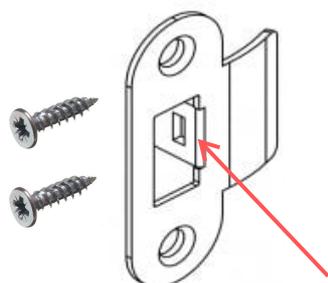
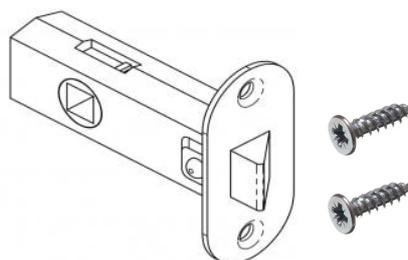
Fit the long flush bolt striker plate into the pre-machined position in the frame head, using the 20mm Philips screws provided in with the flush bolt and the PH2 bit (F).



Fitting the tubular mortice latch and strike plate

Fit the tubular mortice latch into the pre-machined position in the Access door, using Qty 2 3/4" x 6s Pozi wood screws and Pozi No. 2 bit (E) provided.

The curved edge of the latch should face latch striker plate.

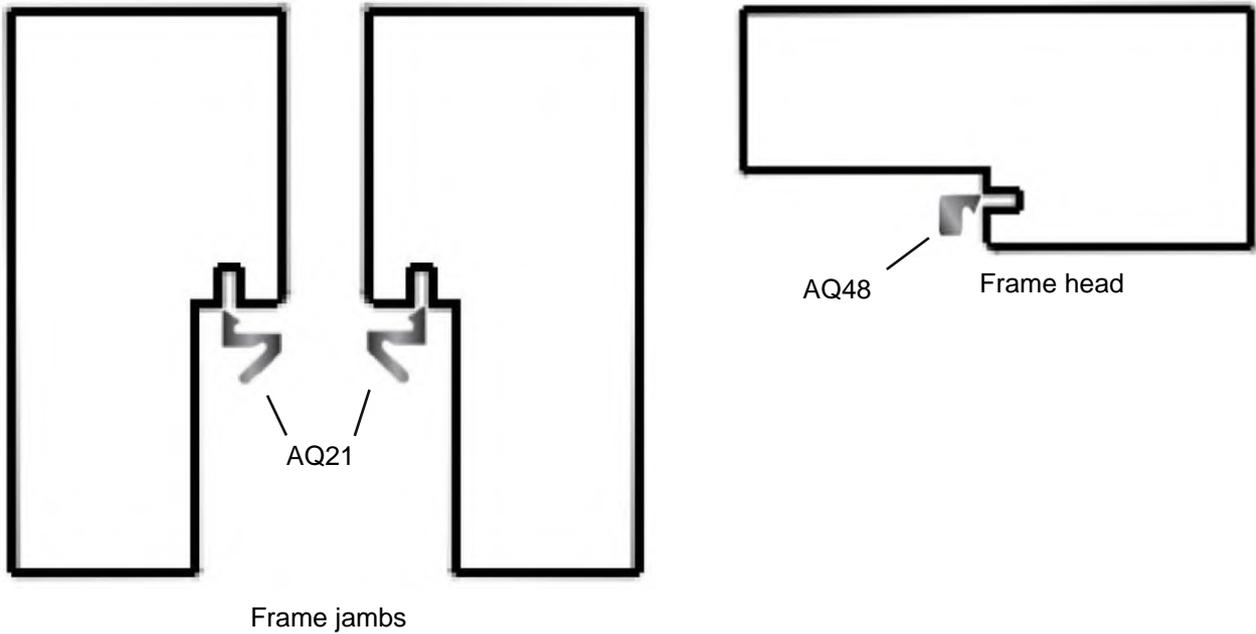


Adjustable latch plate

Fit the latch striker plate into the pre-machined position in the Slave door, using Qty 2 3/4" x 6s Pozi wood screw and Pozi No.2 bit (E) provided.

Fitting the seals to the frame

Fit the AQ21 draft seals into the frame jambs and the AQ48 into the frame head, trimming to size where required.



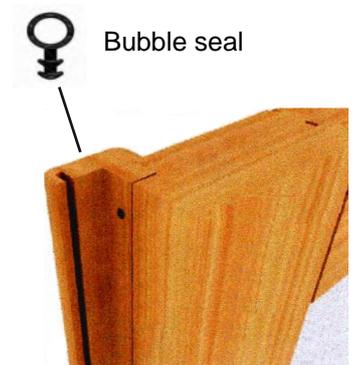
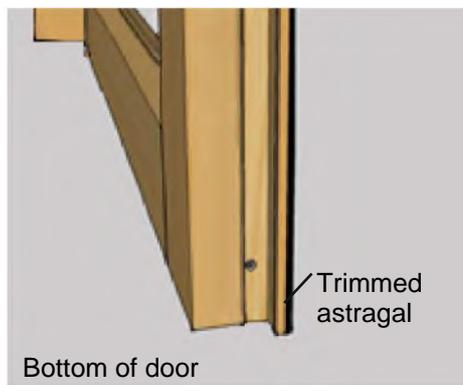
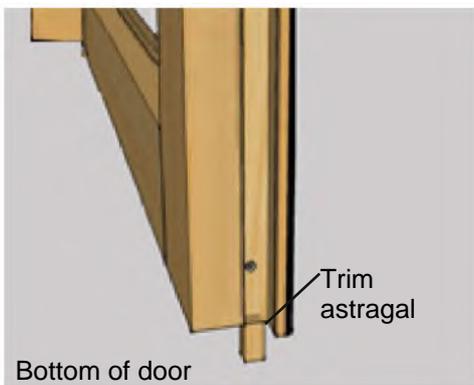
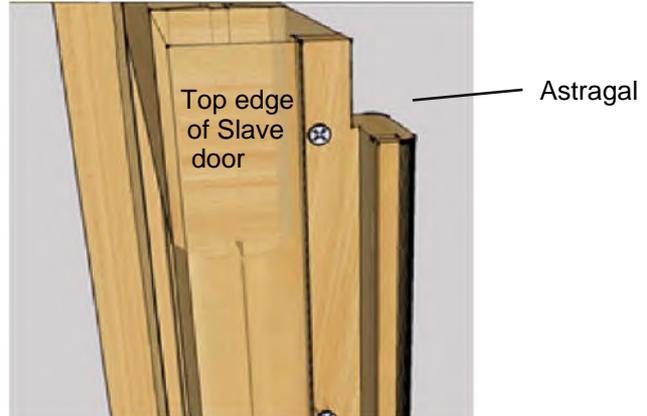
Fitting the astragal mullion

The astragal mullion should be fitted to the edge of the Slave door. The rebated part of the astragal should be fitted level with the top of the door.

Install into the machined position and secure with the Qty 5 3/4" Pozi wood screws provided (black primed plus door sets are supplied with Qty 5 3mm x 20mm pozi wood screws).

The part of the astragal protruding at the bottom of the door should be trimmed off, level with the bottom of the door, using a fine toothed saw.

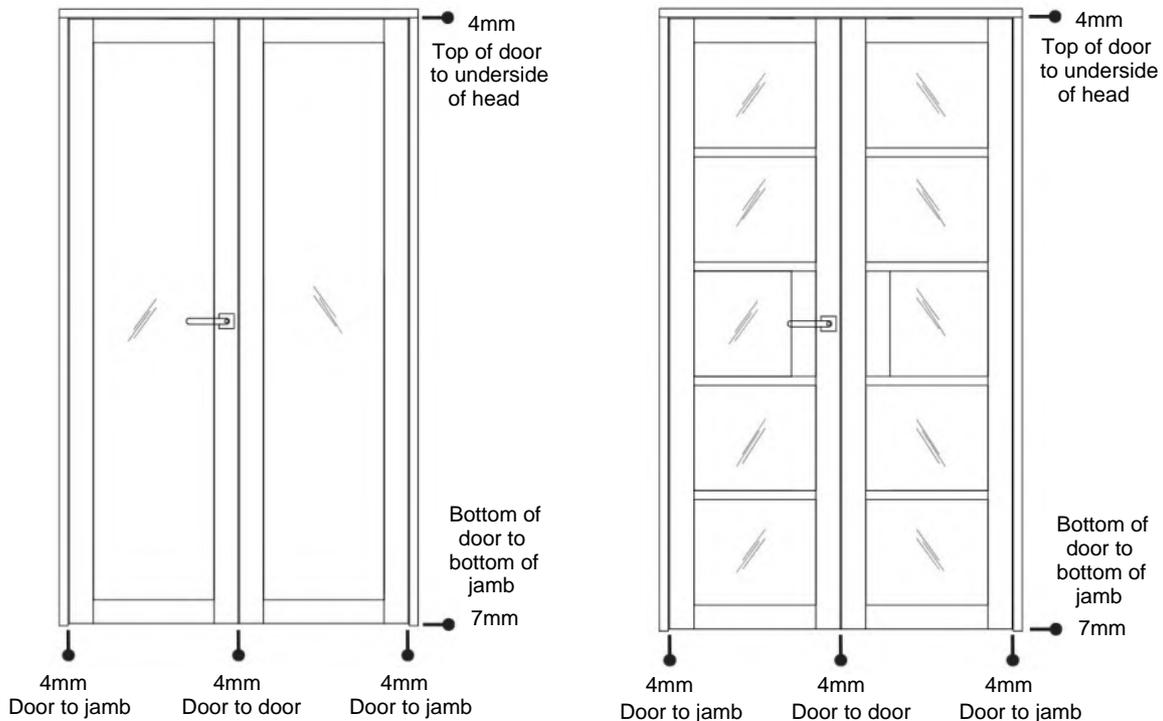
Fit the 5mm bubble seal into the pre-machined groove in the astragal.



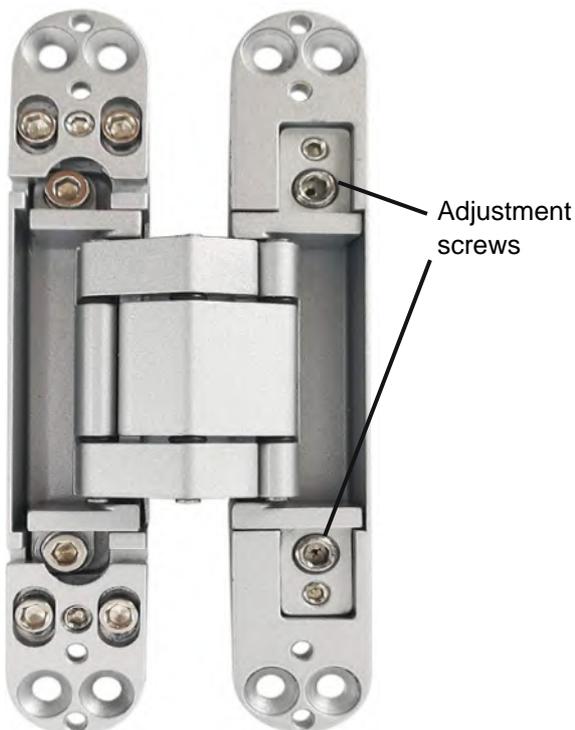
Final adjustment of the concealed adjustable hinges

Carefully close the doors together to check how they are sitting in the frame. Adjust the 4 hinges to position the doors with even spacing between the doors and the frame, so that they open and close smoothly without catching, ensuring the tubular mortice latch operates smoothly when opening and closing.

Below is the final adjustment and approximate spacing recommended for our Internal French doors, however adjust the doors as required to achieve a smooth operation.



Width adjustment (Horizontal/ Lateral)

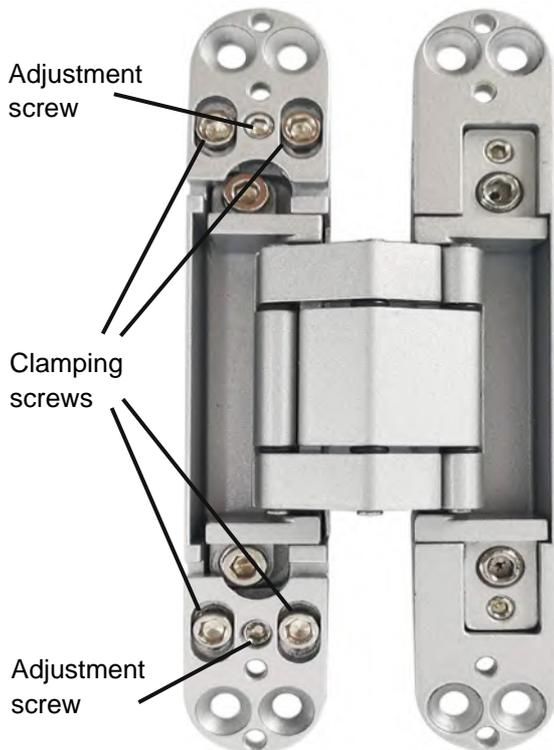


To adjust the doors laterally;

- Locate the top adjustment screw
- Insert the 4mm Allen key provided
- Turn the Allen key anti-clockwise to position the doors further apart
- Repeat the process on the bottom adjustment screw
- Adjust each hinge as required to achieve even spacing in-between the doors and the outer frame.

Final adjustment of the concealed adjustable hinges (cont)

Height adjustment (Vertical)



To raise the doors;

- Locate the 4 clamping screws and 2 adjustment screws on each of the top and bottom hinges
- Insert the 4mm Allen key into the clamping screws and turn anti-clockwise to loosen them
- Insert the 3mm Allen key provided into the adjustment screws and turn anti-clockwise to loosen them
- Manually raise the door into the desired position and re-tighten all clamping & adjustment screws

To assist, the doors can be raised or lowered using an air wedge (being careful not to over inflate) or supports.

Repeat the process on the adjacent door if required.

To lower the doors;

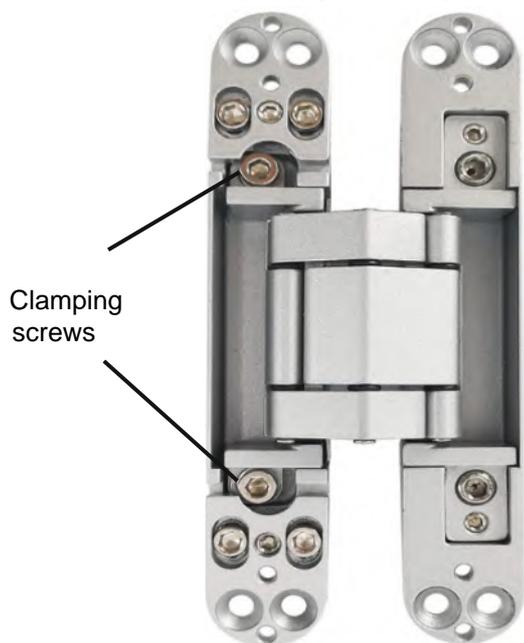
- Place air wedges or supports under the doors
- Locate the 4 clamping screws and 2 adjustment screws on each of the top and bottom hinges
- Insert the 4mm Allen key into the clamping screws and turn anti-clockwise to loosen them
- Insert the 3mm Allen key into the adjustment screws and turn anti-clockwise to loosen them
- Manually lower the door into the required position by deflating the air bags or lowering the supports
- Re-tighten all clamping screws and adjustment screws.

Repeat the process on the adjacent door if required.

Final adjustment of the concealed adjustable hinges (cont)

The depth if needed can be adjusted on the concealed adjustable hinges.

Depth adjustment (In / Out)



To adjust the depth of the doors in the frame;

- Locate the 2 clamping screws on each of the top and bottom hinges
- Insert the 4mm Allen Key and turn anti-clockwise slightly to loosen them off
- Manually align the door into the desired compression and turn all the clamping screws clockwise to re-tighten

Repeat the process on the adjacent door if required.



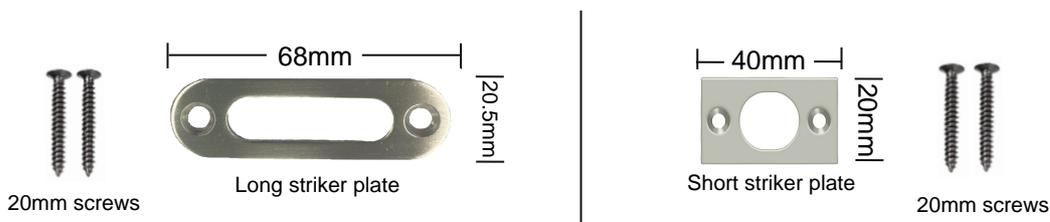
After the adjustment of the hinges has been completed, fit the plastic covers onto the concealed hinges and secure with the 6mm self tapping screws and PH2 bit (F) provided.

Fitting the striker plate for the bottom flush bolt

Once you are 100% happy the doors are correctly fitted and adjusted, you can now fit either the shorter squarer or the longer rounder striker plate into the finished flooring. To use the bottom flush bolt it will be necessary to make a locating hole in the floor, to be covered by the striker plate of your preference.

Using a bottom flush bolt provides greater rigidity when the doors are closed and it is our recommendation this is used. If however, it is preferred NOT to drill a hole into the floor, leaving the bottom flush bolt unused and the floor completely clear, please note well that the doors will be less rigid when closed and during operation. Not engaging the bottom flush bolt can also cause the doors to sit slightly out of line.

Close both the Slave and the Access doors, and engage the bottom flush bolt. Mark the flooring as to where the bolt would strike the flooring, and disengage the flush bolt. Before drilling the hole, please make sure the doors are not misaligned.



Offer either striker plate to the floor and mark off accordingly with a pencil. Drill or route out a hole to allow the floor to receive the bolt. Secure the plate using Qty 2 20mm Philips screws provided and the PH2 bit (F).

Final finish

Due to increasing demands for thinner frame sections / slimmer sightlines, this can impact on the final finish surrounding the outer frame. The frame may sit flush to one side of the partition / reveal, leaving the other side of the frame set within the reveal or create gaps. It is a personal preference as to how you choose to finish up to the frame. You could foam fill and silicone seal any gaps, use a decorator's caulk, plasterboard and plaster, or finish using an architrave to match the doors.

Should you wish to source any matching timber, the black (RAL 9011) and white (RAL 9016) prime plus internal French doors sets are hardwood veneered and finished with a polyurethane finish. The oak internal French doors are veneered using American white oak and coated with a clear polyurethane finish (prefinished oak door sets only.) Unfortunately we are unable to supply any trims or architrave.

Correct operation

When closing the internal French door set, first close the Slave door, securing in place using the top and bottom finger operated bolts located on the side edge of the door.

Once secured, close the Access door by pulling or pushing the door until the central latch engages.

To open the doors, first depress the handle on the Access door and fully open the door. This will expose the finger operated bolts located on the side edge of the Slave door, release both the top and bottom bolts and then fully open the door.