

72

Ultra Sliding Folding Patio 6 Door Set

T14 Set - (Approx. 14ft)

T16 Set - (Approx. 16ft)

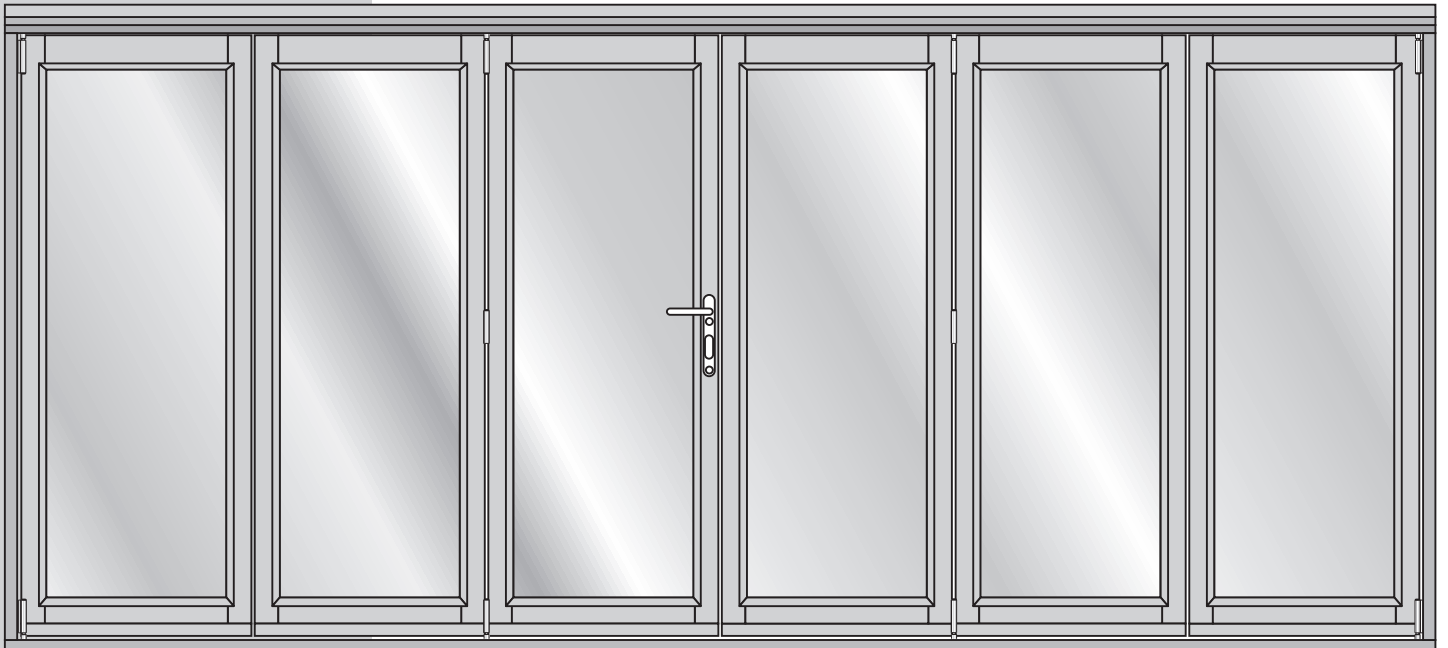
Assembly Instructions

VERY IMPORTANT FOR INSTALLERS

The Vufold Ultra set is Wood with an Aluminium Cladding on the outside.

The installation is very similar to the Vufold wood sets and any competent builder, joiner or installer can install the product by following these installation instructions. **NO SPECIALIST ALUMINIUM DOOR INSTALLATION EXPERIENCE IS REQUIRED.**

However some parts of the installation require particular care to avoid damaging the aluminium and are highlighted in red throughout the booklet.



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 RSJ over the opening. The RSJ *must* be capable of carrying the load of the doors in all conditions. If in doubt consult a structural engineer.

Automatic Closures 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 aluminium clad 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. (See separate parts list for component reference number).
- 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.

VERY IMPORTANT

- It is vitally important to handle the doors and frames *very carefully* at all times to avoid damaging the powder-coated finish on the aluminium.
- All frames and doors should be handled by *two people* at all times as they are very heavy.

Trimming

- This Sliding Folding 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 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 or 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 the corrosion 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 grains 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

The outside powder-coated finish on the aluminium should be regularly washed with warm soapy water, rinsed with clean water and dried off.

The oak timber inside finish is a resilient polyurethane clear varnish which should last for several years. To maintain, just wipe down with a damp cloth. When the oak requires re-coating, use a proprietary brand of clear PU varnish.

Contents (1)

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

Aluminium clad 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 72mm
 Door size - 16' set = 1972 x 778 x 72mm

Top frame section includes aluminium top track - quantity 1

Side frame sections (jambs) - quantity 2

Sill bottom section includes aluminium bottom track - quantity 1

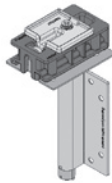
Frame and track fixing pack - quantity 1

Timber Astragal - quantity 1



Hardware

Top pivot - quantity 2
 Top pivot fixing pack - quantity 2 pack



Bottom pivot - quantity 2
 Bottom pivot fixing pack - quantity 2 pack



Half offset hinges - quantity 6
 Half offset hinges
 fixing pack - quantity 2 pack



Intermediate carrier - quantity 2
 Intermediate
 fixing pack - quantity 2 packs



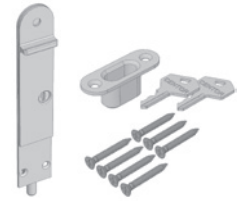
Straight Hinge - Quantity 2
 Straight Hinge
 fixing pack - quantity 2 packs



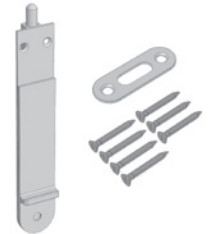
Intermediate guide - quantity 2
 Intermediate guide
 fixing pack - quantity 2 packs



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



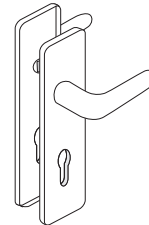
Drop bolt non keyed - quantity 3
 Non-keyed drop bolt
 fixing pack - quantity 3 packs
 Includes drop bolt striker plate



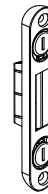
Driver pack - quantity 1



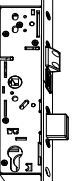
Door handles - quantity 2



Hook bolt keeps -
 quantity 4



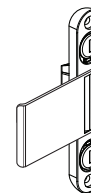
Vectis
 4 hook lock -
 quantity 1



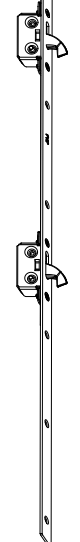
Centre lock keep -
 quantity 1



Latch plate -
 quantity 1



Keys - quantity 2
 Lock fixing pack - quantity 1 pack (37 pieces)

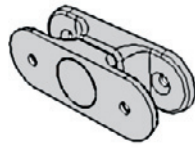


Contents (2)

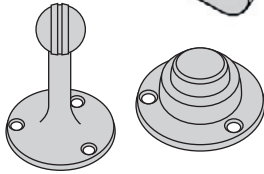
Please check the contents of the packages to ensure that all parts are present before beginning assembly.

Magnetic catches

Plastic magnetic door holders
- quantity 3 sets



Metal magnetic door holders
- quantity 1 set









Door adjustment protector
attached to door 1








Door installation protector
attached to door 1

Seal Quantities Per Set - Aluminium Clad - White

	T14	T16
 Draft seal AQ21 White	2.3 metres x 6	2.3 metres x 6
 Draft seal AQ21 Black	2.3 metres x 2 4.8 metres x 2	2.3 metres x 2 4.8 metres x 2
 Draft seal AQ63 Black	2 metres x 4	2 metres x 4
 Draft seal AQ109 White	2 metres x 1	2 metres x 1
 Draft seal AQ89 Black	2 metres x 1	2 metres x 1
 Brush seal Grey	4.8 metres x 1	4.8 metres x 1

Seal Quantities Per Set - Aluminium Clad - Grey

	T14	T16
 Draft seal AQ21 Black	2.3 metres x 8 4.8 metres x 2	2.3 metres x 8 4.8 metres x 2
 Draft seal AQ63 Black	2 metres x 4	2 metres x 4
 Draft seal AQ109 Black	2 metres x 1	2 metres x 1
 Draft seal AQ89 Black	2 metres x 1	2 metres x 1
 Brush seal Grey	4.8 metres x 1	4.8 metres x 1

Installation Bag Contents

Hardened steel frame fixings - quantity 22



Hardened steel wood screws
pozi flat countersunk yellow

M5 x 100mm - quantity 4

M5 x 70mm - quantity 4

M5 x 60mm - quantity 4



Hardened steel wood screws
pozi flat countersunk zinc

M4 x 40mm - quantity 37



A2 machine screws Philips raised
countersunk brushed chrome

M5 x 90mm - quantity 37

Steel cross recess mushroom head bolt zinc
M6 x 80mm - quantity 14

Steel M6 nuts zinc

M6 - quantity 14

1/4 hex T30 insert bit - quantity 1



1/4 hex pozi No.2 insert bit - quantity 1



1/4 hex insert bit Philips No.2 - quantity 1

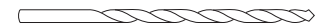
SDS drill bit - quantity 1

6.5mm x 210mm



HSS long drill bit - quantity 1

6.5mm x 148mm



HSS drill bit - quantity 1

3mm

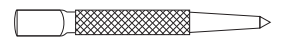
HSS drill bit - quantity 1

5mm

HSS reduced shank drill bit 140mm / 90mm - quantity 1
14mm

HSS reduced shank drill bit 145mm / 95mm - quantity 1
22mm

Square head steel centre punch - quantity 1



2610 masking tape on backing paper - quantity 2

Installation Instructions - quantity 1

For sets factory pre-finished

Please see the separate booklet with detailed information and maintenance guidelines.

Preparing the site

Brickwork opening:

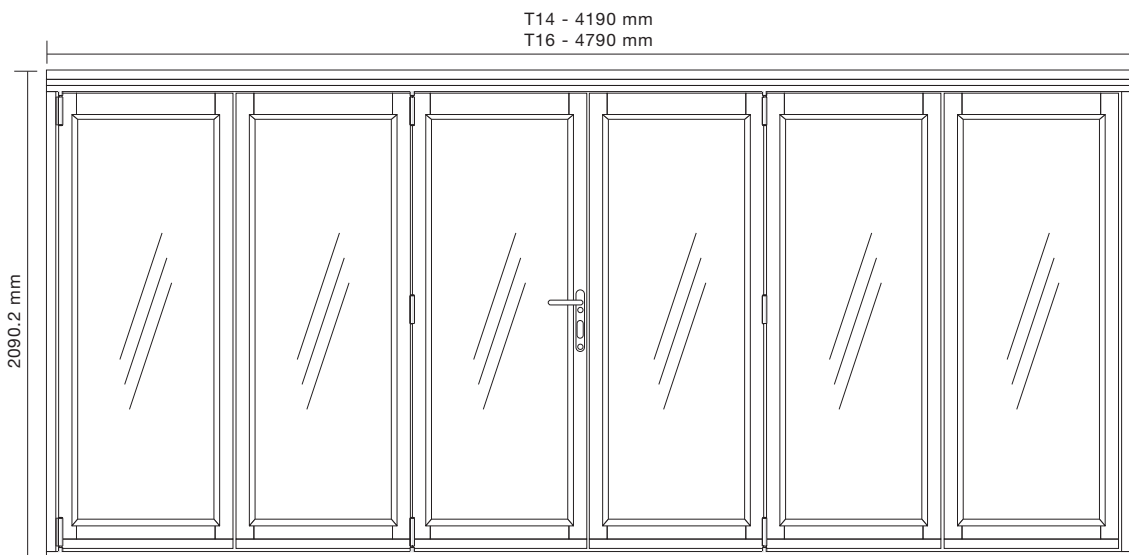
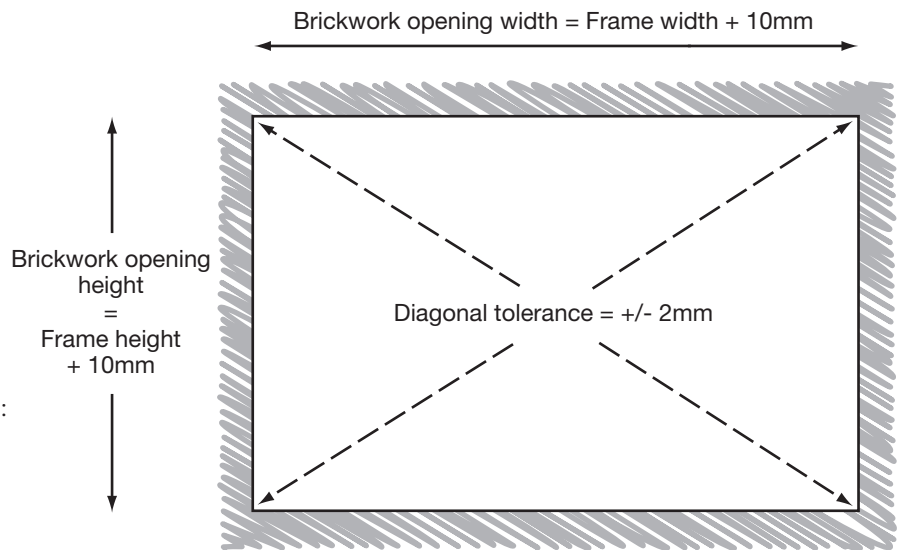
When preparing the site please prepare the brickwork opening to be 10mm more in height and width than the outside assembled frame size.

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.

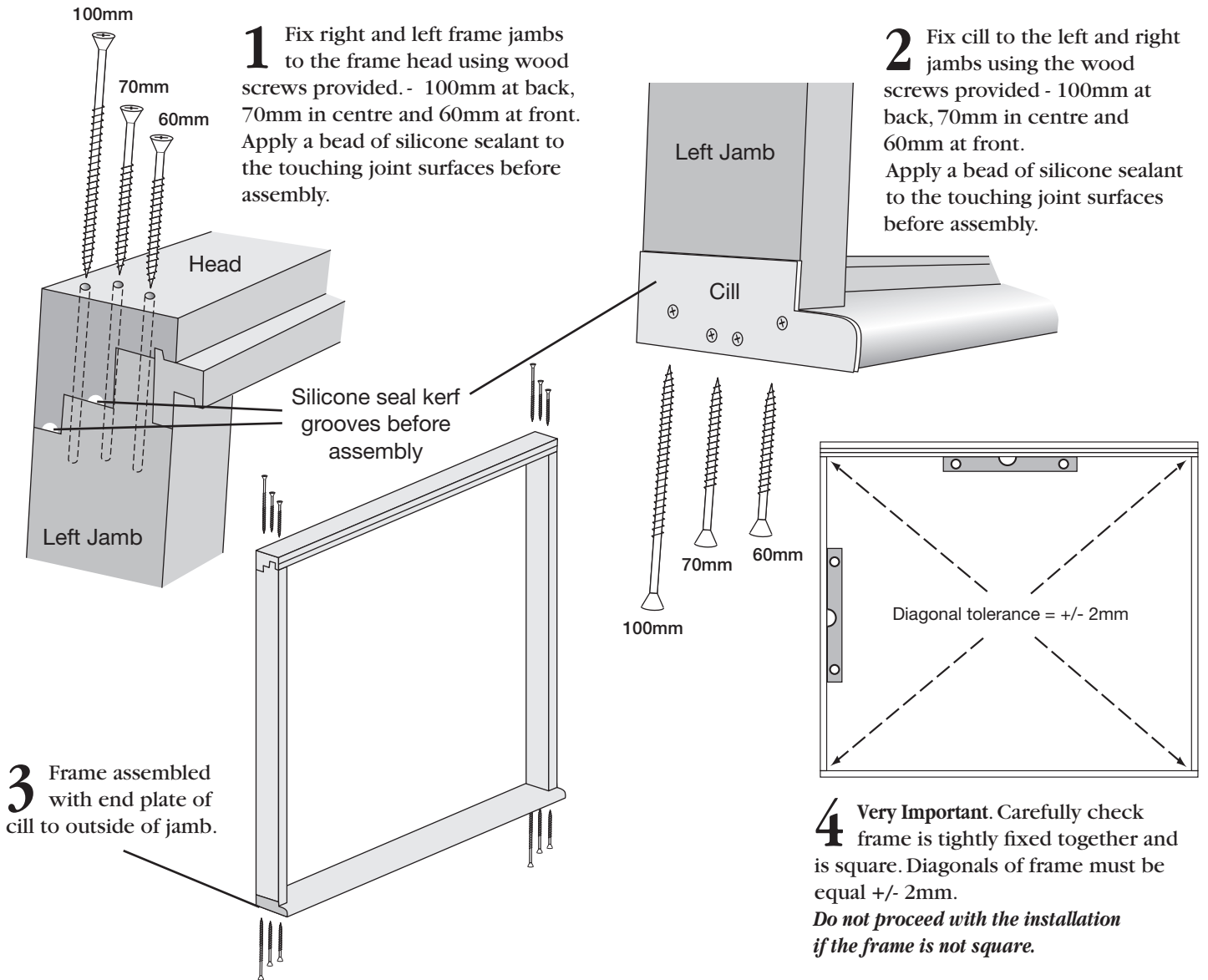
The door set outer frame sizes are as follows:

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

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

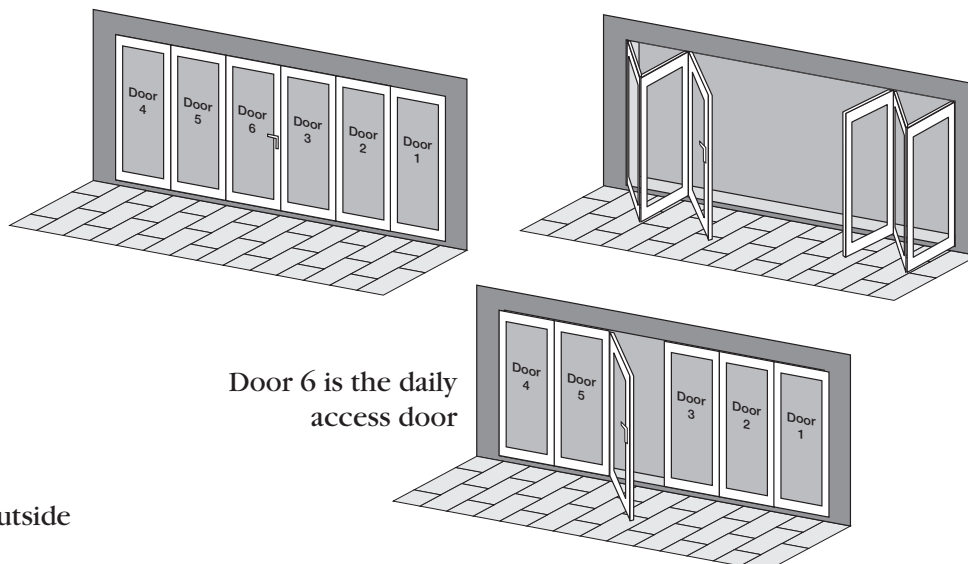


Assembling the frame

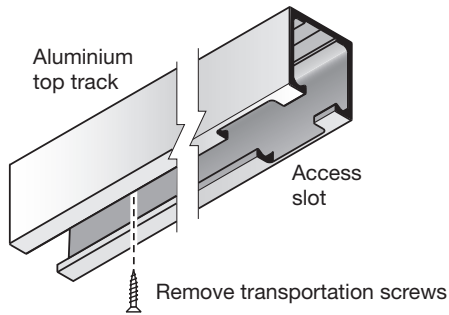


Opening arrangement

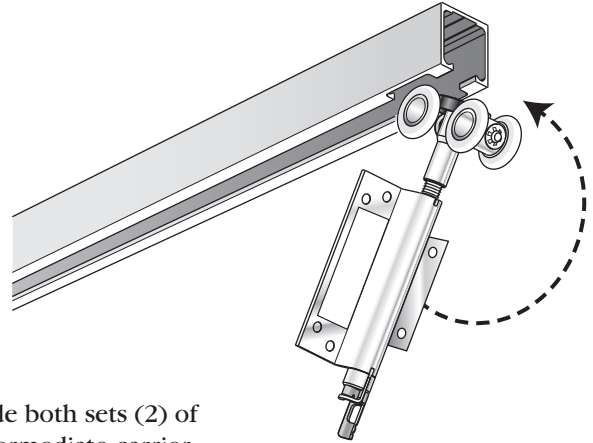
5 The T14 and T16 sets open with three doors to the left and three doors to the right. Doors 3 and 6 can be opened like a patio door pair. Door 6 is the daily access door. (The doors always open outwards.)



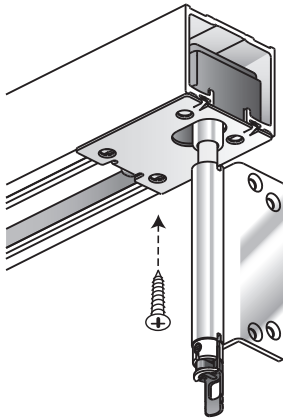
Assembling the top track



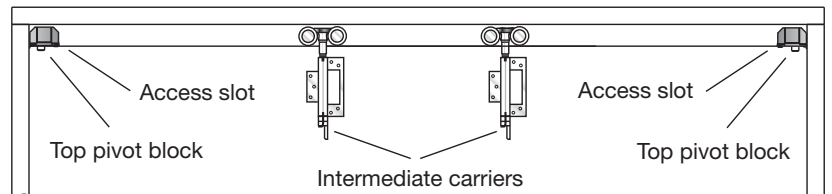
- 6** Remove the two transportation screws to release the aluminium top track from the frame head.



- 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.



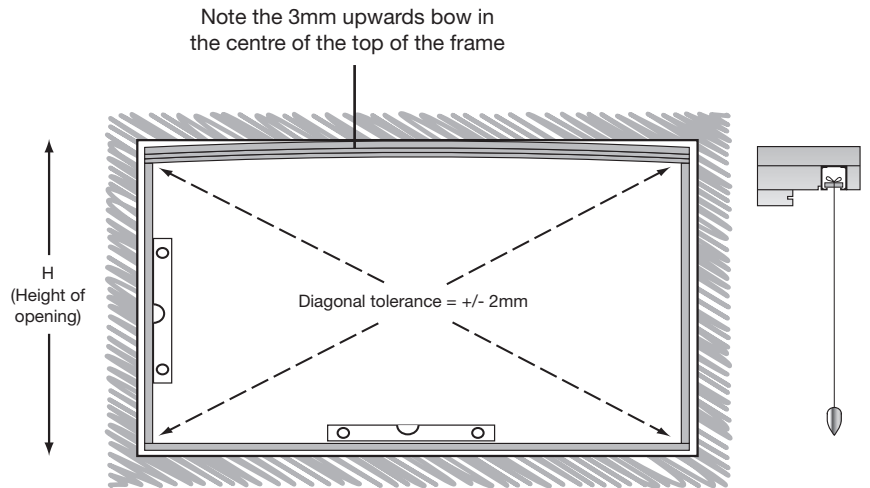
- 9** Re-secure the top track to the frame head using the two transportation screws *only* at this stage.

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.**



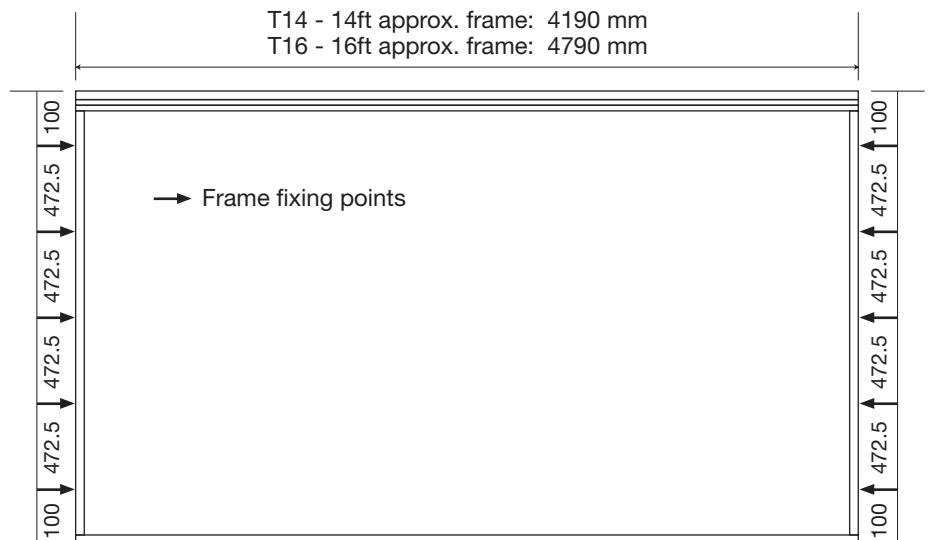
10 Fix the outer frame into the brickwork, **setting it to overhang the cavity**. Install sill onto a bed of silicone sealant and/or mortar.

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.

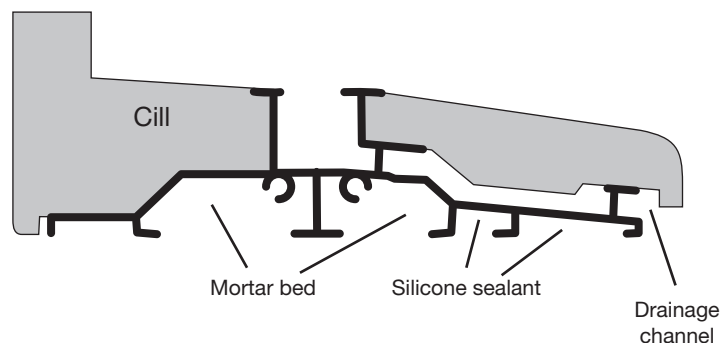
Use the **direct frame fixings** as follows:

- 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.



 Direct Frame Fixing

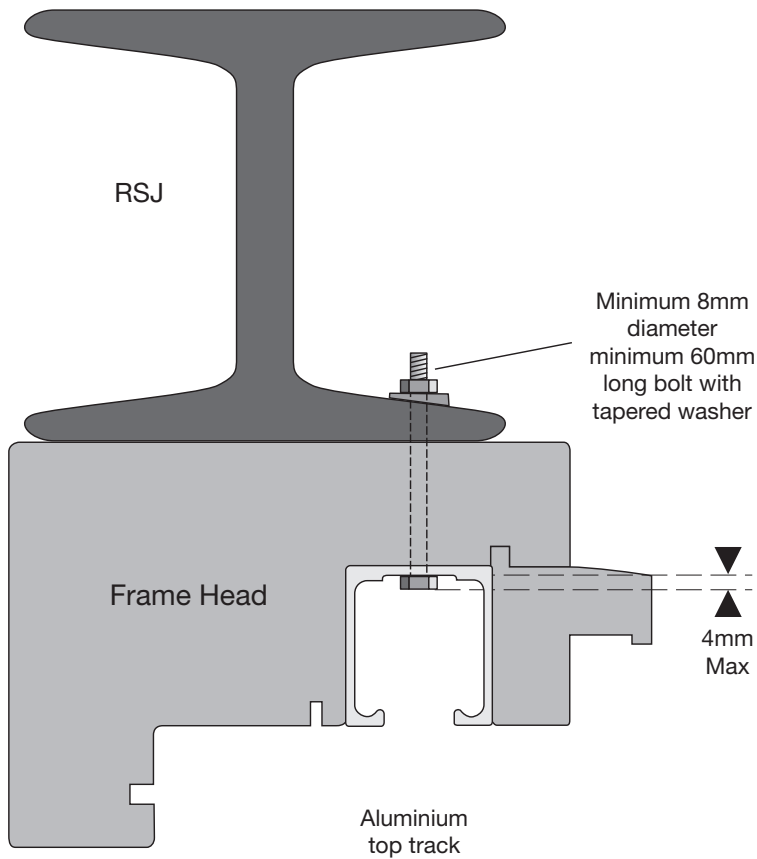


Important information about **direct frame fixings**

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 RSJ.

The aluminium track must be securely fixed, through the head of the frame, into the RSJ using the *nuts, bolts and washers* provided.

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

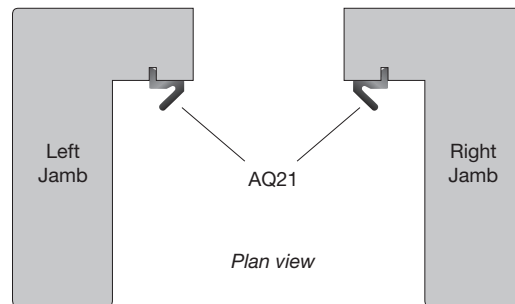
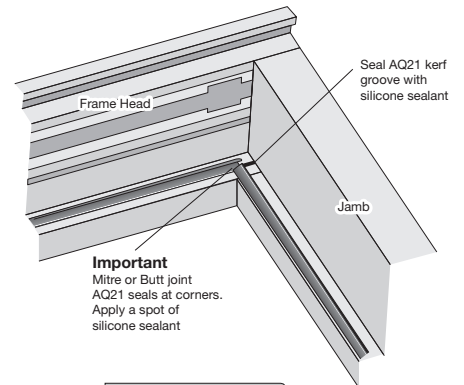
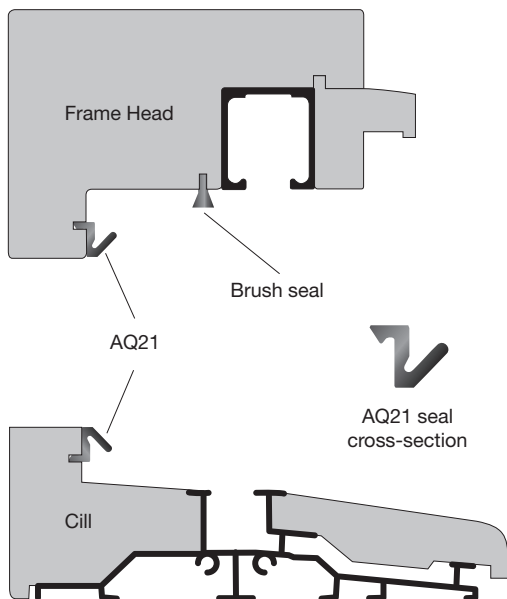
- 1) Locate the pre-drilled holes in the aluminium top track.
- 2) Use the 6.5mm HSS drill (supplied) to drill through pre-drilled holes, through timber frame head and through RSJ.
- 3) Use the nuts, bolts and washers provided to fix the track and framehead to the RSJ.

IMPORTANT:

Fixings must fix through aluminium track, frame head and RSJ. (The folding and sliding 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 RSJ, to enable the system to work correctly.)

Fitting the seals to the frame

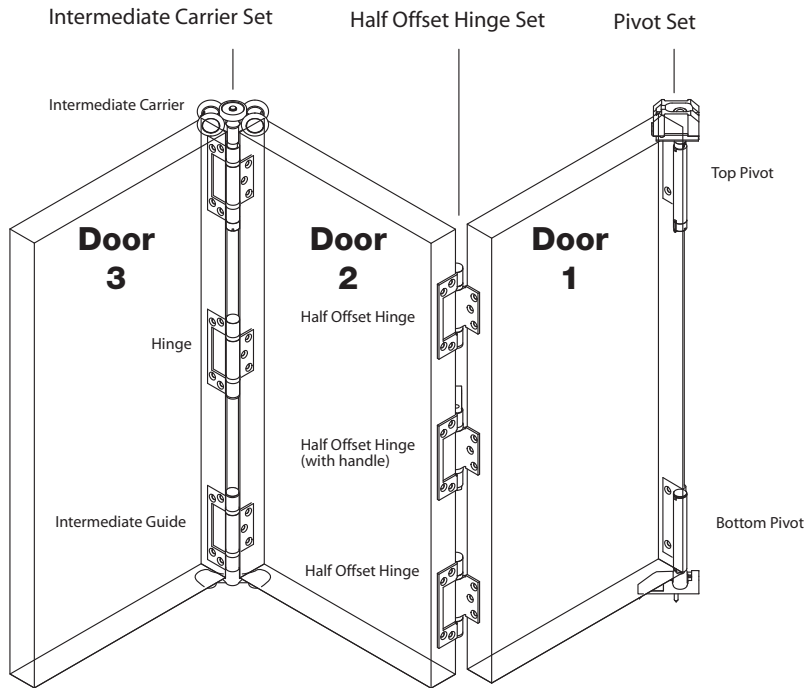
12 Once the frame is fixed into place, fit the weather seals (AQ21) to the frame and the brush seal into the frame head.



Overview of door and hardware arrangement

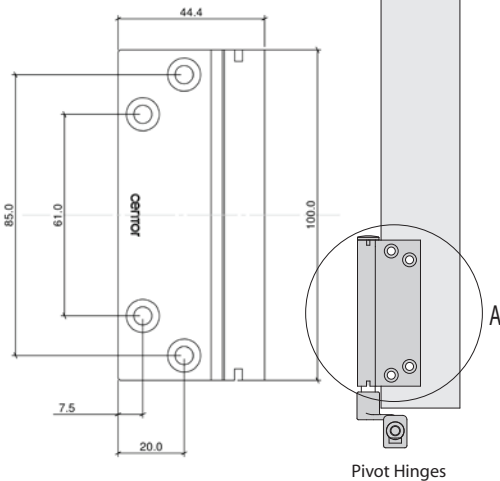
13a

Arrangement **A** for 3 Right opening doors of set

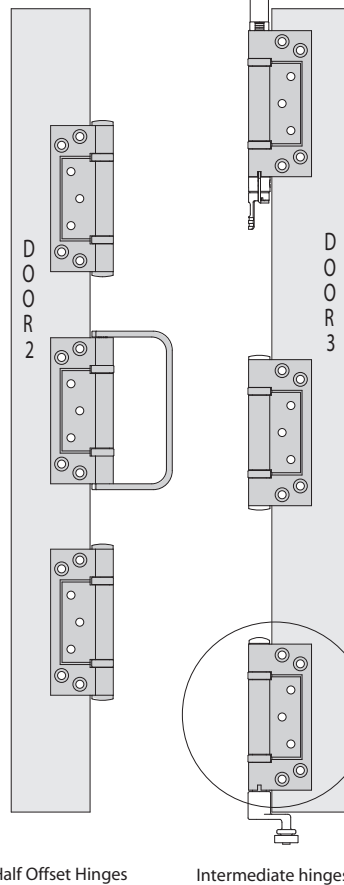


- ◎ Fit to this door
- Fit to the other door

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



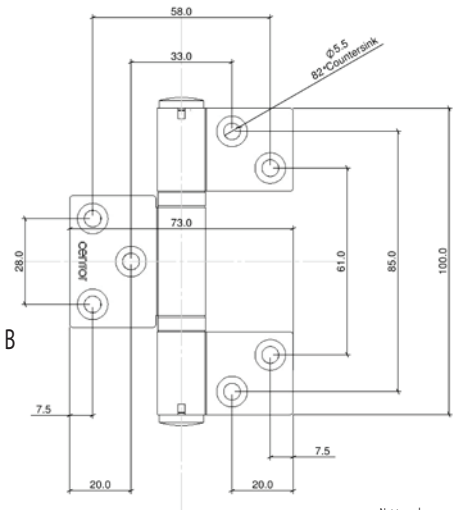
Pivot Hinges



Half Offset Hinges

Intermediate hinges

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.



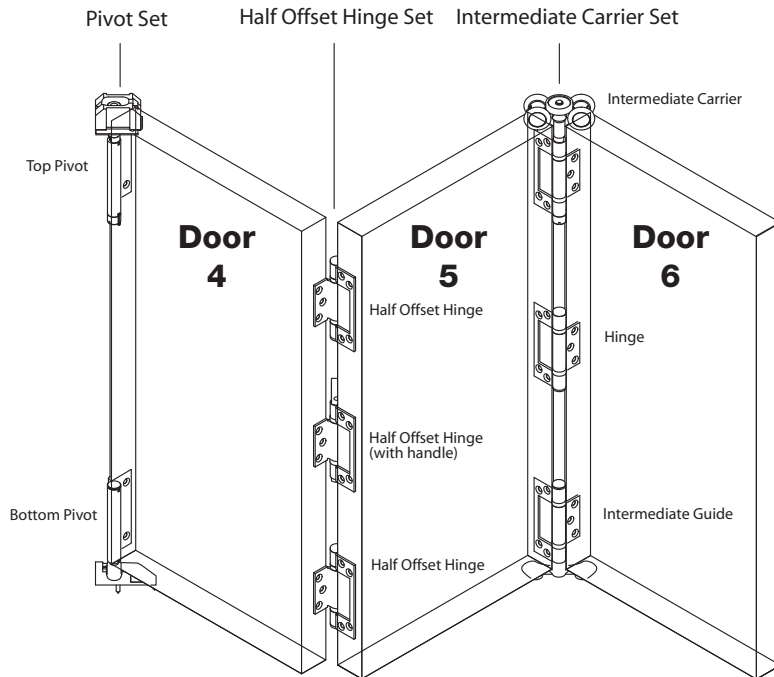
Not to scale

Note: Pivots are reversible. For this option 'A' it is necessary to take the top and bottom pivots apart to reverse them - see 16

Overview of door and hardware arrangement

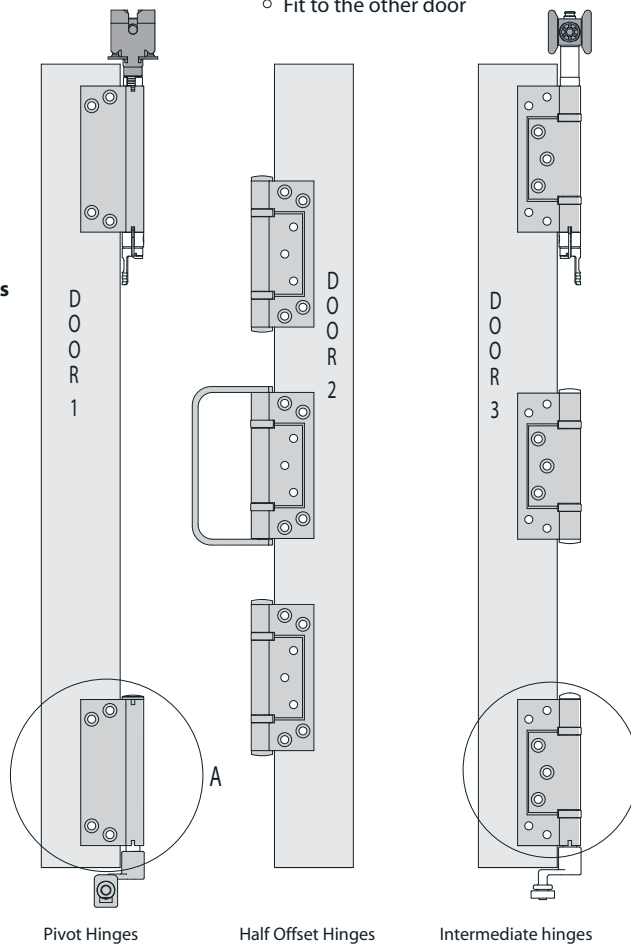
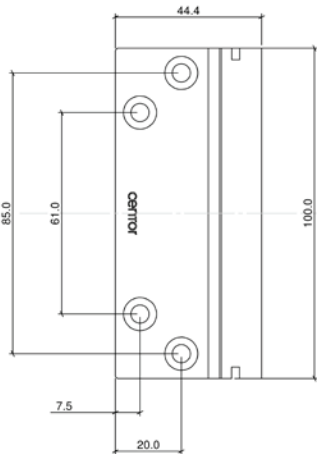
13b

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

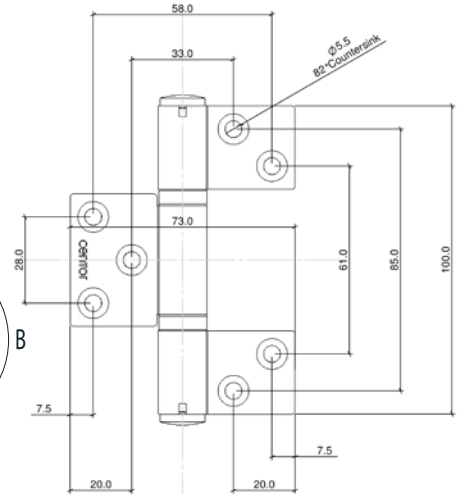


- ⊙ Fit to this door
- Fit to the other door

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.



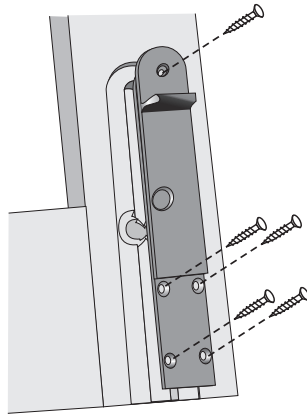
Not to scale

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.

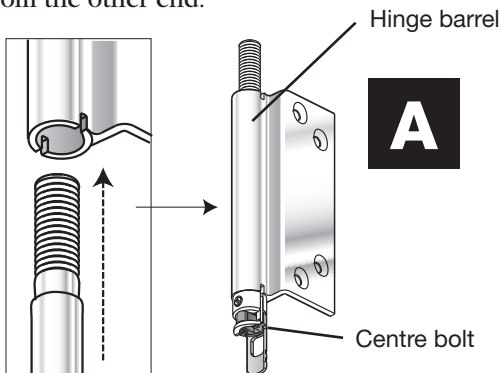


Fitting the right pivot door (door 1)

Before fitting door 1 thoroughly clean the top and bottom tracks.

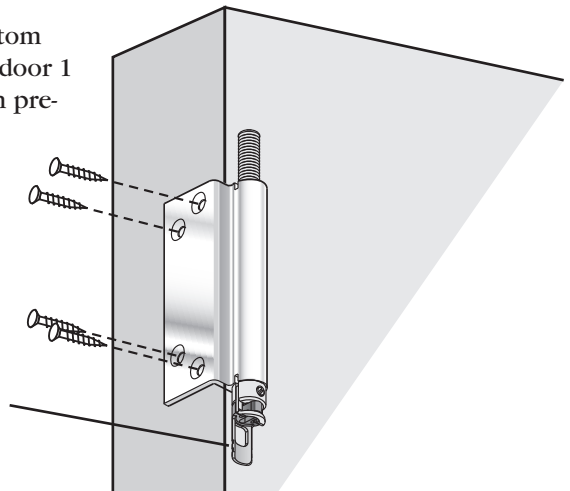
Note well: When drilling holes in the door edge to fix the hinge plates, first use the centre punch to mark the hole location then drill with the 3mm HSS drill. This applies especially to the holes in the aluminium.

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

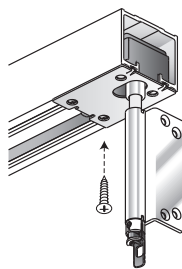


17 Fix top and bottom pivot hinges to door 1 using screws supplied in pre-drilled holes

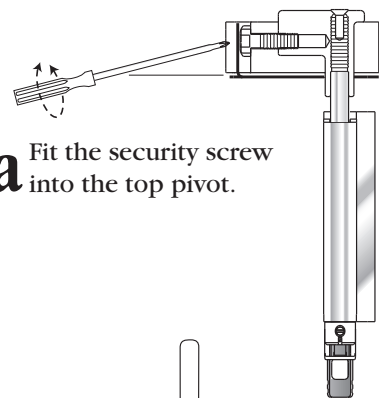
Do not remove yellow clip at this stage



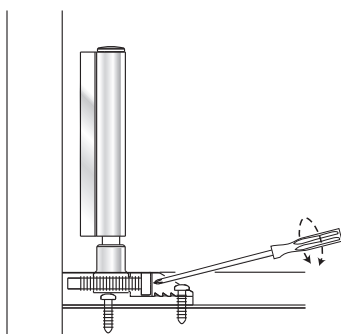
18 Assemble top pivot block. Slide and click cover plate onto the pivot block. Screw through cover plate into rear of access slot.



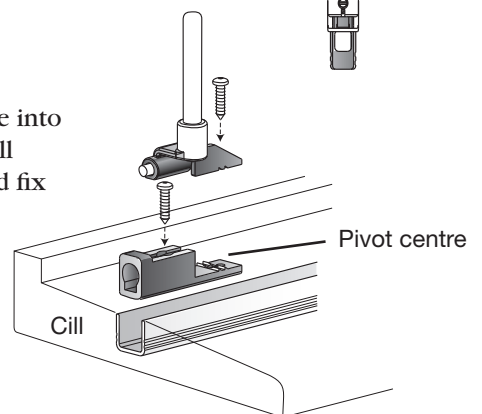
18a Fit the security screw into the top pivot.



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

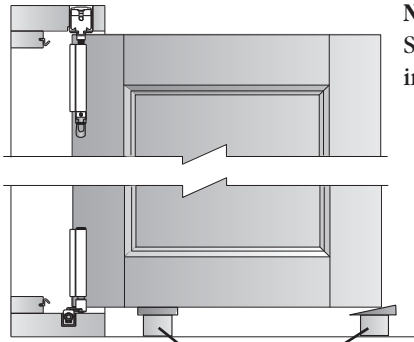


Fitting the right pivot door (door 1) *continued*

VERY IMPORTANT - When installing the doors, always use the door installation protector to rest the doors on and never place the doors directly on the cill.

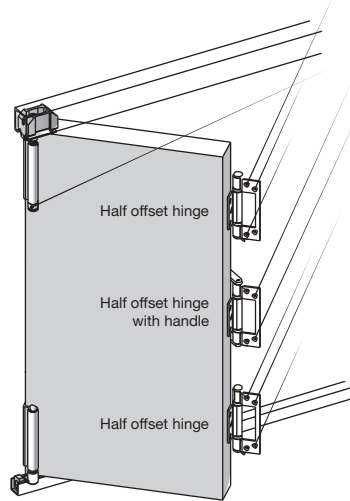
21 Lift door onto bottom pivot. Support door then screw top pivot centre bolt into pivot block until door swings freely.

Note: To avoid damaging the door, always use the door adjustment protector on the surface of the door and under the pivot bolt before tightening.

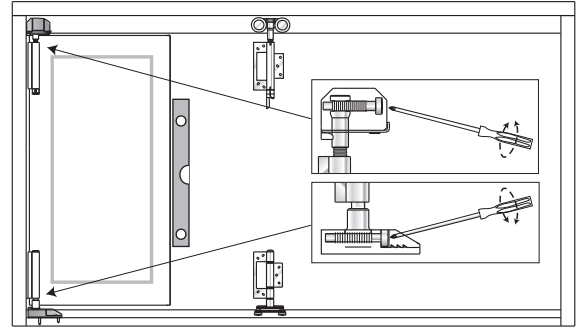


Note: Screwing top pivot bolt in and out adjusts height.

Temporary supports and door installation protectors to prevent damage to the cill.



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.

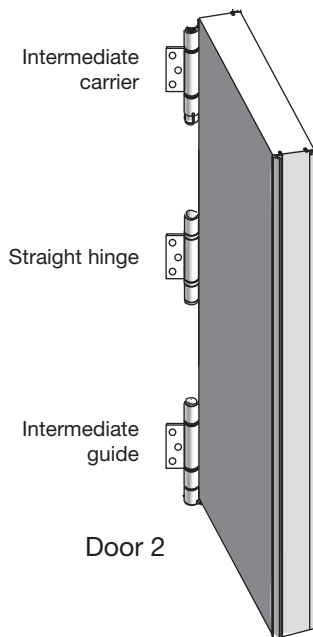
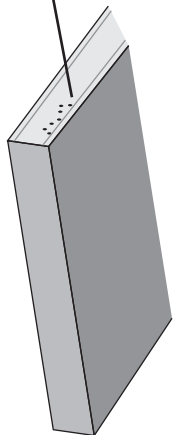
Note: Hinge barrels and centre hinge handle to *inside*.

Fitting the right mid door (door 2)

VERY IMPORTANT - FOR SECTIONS 24 TO 26 INCLUSIVE - Always support the doors on the door installation protector to avoid damage to the aluminium powder coating and always use the door adjustment protector on the surface of the door and under the pivot before tightening.

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

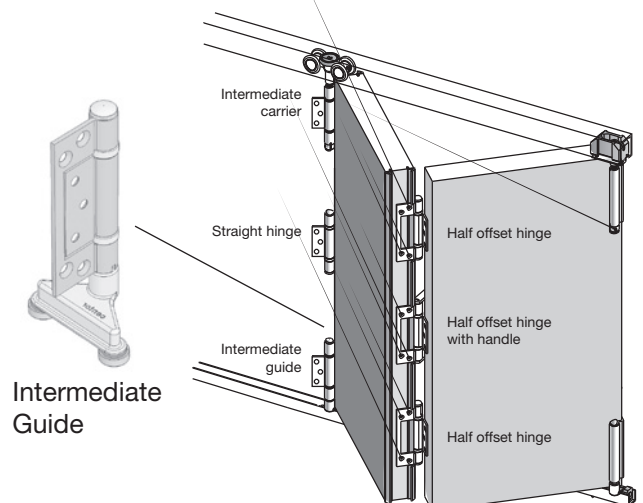
Pre-drilled positions



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.

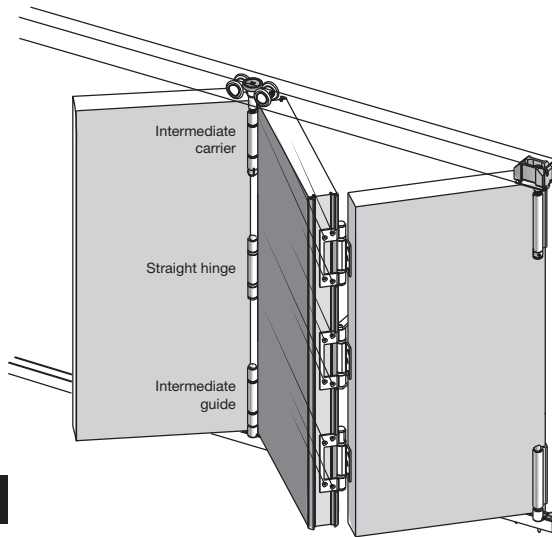
Note: Handle to inside



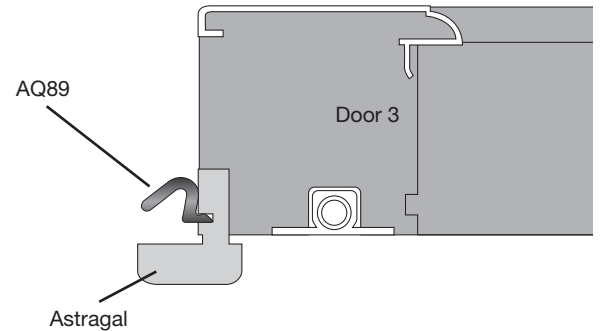
Fitting right fixed access door (door 3)

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**



Fit the astragal to door 3, screwing into the edge of the door and then fit the AQ89 seal into the groove with the open end facing towards the astragal.



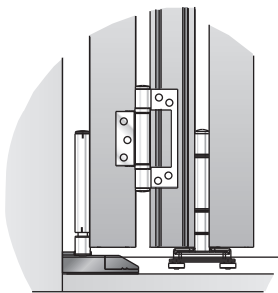
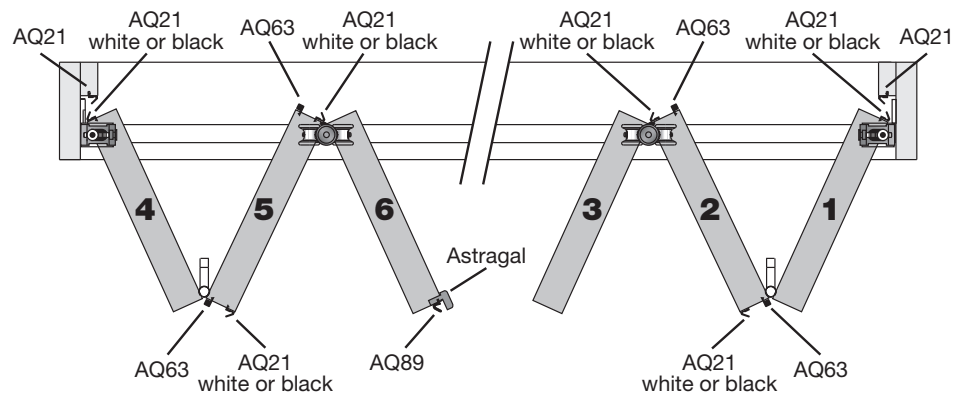
Fitting the left opening three doors of the set

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
- 2 strips type AQ63 to doors 2&5
- 1 strip type AQ109 to door 3
- 1 strip type AQ109 to door 6
- 2 strips type AQ21 to doors 2&5
- 1 strip type AQ89 to door astragal

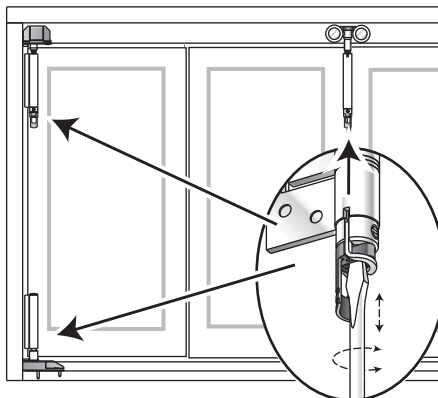


Where necessary, remove sections of seal to accommodate hinges and other hardware

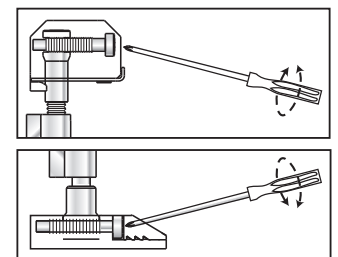


Adjusting the operation of the doors

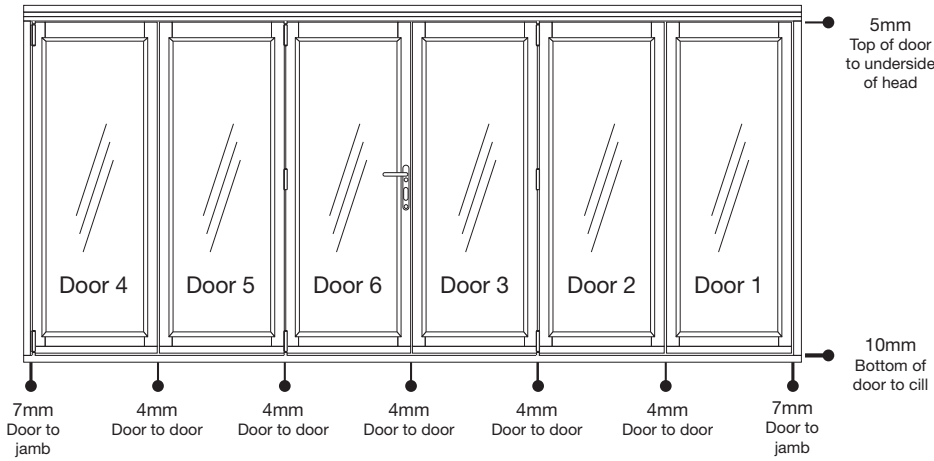
29 Raise or lower the height of the doors by adjusting the top pivot on doors 1 and 4, and the intermediate carrier between doors 2/3 and 5/6.



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



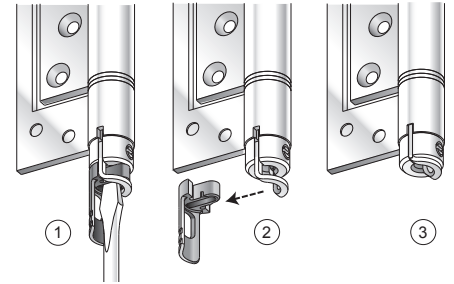
Correct spacing for final adjustment



Shipping clips

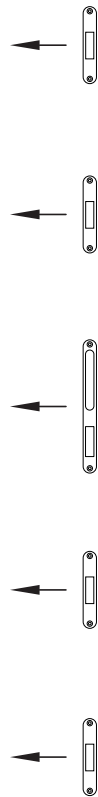
31 Do not remove the shipping clips until you have made all the necessary adjustments as shown in sections 29 and 30.

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.

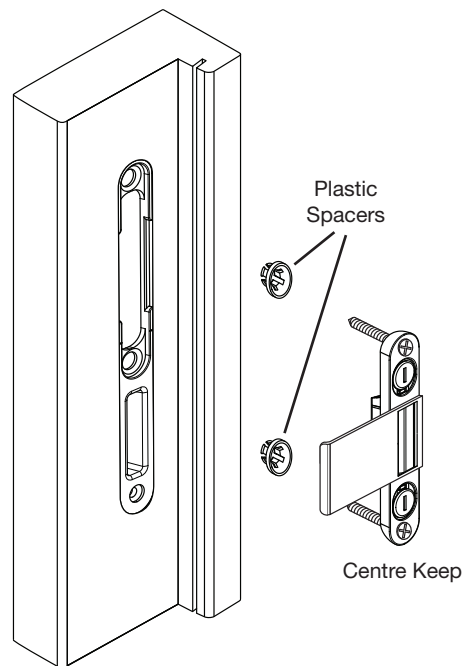


Fitting the lock and handle

32 Fit lock keeps into into the edge of door 3 using the pre-cut positions.



33 Fit the latch striker plate and keep onto the plastic spacers.

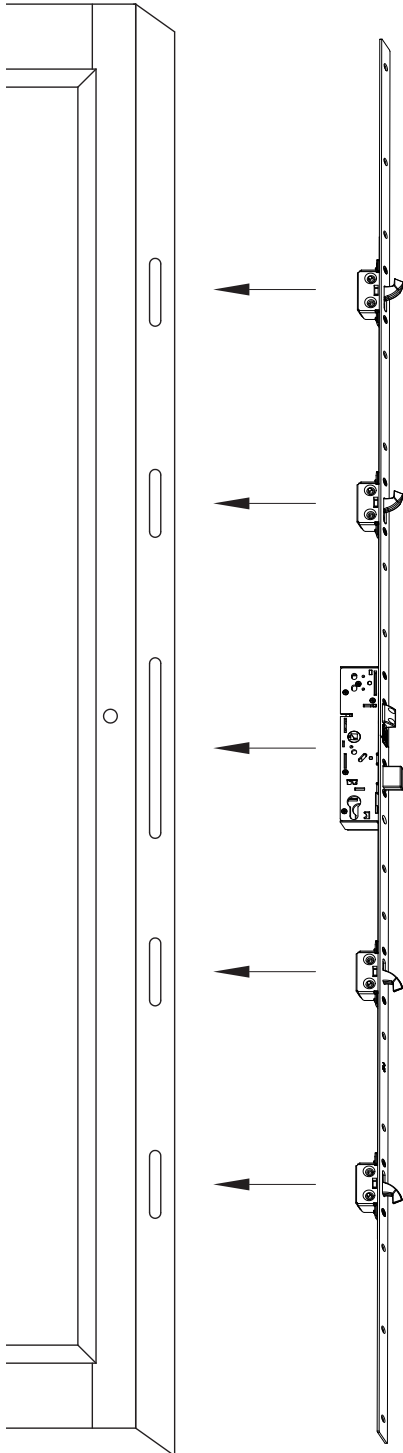


Fit the latch striker plate to the edge of door 3 with the curved 'leading edge' to the outside

Fitting the lock and handle *continued*

34 Fit lock into door 3. Apply the masking tape to the face of the door and mark the holes for the keyhole and the handle locating screws. The keyhole is always at the bottom.

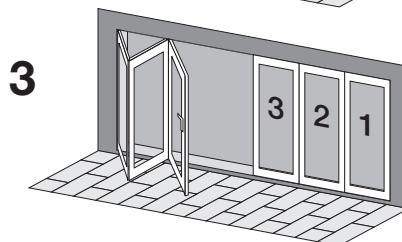
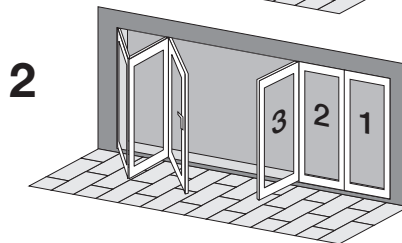
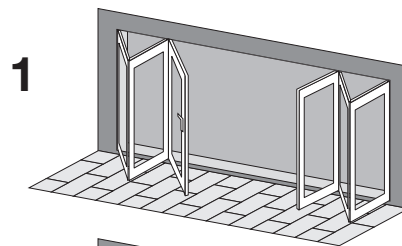
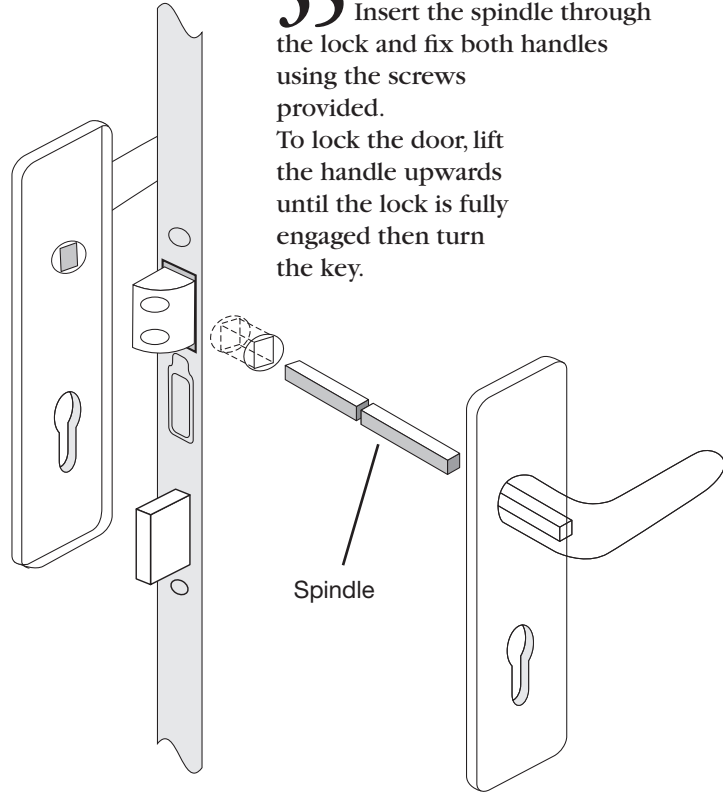
Very Important: Use the centre punch to mark the holes. Then drill a pilot hole with the 5mm HSS drill. Next use the 14mm HSS drill for the handle and keyhole. Finally use the 22mm HSS Drill for the keyhole only. Secure the lock in place and remove the masking tape.



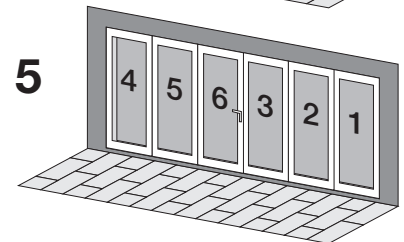
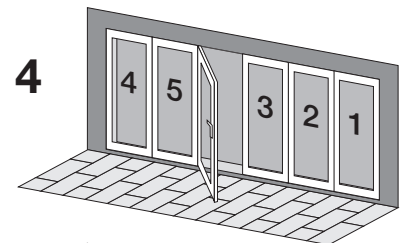
35 Fitting spindle assembly.

Insert the spindle through the lock and fix both handles using the screws provided.

To lock the door, lift the handle upwards until the lock is fully engaged then turn the key.



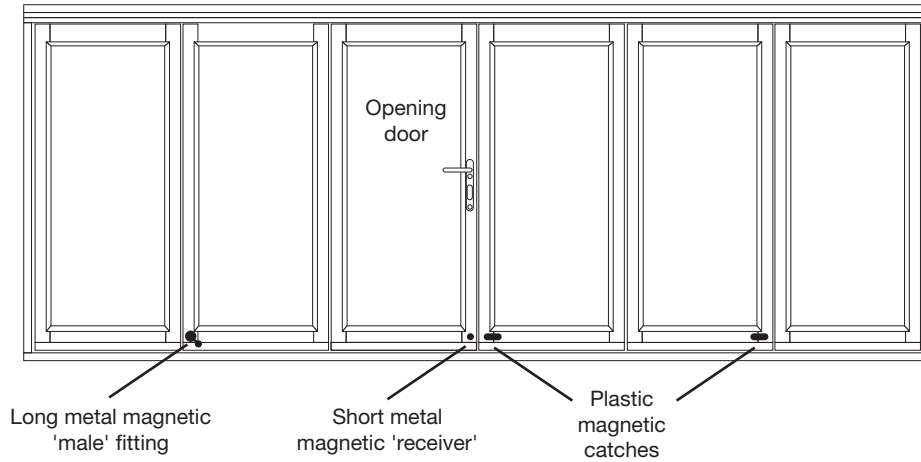
36 When closing the right door set, first close doors 1 and 2, securing them with the dropbolts. Then close door 3. When closing the left door set, first close doors 4 & 5, securing them with the dropbolt. Finally, close and lock door 6.



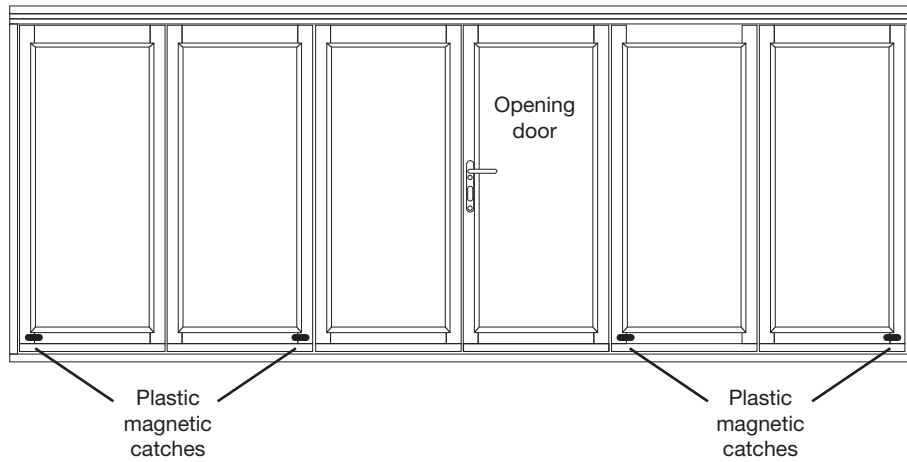
Fitting the magnetic catches to the doors

37 Fit the magnetic catches in the positions shown using the fixings provided.

From outside, looking in



From inside, looking out



Important: Mark the catch fixing holes with the centre punch then drill a pilot hole with the 3mm HSS drill.

