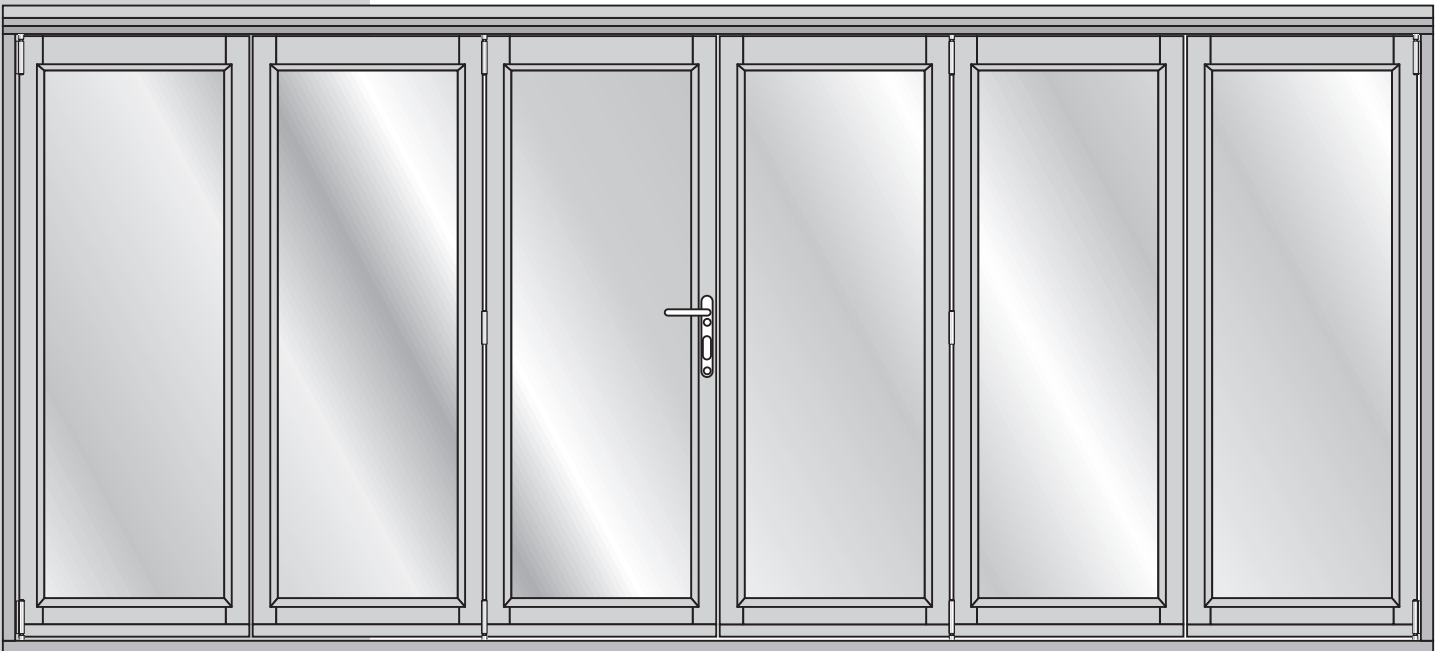


Sliding Folding Patio 6 Door Set

T14 Set - (Approx. 14ft)

T16 Set - (Approx. 16ft)

Assembly Instructions



About your patio door set

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

- We recommend that a competent tradesperson install this product.
- A single person must **never** carry out the installation, as some components are very heavy.
- The Outer-Frame Head requires fixing to the building lintel over the opening. The lintel **must** be capable of carrying the load of the door in all conditions. If in doubt consult a structural engineer.

Automatic Closers and Operators

- The hardware systems are designed for manual operation. Poorly adjusted automatic operator closers can impart significant destructive forces to tracks, bearings and stops. Such hardware used in installations is expressly excluded from warranty terms.

Care of Timber Doors and frames on site

- Please check doors, frame and sill at time of delivery to ensure that they are acceptable and in good condition. If you find a component missing or damaged please inform your supplier immediately. We keep replacement components of most set parts and these can be sent out to you quickly. This will save you having to re-package and return the whole set, and allows you to continue with the project.
- When storing prior to installation the doors and frames should be kept in their packaging, handled with care and stored in a dry, ventilated building. Doors and frames should be stored flat on a level surface (not on edge or on end).
- Doors should not be stored or fitted in the building until the wet trades such as plastering, painting etc. Have been completed and the room is dried out.

Finishing prior to Installation

- See **Pre-finishing the wooden parts** - Very important: We do not recommend wax or oil finishing systems such as Linseed oil or Teak oil.

Trimming

- This Tri-Fold door set is not designed to be trimmed on site and should be fitted as supplied.

Conditions of Sale

- We shall not be held responsible for any incidental work expenses arising out of or because of any defect in our product, or bad workmanship to our product. In the event of the goods having manufacturing defects and requiring replacement, our liability will be limited to the value of the door or frame or hardware component only. These notes do not affect your statutory rights with the retailer of this product.

Maintenance

Hardware in buildings is subject to deterioration from everyday use, and also environmental attack due to atmospheric and other conditions. Maintenance of hardware is even more important in severe environments such as coastal marine areas, and some industrial areas. Even stainless steel products require maintenance to prevent deterioration in some environments. We require the following minimum maintenance to be followed otherwise the warranty shall be void.

Track and Bearings:

Using a spatula or similar (not your fingers), apply a small amount (typically a 1/2 teaspoon of white petroleum jelly (Vaseline) or similar lubricant to the inner lip of each side of the track. Ensure that the wheels pass through the lubricant and it is distributed evenly along the track. Put additional lubricant around bearings. Lubricant reduces wear, improves smoothness and further protects against corrosion of track and bearings. Remove all surface contaminants by wiping all visible track surfaces with a damp soft cloth and mild detergent, then wipe clean with a clean cloth. In severe environments, apply a thin film of corrosion preventative such as WD40, by wiping with a soft cloth moistened with one of these products.

Stainless steel bearings are manufactured from hardening-grade stainless steel and although this material performs considerably better than plated steels, it is susceptible to corrosion unless maintained as described above.

Hangers, Pivots and Brackets:

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

Hinges:

Wipe down the visible surfaces with warm soapy water on a soft rag and then rinse off by wiping with a clean damp rag. Application of a thin film of light machine oil or WD40 will help to maintain the original lustre of the metal finish. Be careful not to get these compounds on the timberwork itself as may cause staining.

Drop bolts:

Spray application of a suitable lubricant such as WD40 to the sliding pin inside the bolt and to the lock cylinder is recommended. A tube attached to the nozzle will help to concentrate the spray where you want it to go. There are access holes or slots on all drop bolt products so that this can be done without removing the locks from the doors.

Frequency:

The procedures mentioned above need to be carried out as often as is necessary to prevent deterioration in the installed environment, however we recommend the following minimum frequency of application:

| | |
|-----------------------|-----------|
| General environment - | 6 monthly |
| Marine environment - | 3 monthly |

Please be careful not to get the lubricants or other liquids above on the Timber components as may cause staining of the timber.

The properties of timber

No two trees produce identical grain or colour of wood and this adds to the beauty of a natural product. We therefore cannot guarantee that all doors and frame components will look exactly the same in grain and colour. Warping of wood is not a defect if it does not exceed 1/4 inch (6mm) in its installed position.

Maintaining the doors and frame

We suggest additional treatment and finishing may be required at least once a year or sooner if there is any indication of deterioration in the wood protective finish used.

Contents (1)

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

Timber parts

- Door 1 - Right pivot hinge door - quantity 1
- Door 2 - Right mid door - quantity 1
- Door 3 - Right fixed access door - quantity 1
- Door 6 - Left opening access door - quantity 1
- Door 5 - Left mid door - quantity 1
- Door 4 - Left pivot hinge door - quantity 1

Door size - 14' set = 1972 x 678 x 54mm
 Door size - 16' set = 1972 x 778 x 54mm

- Top frame section includes aluminium top track - quantity 1
- Side frame sections (jambs) - quantity 2
- Sill bottom section includes aluminium bottom track - quantity 1
- Frame and track finishing pack - quantity 1

Hardware

- Top pivot - quantity 2
- Top pivot finishing pack - quantity 2 pack

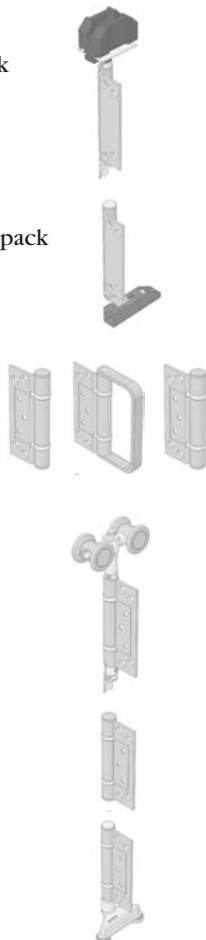
- Bottom pivot - quantity 2
- Bottom pivot finishing pack - quantity 2 pack

- Half of inset hinges - quantity 6
- Half of inset hinges finishing pack - quantity 2 pack

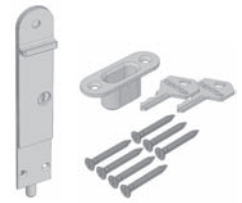
- Intermediate carrier - quantity 2
- Intermediate finishing pack - quantity 2 packs

- Straight Hinge - Quantity 2
- Straight Hinge finishing pack - quantity 2 packs

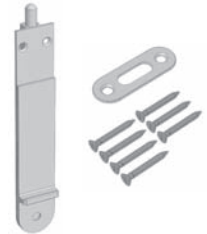
- Intermediate guide - quantity 2
- Intermediate guide finishing pack - quantity 2 packs



- Drop bolt keyed - quantity 3
- Keyed drop bolt finishing pack - quantity 3 packs
- Includes drop bolt cup



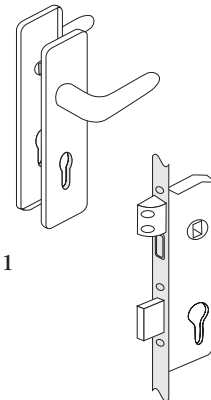
- Drop bolt non keyed - quantity 3
- Non-keyed drop bolt finishing pack - quantity 3 packs
- Includes drop bolt striker plate



- Driver pack - quantity 1

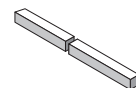


- Door handles - quantity 2

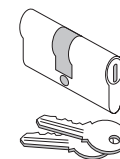


- Lock mechanism - quantity 1

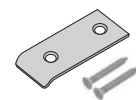
- Spindle - quantity 1



- Euro cylinder lock - quantity 1
- Keys - quantity 2



- Latch striker plate - quantity 1
- Latch striker plate finishing pack - quantity 1 pack



- Lock keep - quantity 1



- Lock finishing pack - quantity 1 pack (32 screws)

Contents (2)

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

Seals



Draft seal AQ21

T14 T16

2.0 metres x 4 2.0 metres x 4
4.2 metres x 2 4.8 metres x 2



Draft seal Brush seal

1.9 metres x 1 1.7 metres x 3
2.3 metres x 1



Draft seal AQ63

2.0 metres x 8 2.0 metres x 8



Draft seal AQ109

2.0 metres x 2 2.0 metres x 2

Installation Bag Contents

Direct Frame Fixings - quantity 20



Hardened Steel Wood Screws

M5 x 100mm - quantity 4

M5 x 70mm - quantity 4

M5 x 60mm - quantity 4



Torx T30 Insert Bit - quantity 1



Pozi No.2 Insert Bit - quantity 1



HSS Long Series Drill Bit - quantity 1
6.5mm x 148mm

SDS Drill Bit - quantity 1
6.5mm x 210mm

Installation Instructions - quantity 1

Pre-finishing the wooden parts

After you have checked the parts list to ensure you have all the parts ready and all components are in good condition (replacement parts are available) please carry out the pre-finishing procedure specified.

Please do not proceed with installation or assembly before applying high quality water-repellent sealant to all wooden parts as recommended below. It will be difficult for you to apply the sealants correctly once the product is assembled and installed. Failure to do this will cause the wooden parts to break down in UK weather conditions.

- Apply at least 3 coats of water-repellent protective finish to all faces, edges and top/bottom of each door and wood frame component prior to starting assembly or installation. Ensuring the backs of each frame is well sealed. For your convenience the under side of the wood components in the sill have received a factory applied sealant coating therefore there is no need to remove from the assembled sill. Just finish the exposed wooden areas of the sill in its assembled form as supplied.
 - Apply a further coating of water-repellent protective finish to the back of the frame once the frame has been assembled and just prior to installation - all 4 edges.
 - Apply a further topcoat of water-repellent protective finish to the tops and bottom of each door before installing the hardware or installation. The tops and bottom of each door are critical areas to finish, as this is the end grain area of the timber where moisture absorption will occur.
 - If any scratches are incurred during installation please give another coating.
 - We do not recommend wax or oil finishing systems such as linseed oil or teak oil.
- Very Important: Do not use steel wool or allow steel or iron fragments to come into contact with the untreated oak timber as this will cause oxidation resulting in black stains.**

Preparing the site

Brickwork opening:

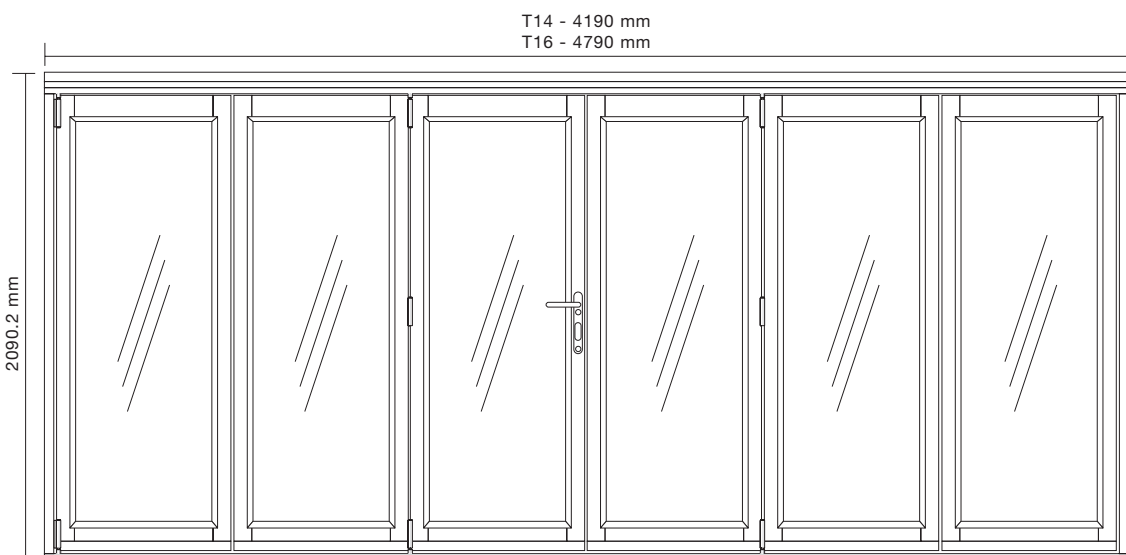
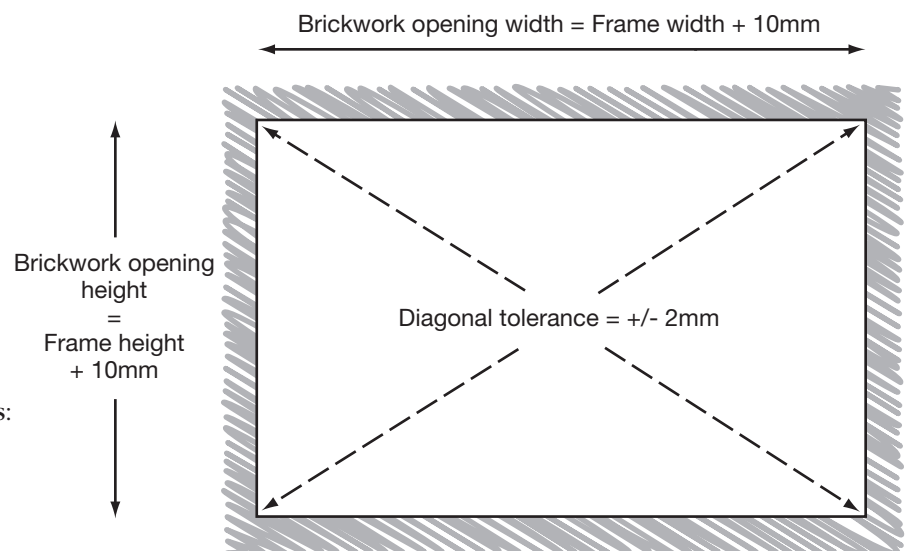
When preparing the site please prepare the brickwork opening to be 10mm more in height and width than the outside assembled frame size.

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 set must be installed square and level into the opening.

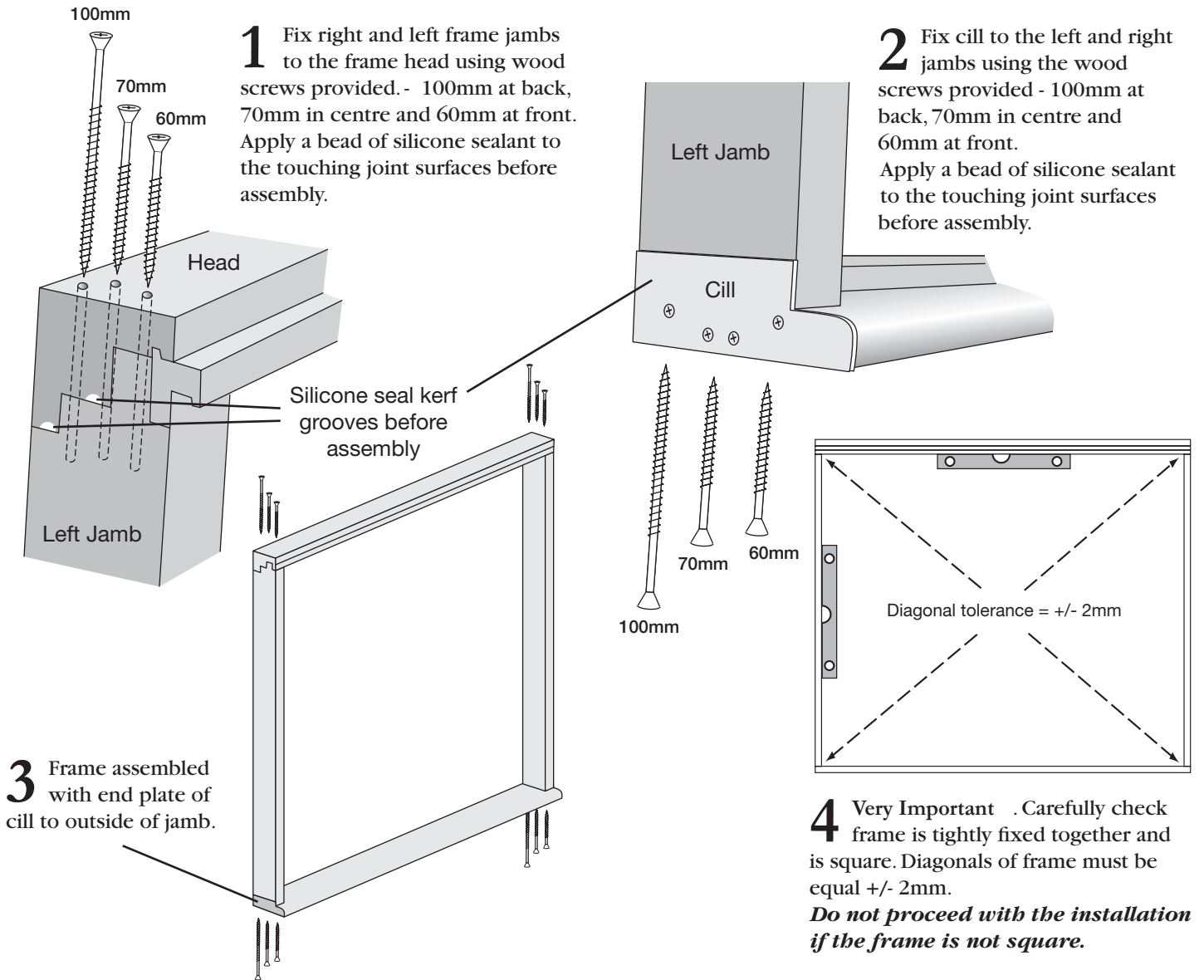
The door set outer frame sizes are as follows:

T14 - 14' - 2090.2mm High x 4190mm Wide

T16 - 16' - 2090.2mm High x 4790mm Wide

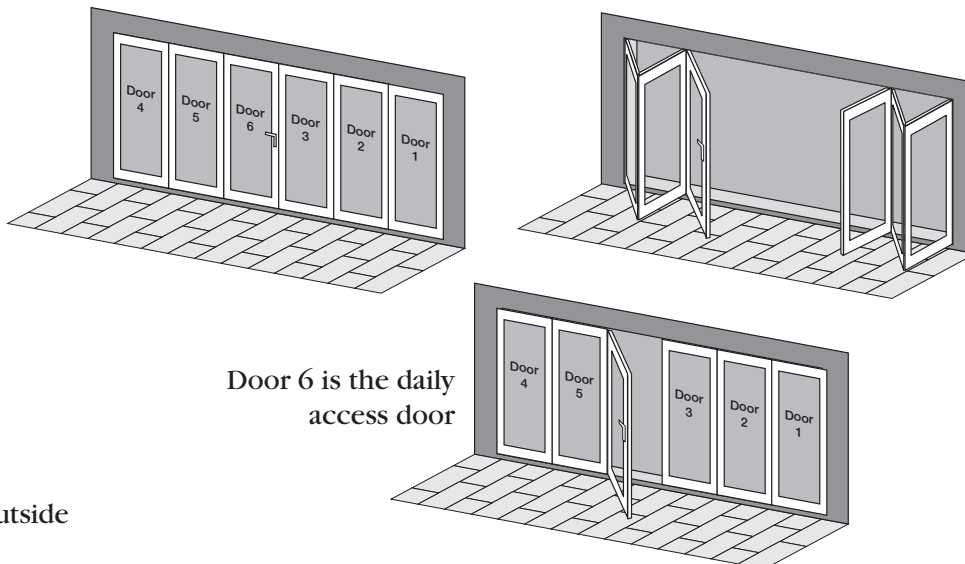


Assembling the frame

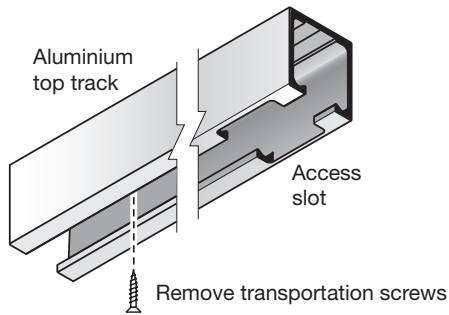


Opening arrangement

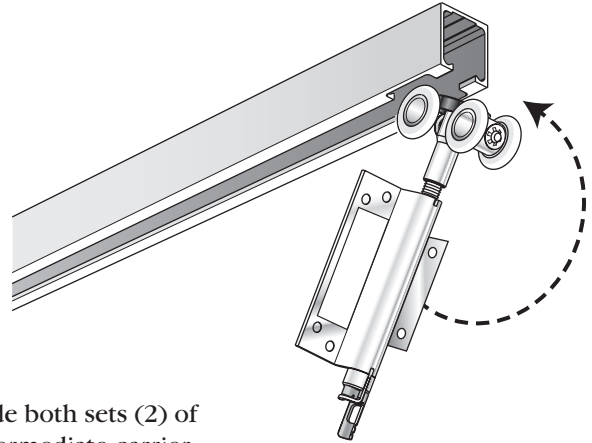
- 5** The T14 and T16 sets open with three doors to the left and three doors to the right. Doors 3 and 6 can be opened like a patio door pair. Door 6 is the daily access door. (The doors always open outwards.)



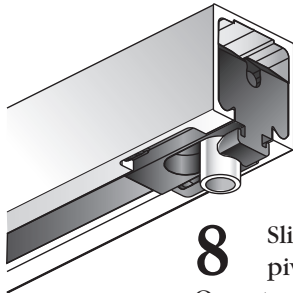
Assembling the top track



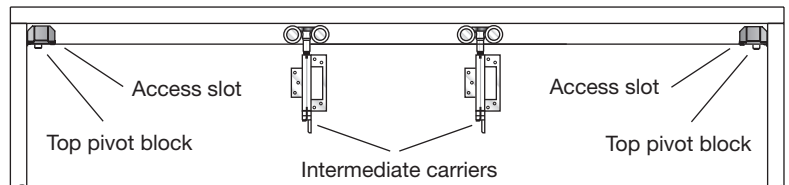
- 6** Remove the two transportation screws to release the aluminium top track from the frame head.



- 7** Slide both sets (2) of intermediate carrier wheels into the track.



- 8** Slide both plastic top pivots (2) into the track. One at each end.



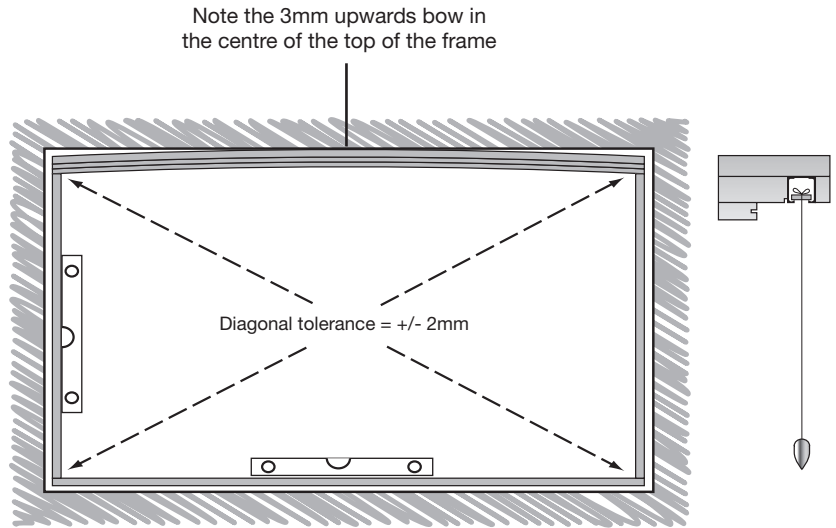
- 9** Re-secure the top track to the frame head using the two transportation screws *only* at this stage.

Installing the assembled frame

Proceed to install the assembled frame ensuring that the sill faces to the outside. **It is critical that the frame is fitted square and level** with tolerances as follows. Ensure the frame is installed straight and square, if necessary use shims (packers) between the frame and the brick opening.

The diagonals must be the same, +/- 2mm.

We recommend that the top centre of the frame is bowed upwards by 3mm. This can be achieved by fixing 3mm shims at the top of both jambs and then fixing the center of the top of the frame securely to the lintel. **Important: The head section of the frame must not sag.**



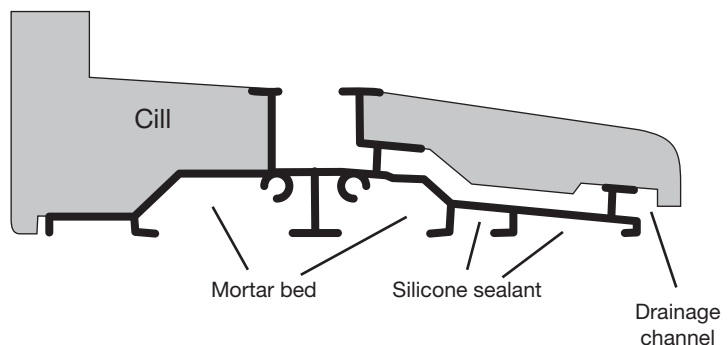
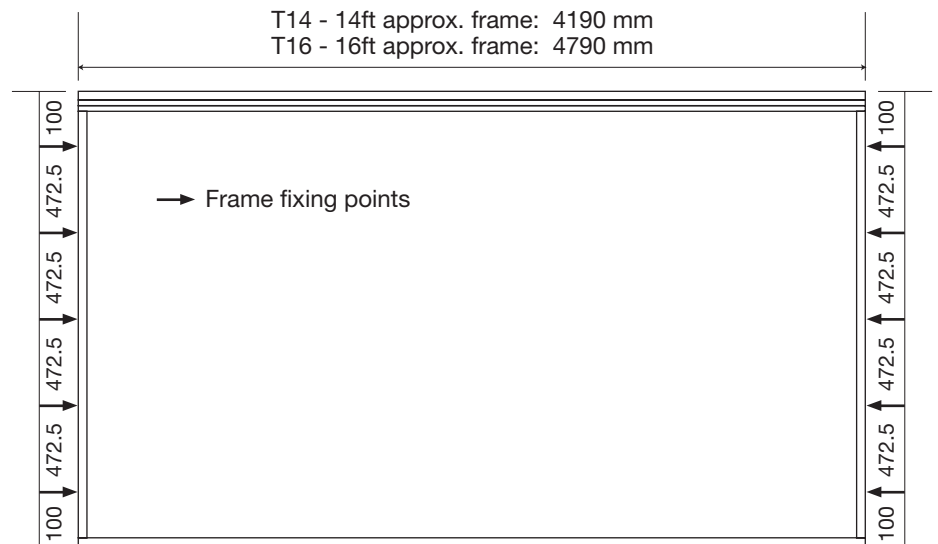
10 Fix the outer frame into the brickwork, **setting it to overhang the cavity**. Install sill onto a bed of silicone sealant and/or mortar.

Fix the outer frame to the brickwork through both jambs with 5 fixings at spacing shown using the **direct frame fixings** provided (unless the construction of your building requires more appropriate fixings to suit the individual dwelling). Countersink holes in frame.

Use the **direct frame fixings** as follows:

- 1) Use the 6.5mm HSS drill (supplied) to drill holes in frame jambs, aluminium track and steel.
- 2) Use the 6.5mm SDS masonry drill (supplied) to drill into brickwork.
- 3) Use the Torx T30 bit (supplied) to screw in the **direct frame fixings**.

Do not fix through the aluminium part of the sill as this may damage the drainage system.

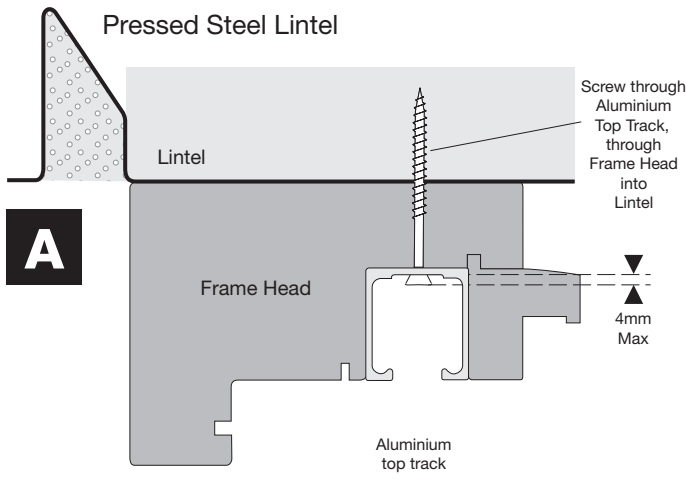


Important information about **direct frame fixings**

The Direct Frame Fixings supplied will screw directly into brickwork and up to 2.5mm thickness of steel. It is essential to use the 6.5mm drills and Tork T30 bit provided to ensure a secure fixing.



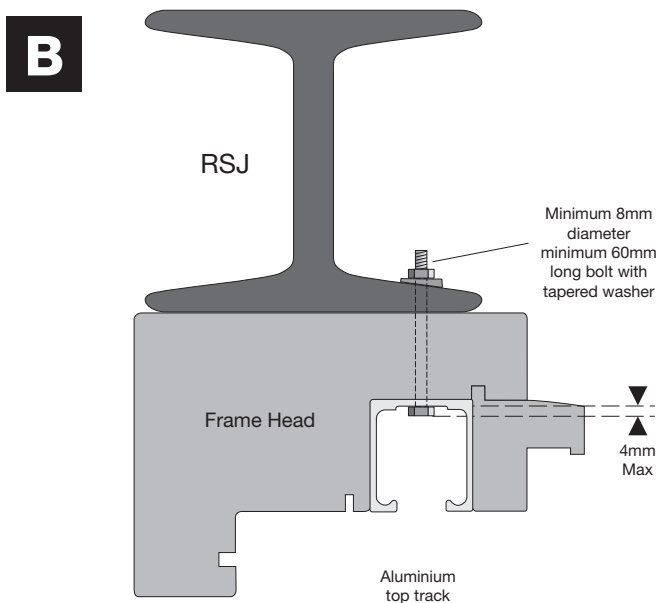
Installing the assembled frame *continued*



11 The aluminium top track, which is temporarily held in place with transit screws, has been pre-drilled for fixing points into the Lintel. The aluminium track must be securely fixed, through the head of the frame, into the lintel using either the **direct frame fixings** or **nuts, bolts and washers** provided.

A Use the **direct frame fixings** as follows:

- 1) Locate the pre-drilled holes in the aluminium top track (18 holes in T14 and 19 holes in T16).
- 2) Use the 6.5mm HSS drill (supplied) to drill through pre-drilled holes, through timber frame head and through pressed-steel lintel.
- 3) Use the 6.5mm SDS masonry drill (supplied) to drill through same holes into brickwork above lintel.
- 4) Use the Torx T30 bit (supplied) to screw in the **direct frame fixings**.



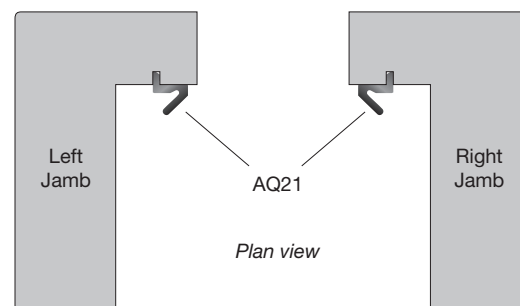
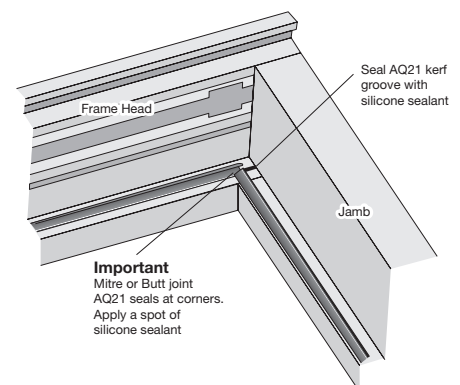
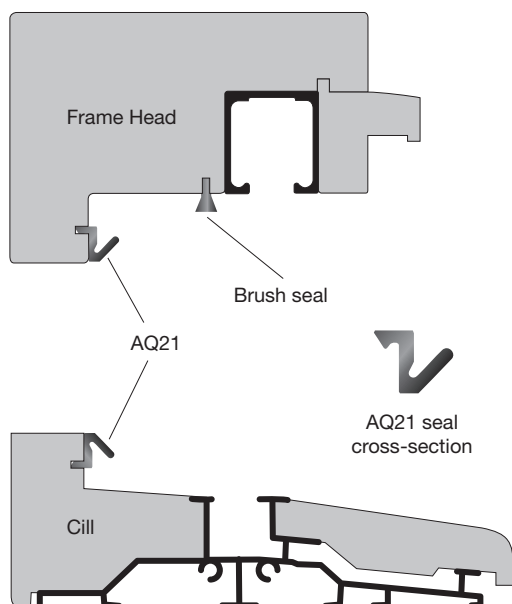
B Use the **nuts, bolts and washers** as follows:

- 1) Locate the pre-drilled holes in the aluminium top track (17 holes in T14 and 19 holes in T16).
- 2) Use the 6.5mm HSS drill (supplied) to drill through pre-drilled holes, through timber frame head and through RSJ.
- 3) Use nuts, bolts and washers to fix the track and framehead to the RSJ. (Nuts, bolts and washers not provided).

IMPORTANT: For T14 and T16 we strongly recommend 'B' type fixing to RSJ. If using 'A' type fixing to pressed steel lintel, ensure the lintel can support the weight of the set. Fixings must fix through aluminium track, frame head and lintel. (The fold and slide system is "top hung" so all the weight is supported from the aluminium top channel and the head of the timber frame, hence the importance of a secure fixing into the lintel, to enable the system to work correctly.)

Fitting the seals to the frame

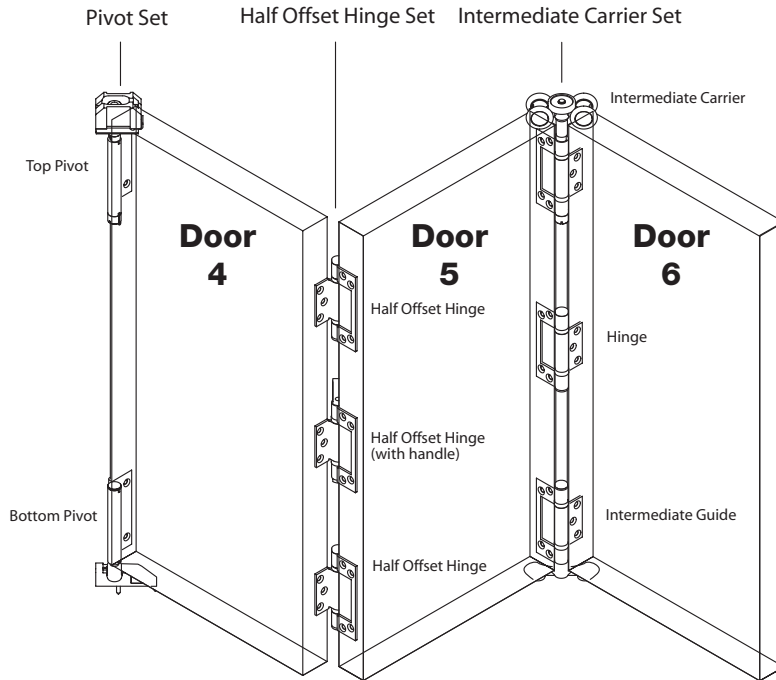
12 Once the frame is fixed into place, fit the weather seals (AQ21) to the frame and the brush seal into the frame head.



Overview of door and hardware arrangement

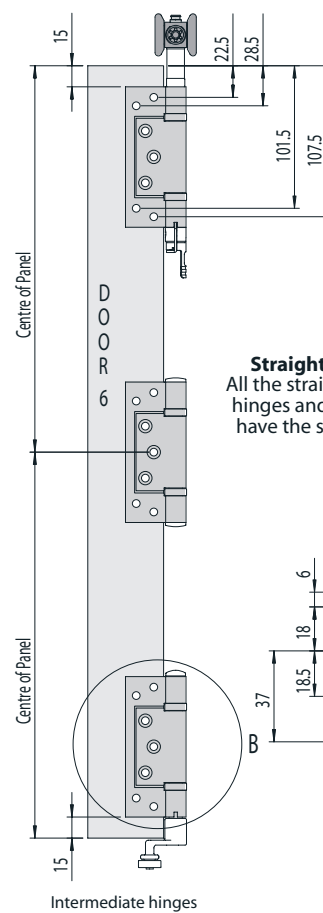
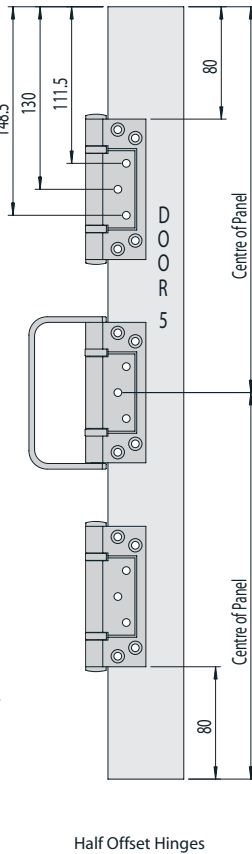
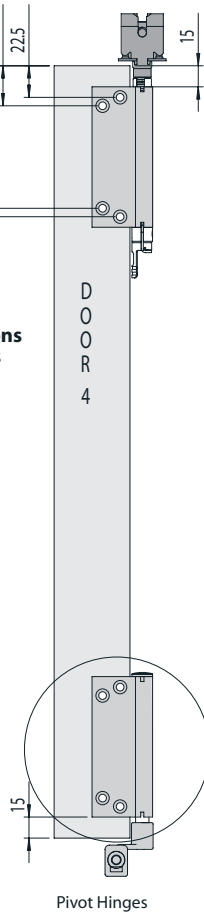
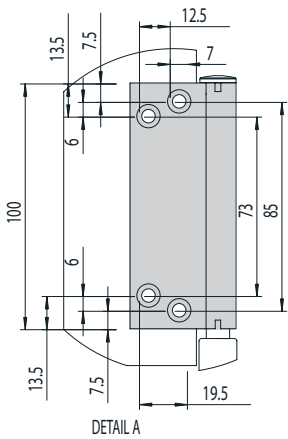
13b

Arrangement **B** for 3 Left opening doors of set

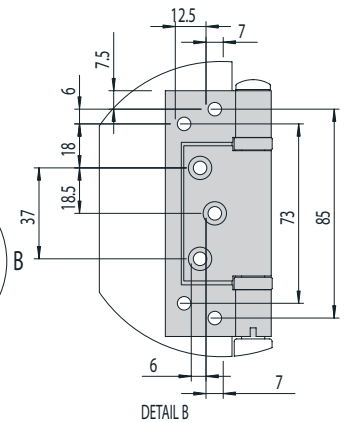


- ⊙ Fit to this door
- Fit to the other door

Top & Bottom Pivot Hole Locations
The top and bottom Hinge flaps have the same symmetrical hole location as the below detail A.



Straight & Offset Hole Locations
All the straight (intermediate carrier set) hinges and all of the Half Offset hinges have the same hole location as below detail B.



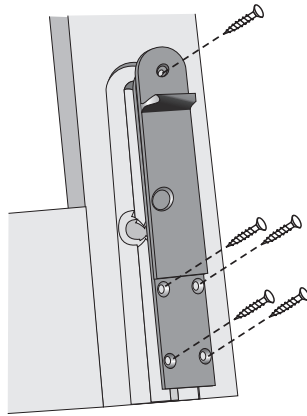
Not to scale

Note: Pivots are reversible. The pivots are delivered set up for this option 'B' - Use without change.

Fitting the dropbolts

14 Fit the keyed drop bolts to the bottom of door 1, door 3 and door 4 using the pre-cut positions.

Fit the non-keyed drop bolts to the top of door 1, door 3 and door 4 using the pre-cut positions.



15 Fit the keyed drop bolt cups to the cill in the pre-cut positions.

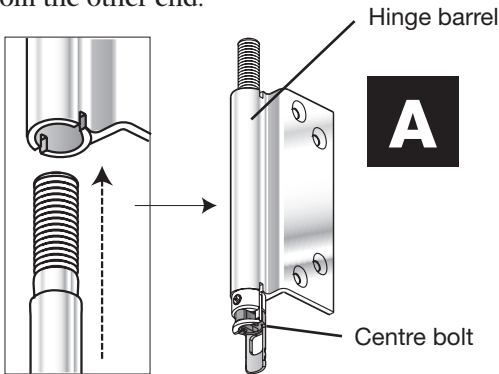
Fit the non-keyed drop bolt striker plates to the frame head in the pre-cut positions.



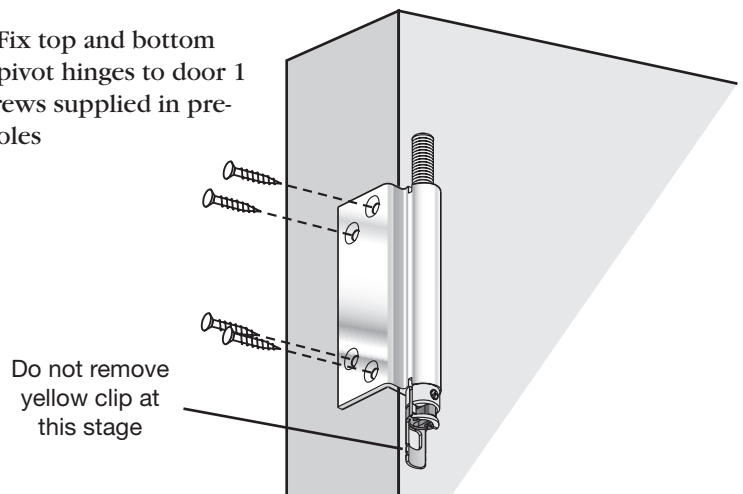
Fitting the right pivot door (door 1)

Before fitting door 1 thoroughly clean the top and bottom tracks

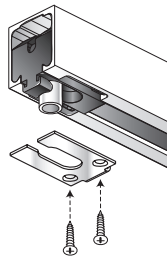
16 Reversing top pivot - Applicable to option **A** only. Carefully remove centre bolt from hinge barrel then re-insert from the other end.



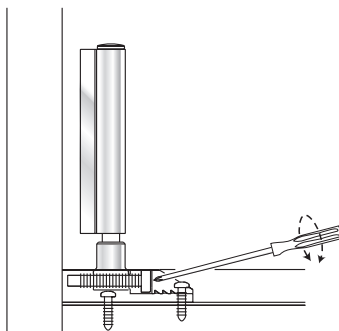
17 Fix top and bottom pivot hinges to door 1 using screws supplied in pre-drilled holes



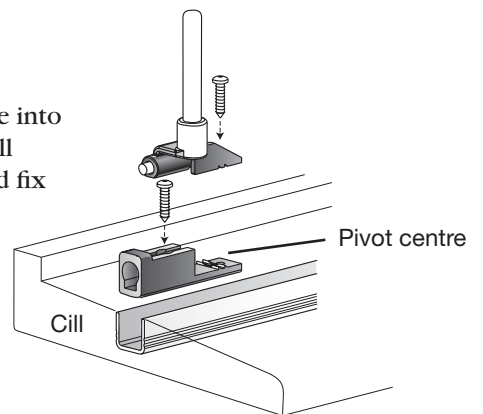
18 Assemble top pivot block. Slide and click cover plate onto the pivot block. Screw through cover plate into rear of access slot.



19 Remove centre part of bottom pivot

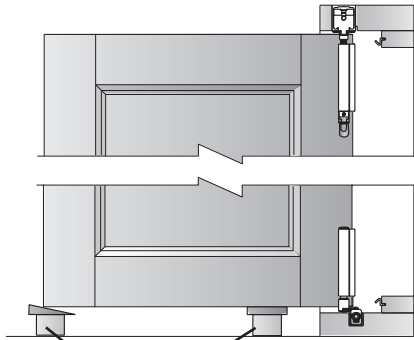


20 Insert pivot base into cill channel. Drill pilot hole in channel and fix with self-tapping screw. Re-assemble centre part with pivot to **outside**. Drill second pilot hole and fix with self-tapping screw through complete unit



Fitting the right pivot door (door 1) *continued*

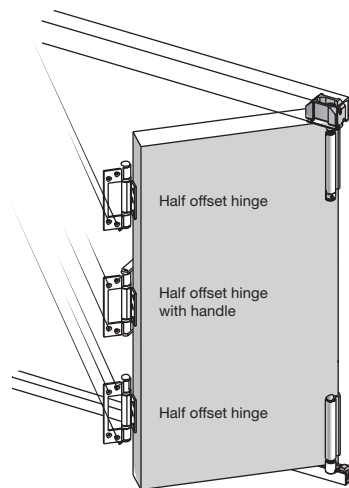
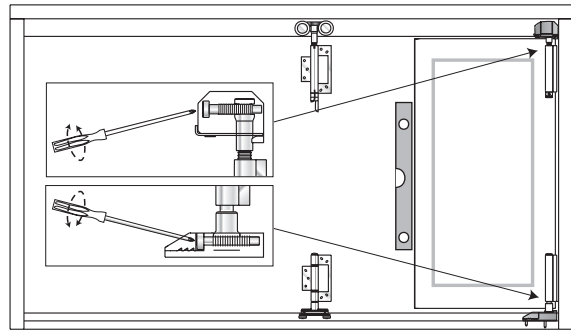
21 Lift door onto bottom pivot. Support door then screw top pivot centre bolt into pivot block until door swings freely.



Temporary supports

Note: Screwing top pivot bolt in and out adjusts height.

22 Adjust alignment of pivot door as shown. Leave a 7mm gap between the door edge and the frame jamb.



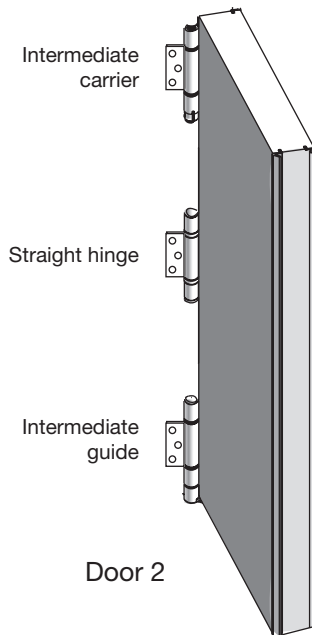
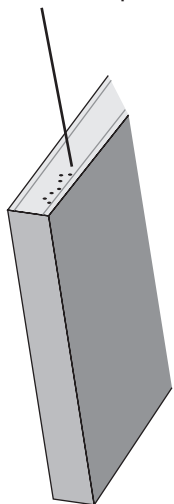
23 Fit half offset hinges to the inside edge of door 1. Fix through small centre part of hinges using screws provided in pre-drilled holes.

Note: Hinge barrels and centre hinge handle to *inside*.

Fitting the right mid door (door 2)

24 Lay door 2 on its edge and fix the intermediate carrier set where indicated using the pre-drilled positions.

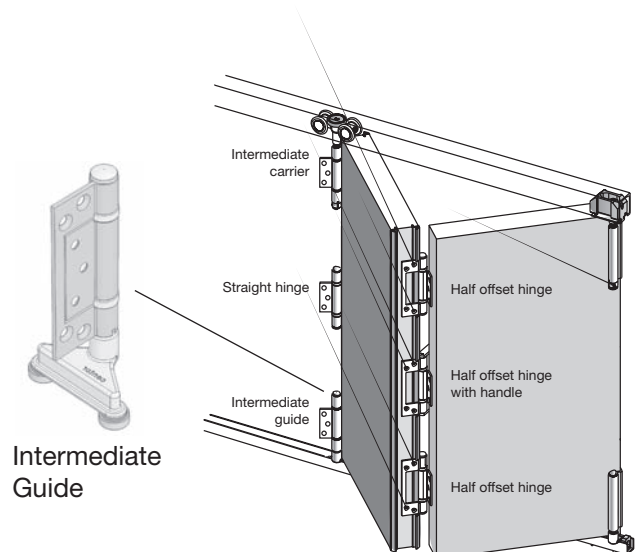
Pre-drilled positions



25 Lift door 2 and locate intermediate guide in bottom channel. Support door on blocks then screw top carrier bolt into top wheel assembly.

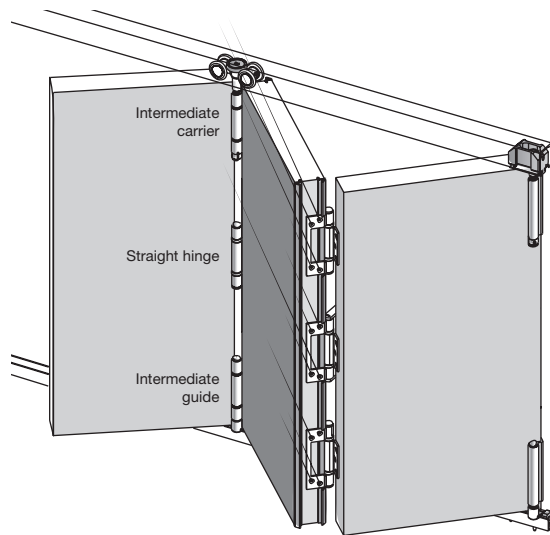
Finally fix door 1 and 2 together using the half offset hinges.

Note: Handle to inside



Fitting right fixed access door (door 3)

26 Attach door 3 to the Intermediate Carrier and Intermediate Guide using the pre-drilled holes as a guide. Use the Straight Hinge in the central position.



Drawings in this section show the arrangement of parts for Opening Option **A**

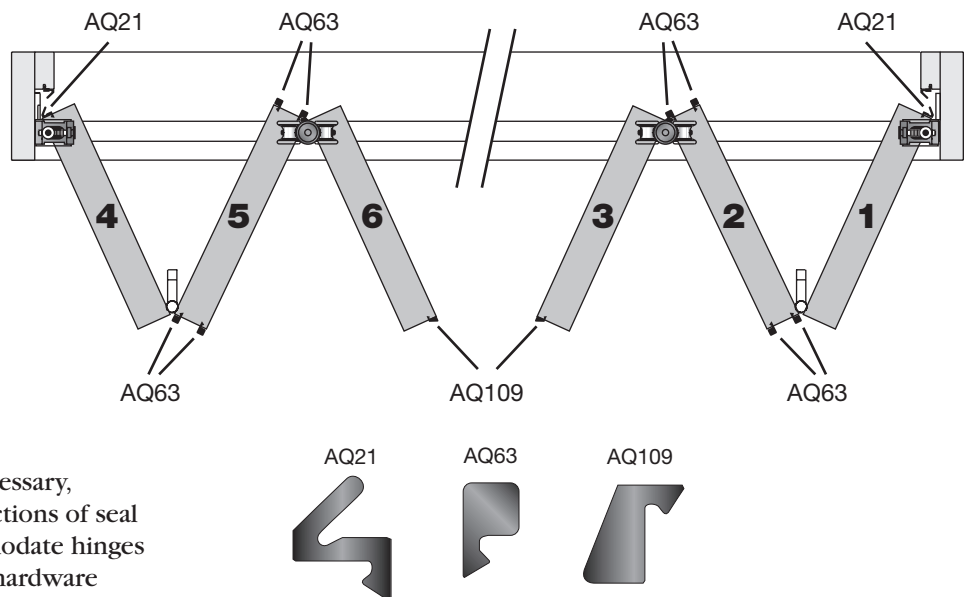
Fitting the left opening three doors of the set

27 Repeat steps 17 to 26 to fit the left opening three doors of the set - Left pivot hinge door (Door 4), Left mid door (Door 5) and Left opening access door (Door 6)

Fitting the weather seals to the doors

28 Fit weather seals to doors as follows:

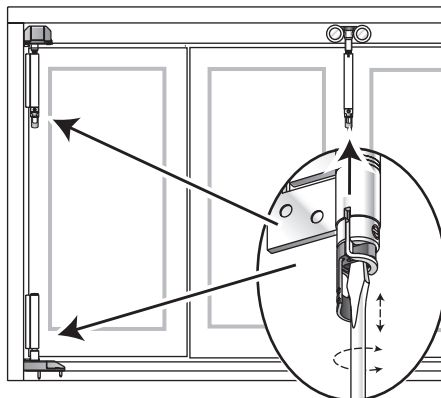
- 1 strip type AQ21 to doors 1&4
- 4 strips type AQ63 to doors 2&5
- 1 strip type AQ109 to door 3
- 1 strip type AQ109 to door 6



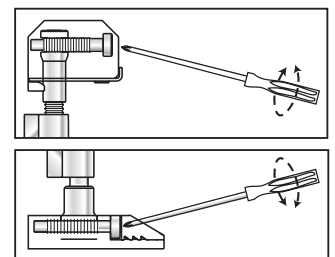
Where necessary, remove sections of seal to accommodate hinges and other hardware

Adjusting the operation of the doors

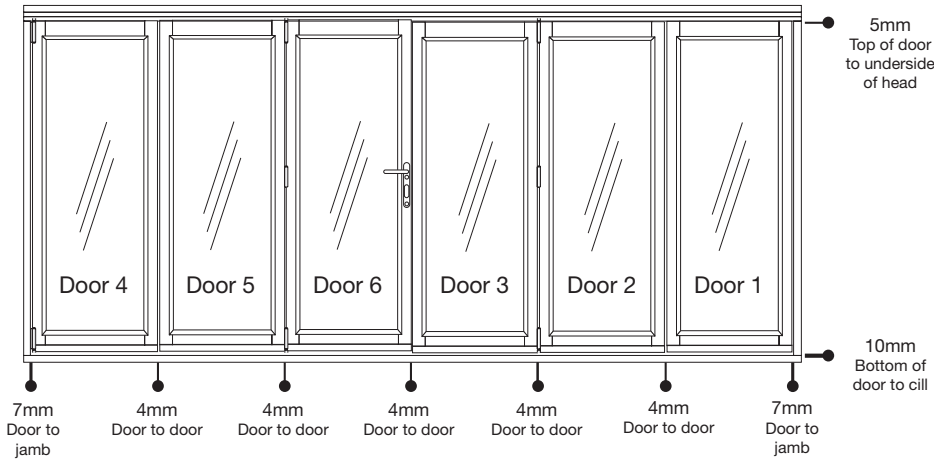
29 Raise or lower the height of the doors by adjusting the top pivot on doors 1 and 4, and the intermediate carrier between doors 2/3 and 5/6.



30 Adjust the top and bottom pivots to move the doors left or right.



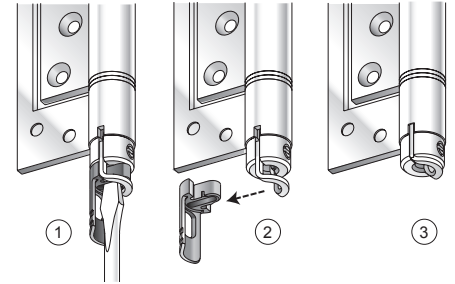
Correct spacing for final adjustment



Shipping clips

31 Do not remove the shipping clips until you have made all the necessary adjustments as shown in sections 29 and 30.

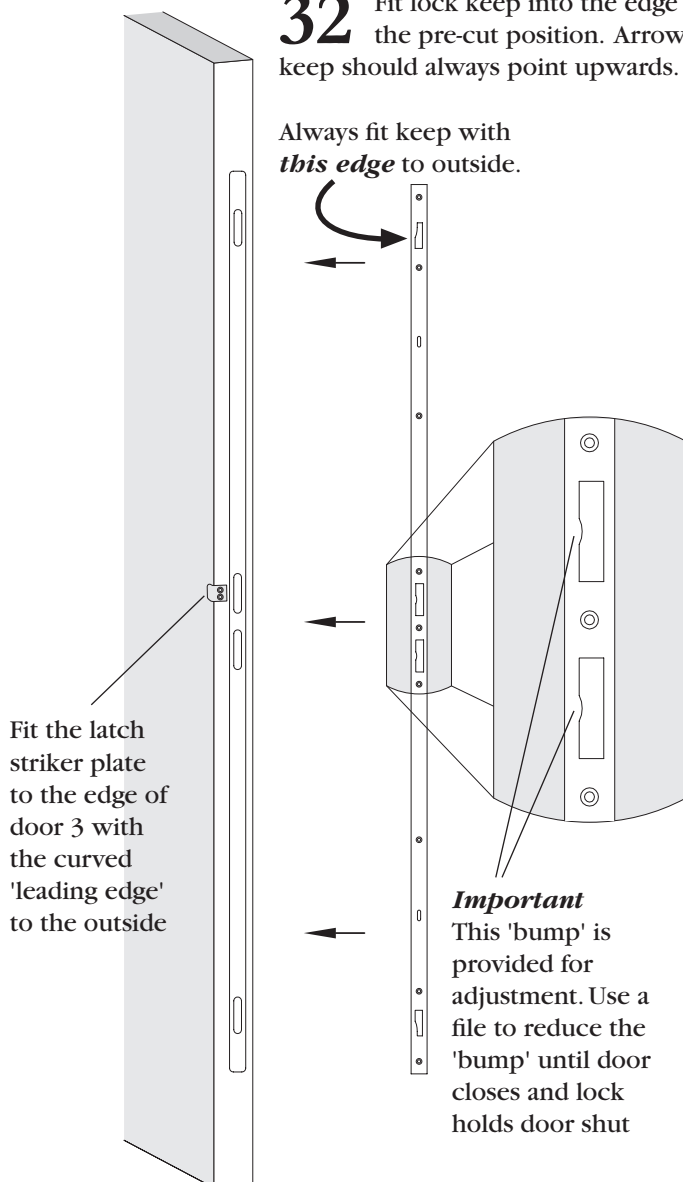
Once you are satisfied with the adjustments you have made, remove the yellow Shipping Clip from the Top Pivot and Intermediate Carrier to lock the position.



Fitting the lock and handle

32 Fit lock keep into the edge of door 3 using the pre-cut position. Arrow marking on the keep should always point upwards.

Always fit keep with **this edge** to outside.

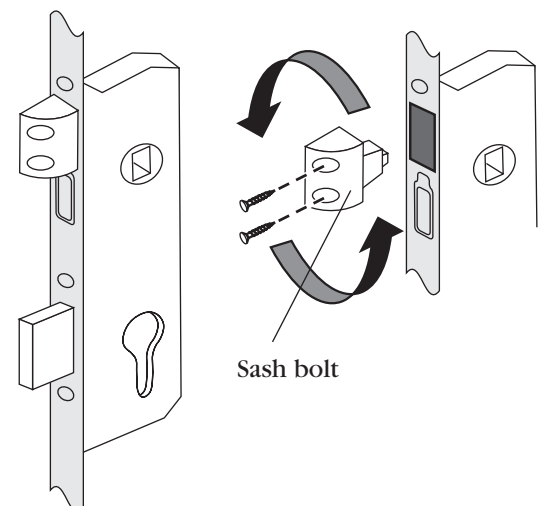


33 You will need to reverse the sash bolt in the lock.

Lift handle to fully throw the deadbolt. Remove the two screws and the sash bolt.

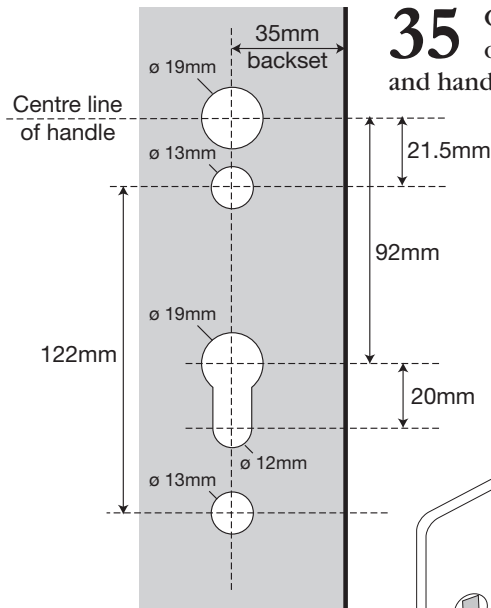
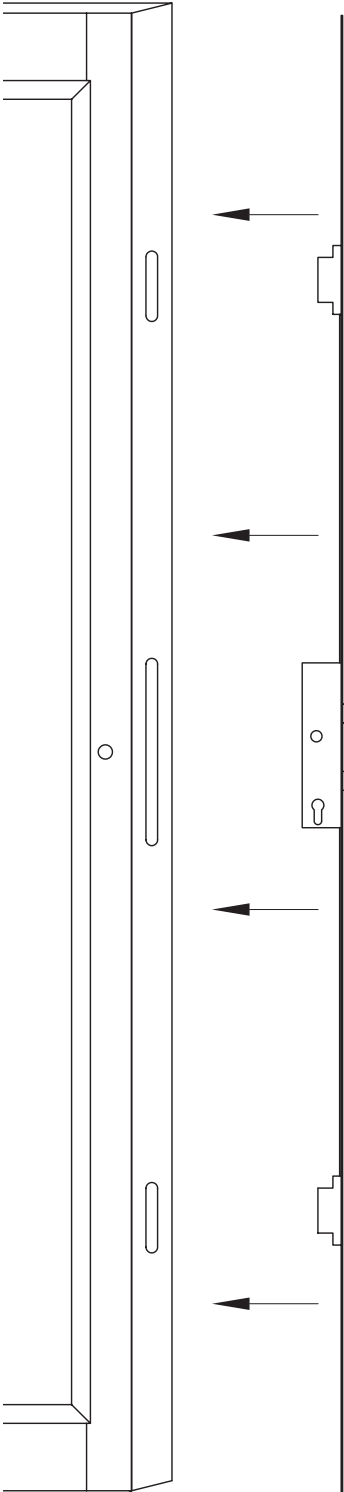
Turn the sash bolt through 180° and insert in lock.

Replace and tighten the two screws.



Fitting the lock and handle *continued*

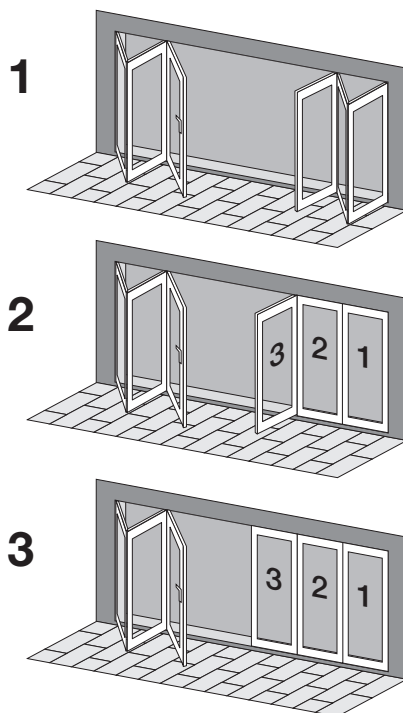
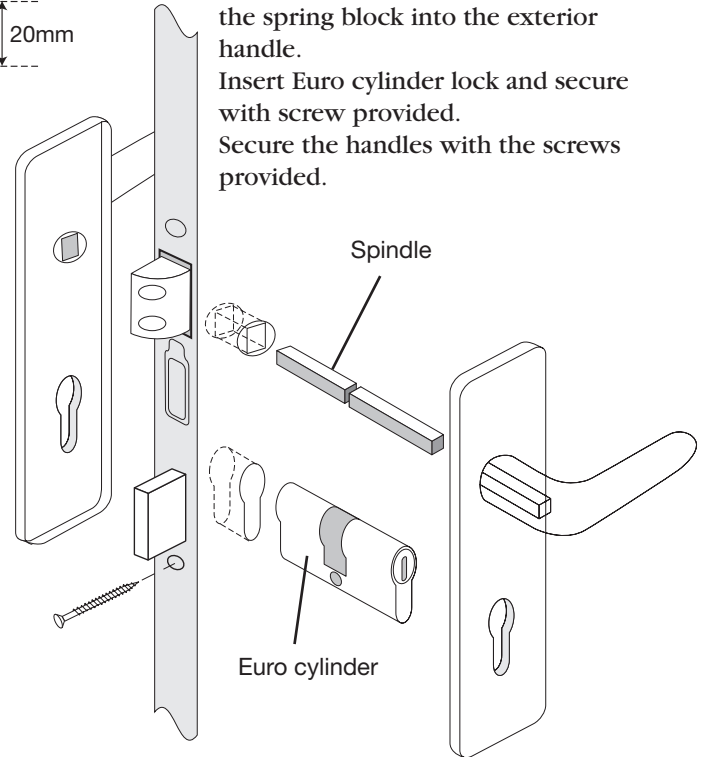
34 Fit lock into door 6 and secure with screws provided. The keyhole is always at the bottom.



35 Carefully mark out and drill the face of the door to fit the Euro cylinder and handle locating holes.

36 *Fitting spindle assembly.*

Insert the spindle end with the spring block into the exterior handle. Insert Euro cylinder lock and secure with screw provided. Secure the handles with the screws provided.



When closing the right door set, first close doors 1 and 2, securing them with the dropbolts. Then close door 3. When closing the left door set, first close doors 4 & 5, securing them with the dropbolt. Finally, close and lock door 6.

