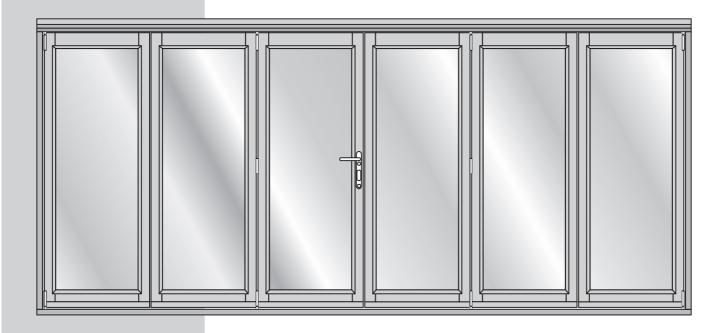


Sliding Folding Patio 6 Door Set

4.8M - 4790mm W x 2090mm H Assembly Instructions

VERY IMPORTANT FOR INSTALLERS

Our folding sliding doors are timber with an aluminium cladding on the outside. The installation is very similar to that of our timber 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. Some parts of the installation require particular care to avoid damaging the aluminium and are highlighted in red throughout this booklet.



IMPORTANT

About your folding sliding 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.

- We recommend that a competent tradesperson install this product.
- A single person must never carry out the installation, as some of the components are very heavy.
- The outer-frame head requires fixing to the building lintel over the opening. (See page 9). The lintel must be capable of carrying the load of the door in all conditions. if in doubt contact a structural engineer.

4.8m 4790mm wide x 2090mm high - 391kg

Automatic Closures and Operators

The hardware systems are designed for manual operation. Poorly adjusted automatic operator closures can import 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 cill at the time of delivery to ensure that they are acceptable and in good condition, and within 72 hours of delivery. If you find a component missing or damaged please inform us 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 numbers)
- When storing prior to installation, the doors and frames should be handled with care and stored in a dry, ventilated building. Doors and frames should be stored flat and on a level surface (not on edge or on end).
- Should you need to store the doors before installation, they
 must still be fully unpacked and checked for damage or faults
 and reported within 72 hours of delivery, repacking if necessary.
- 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. Trimming will invalidate your guarantee.

Conditions of Sale

- We shall not be held responsible for any incidential 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.

Tracks 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 around the bearings. Iubricant 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 susceptable 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 they 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 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 this 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 or 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 oak/timber has been finished with a resilient PU (polyurethane) coating system to all oak faces and edges of the doors and frames. It is very important that the PU finish is checked every six months for deterioration and re coated if necessary. Areas exposed to UV rays and high traffic areas such as the bottom cill may require more regular maintenance depending on how often you use the doors and their environment. This will maintain the decorative finish and ensure that no moisture enters the timber of the doors and frame during the life of the product.

We recommend all oak faces and edges of the doors and frame are recoated using a polyurethane finish from a proprietary brand.

To maintain the external aluminium powder coating finish, wash regularly with soapy water and then dry off with a soft lint-free cloth. As a minimum, the external surfaces must be washed at least every three months and monthly if within five miles of the sea or an industrial area. Our general recommendation would be to wash the external aluminium every time you clean your windows, which should normally be more regularly than the minimum requirement.

Additional infomation on maintenance and guarantees is available in your 'HomeOwners Manual'.

Contents (1)

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

Aluminium clad timber parts

Door 1 - Pivot hinge door - quantity 1

size 4.8m set = 1972 x 778 x 72mm 72PFG16-1 / 72PFW16-1

Door 2 - Right mid door - quantity 1

size 4.8m set = 1972 x 778 x 72mm 72PFG16-2 / 72PFW16-2

Door 3 - Right fixed access door - quantity 1

size 4.8m set = 1972 x 778 x 72mm 72PFG16-3 / 72PFW16-3

Door 4 - Left pivot hinge door - quantity 1

size 4.8m set = 1972 x 778 x 72mm 72PFG16-4 / 72PFW16-4

Door 5 - Left mid door - quantity 1

size 4.8m set = 1972 x 778 x 72mm 72PFG16-5 / 72PFW16-5

Door 6 - Left opening access door - quantity 1

size 4.8m set = 1972 x 778 x 72mm 72PFG16-6 / 72PFW16-6

Frame head section - Includes aluminium top track - quantity 1 72PFG16-7 / 72PFW16-7

size 4.8m set = 4790mm wide

Cover trim 4.8m set: 2mm x 25mm x 2110mm Qty 2 2mm x 25mm x 2410mm Qty 2

Timber astragal- Qty 1



Frame cill section - Includes aluminium bottom track - quantity 1 72PFG16-8 / 72PFW16-8

size 4.8m set = 4790mm wide

Frame jambs (side) sections - quantity 1 pair

size 4.8m set =

72PFG16-9 / 72PFW16-9





Hardware E3HD16

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

Bottom pivot - quantity 2

Bottom pivot fixing pack - quantity 2 (Includes bottom pivot hinge end cap)

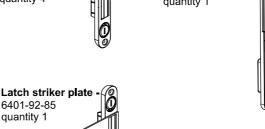
Intermediate carrier - quantity 2 Intermediate carrier fixing pack -quantity 2

Straight hinge - quantity 2 Straight hinge fixing pack -quantity 2

Intermediate guide -quantity 2 Intermediate guide fixing pack -quantity 2 Hook bolt keeps 6402-85 quantity 4



Centre lock keep 6401-101-85 quantity 1



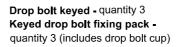
Plastic spacers -6401-spacer quantity 2



6401-92-85 quantity 1



Vectis 4 hook lock -9335-4H-645-85V quantity 1 (includes keys x 2)





Drop bolt non-keyed - quantity 3 Non-keyed drop bolt fixing pack quantity 3 (includes drop bolt striker plate)

Driver pack - quantity 1

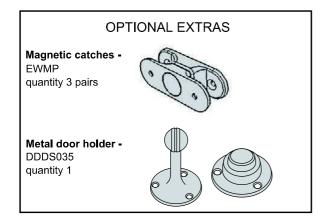


Half offset hinges - quantity 6 Half offset hinges fixing pack quantity 2



Contents (2)

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



Door adjustment protector quantity 1 attached to door 1



Door installation protector quantity 1 attached to door 1



Seal quantities per set -



Draft seal AQ21 black AQ21BLK2.3

2.3 metres x 9



Draft seal AQ21 black AQ21BLK4.8

4.8 metres x 2



Draft seal AQ63 black AQ63BLK2

2 metres x 4



Draft seal AQ109 black

2 metres x 1

Brush seal grey

AQ109BLK2

6.9 900 EC WF GREY 4.8

4.8 metres x 1

Installation bag contents

K71570911(38)ULTRA

A) Hardened steel frame fixings - quantity 22



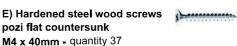
Hardened steel wood screws pozi flat countersunk yellow



B) M5 x 100mm - quantity 4

C) M5 x 70mm quantity 4

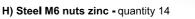
quantity 4 D) M5 x 60mm -

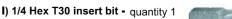


F) A2 machine screws Philips raised countersunk brushed chrome M5 x 90mm - quantity 2



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







J) 1/4 Hex pozi No.2 insert bit - quantity 1



K) 1/4 Hex insert bit Philips No.2 - quantity 1



L) SDS drill bit 6.5mm x 210mm - quantity 1

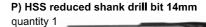


M) HDS long drill bit 6.5mm x 148mm - quantity 1



N) HSS drill bit 3mm - quantity 1







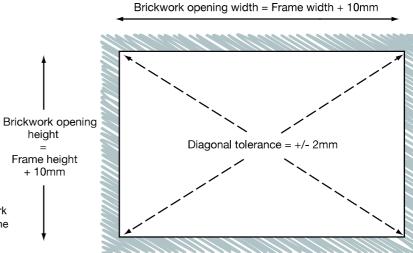
R) Square head steel centre punch quantity 1



S) 2610 masking tape on backing paper quantity 2

Installation Instructions - quantity 1 **IB72NN16**

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 dimensions.

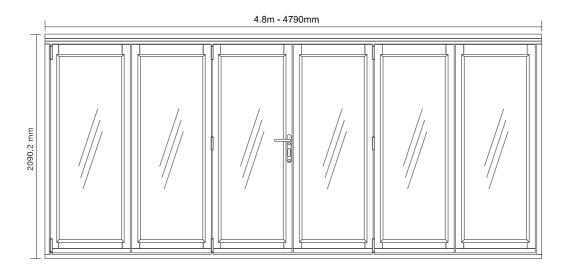
It is essential that all 4 internal surfaces of the brickwork are levelled before installation. Please ensure that all dimensions are correct for installation before proceeding, as the set must be installed square and level into the opening.

The sliding folding door set outer frame dimensions are:

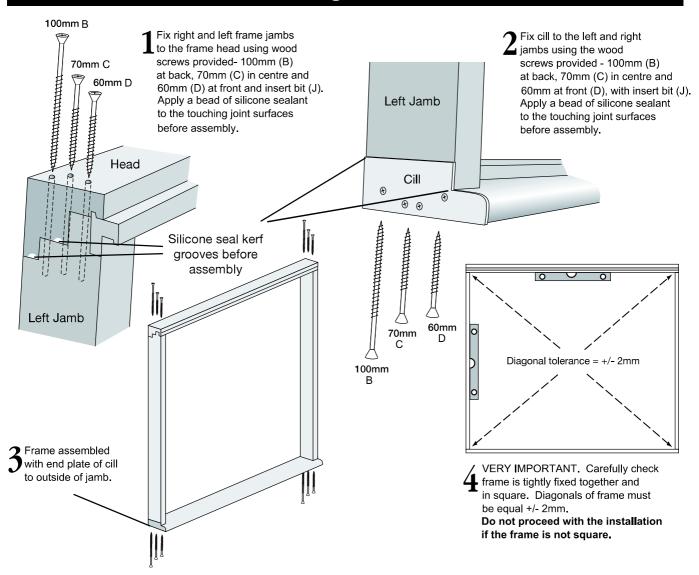
4.8m Tri-fold door set = 4790mm wide x 2090.2mm high

The recommended brickwork openings are:

4.8m Tri-fold door set = 4800mm wide x 2100mm high



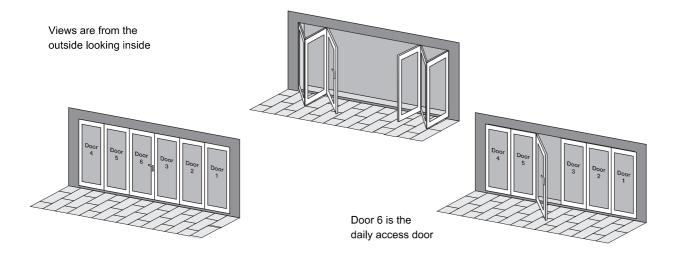
Assembling the frame



Opening options

5 The 4.8m folding sliding door set open with three doors to the left, and three doors to the right.

Doors 3 & 6 can be opened like a patio door pair, however door 6 is always the daily access door. (The Tri-fold doors always open outwards)



Installing the assembled frame

Proceed to install the assembled frame ensuring that the cill 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 using shims/packers (not provided) between the frame and the brickwork 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 centre of the top of the frame securely to the lintel. IMPORTANT: the head section of the frame must not sag.

Fix the outer frame into the brickwork, normally installed 5-10mm back from the outer face of the brickwork, setting it to overhang the cavity if possible.

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

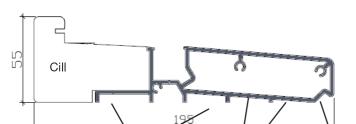
Use the direct frame fixings (A) as follows:

- 1) Use the 6.5mm HSS drill (M) to drill holes in the frame jambs, aluminium track and steel.
- 2) Use the 6.5mm SDS masonry drill (L) to drill into brickwork.
- 3) Use the torx 1/4 hex T30 bit (I) to screw in the direct frame fixings (A).



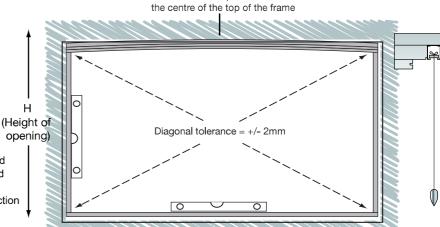
Do not fix through the aluminium part of the cill as this may damage the drainage system.

You do not need to screw down through the cill, however should you wish to it is possible to countersink a fixing into the drop bolt cup cut out. It is important to seal this with silicone.

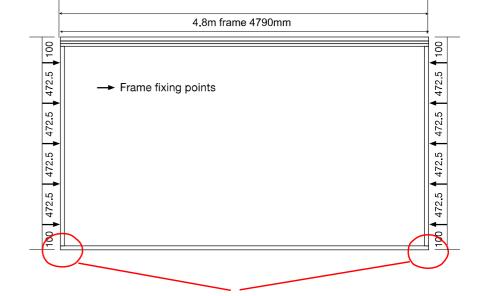


Silicone sealant

Mortar bed



Note the 3mm upwards bow in





IMPORTANT NOTE

After the frame is installed, Silicone Seal around the base of the frame jamb/Cill joint as shown in the drawing

Important information about direct frame fixings

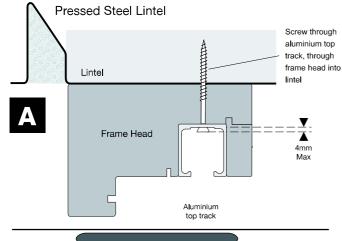
Drainage

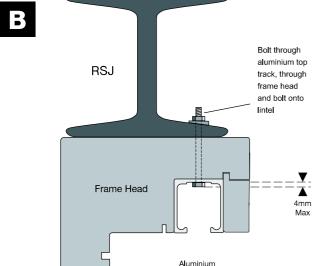
channel

The direct frame fixings (A) supplied will screw directly into brickwork and up to 2.5mm thickness of steel. It is essential to use the 6.5mm drills (M) and torx hex T30 bit (I) provided to ensure a secure fixing.



Installing the assembled frame (continued)





top track

The aluminium top track, which is temporarily held in place with transit screws, has been pre-drilled for fixing points to the lintel.

The aluminium track must be securely fixed, through the head of the frame, into the lintel using either the direct frame fixings (A) or nuts, bolts and washers (G) & (H) provided.

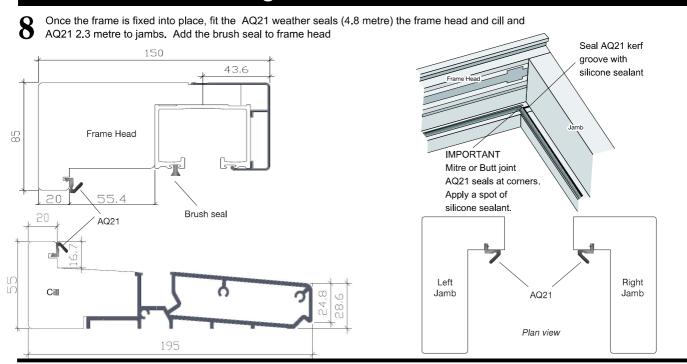
Use the direct frame fixings (A) as follows:

- 1) Locate the pre-drilled holes in the aluminium top track (6ft, 7ft, 8ft & 9ft only).
- 2) Remove the transportation screws from track.
- 3) Use the 6.5mm HSS drill (M) to drill through the pre-drilled holes, through timber frame head and into the pressed steel lintel.
- 4) Use the 6.5mm SDS masonry drill (L) to drill through the same holes into brickwork above the lintel.
- 5) Use the torx 1/4 hex T30 bit (I) to screw in the direct frame fixings (A).
- Use the nuts, bolts and washers (G) & (H) as follows:

 1) Locate the pre-drilled holes in the aluminium top track (6ft, 7ft, 8ft, 9ft, 10ft, 12ft, 14ft & 16ft)
 - 2) Remove the transportation screws from track.
 - 3) Use the 6.5mm HSS drill (M) to drill through predrilled holes, through to timber frame head and through RSJ.
 - 4) Use the nuts, bolts and washers (G) & (H) provided to fix the track and framed head to the RSJ.

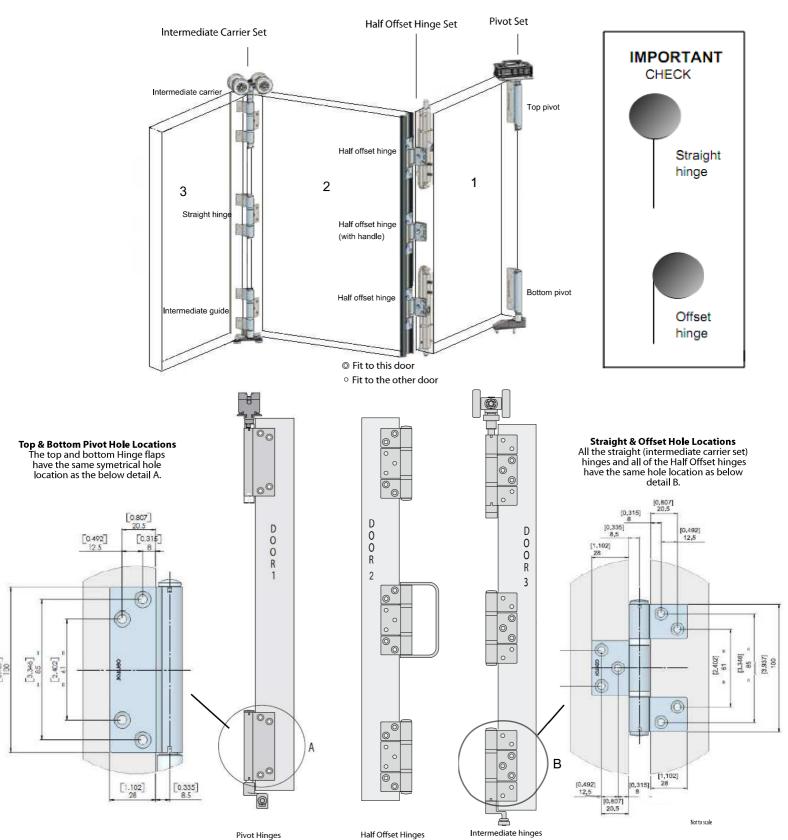
IMPORTANT: We strongly recommend 'B' type fixing to RSJ. If using 'A' type fixing to pressed steel lintel, ensure the lintel can support the weight of the set (6ft, 7ft, 8ft & 9ft only.) Fixings must fix through the aluminium track, frame head and lintel. (The folding sliding system is 'top hung' so all the weight is supported from the lintel, hence the importance of fixing into the lintel, to enable the system to work correctly.)

Fitting the seals to the frame



Overview of door and hardware arrangement

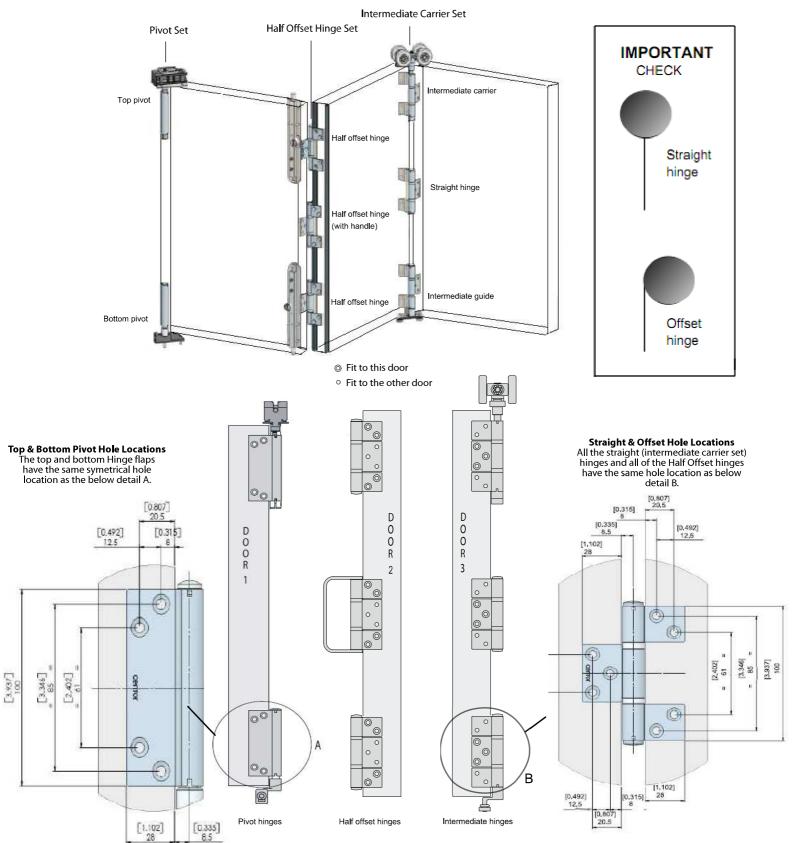
9 Arrangement A for 3 Right opening doors of set



NOTE: Pivots are reversible. It may be necessary to take the top and bottom pivots apart to reverse them- see page 11.

Overview of door and hardware arrangement

10 Arrangement lacksquare for 3 Left opening doors of set

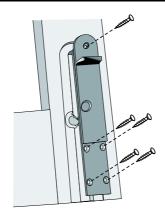


NOTE: Pivots are reversible. It may be necessary to take the top and bottom pivots apart to reverse them- see page 11.

Fitting the drop bolts

11 Fit the keyed drop bolts to the bottom of doors 1, 3 & 4 using the pre-cut positions.

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



12 Fit the keyed drop bolt cup to the cill in the pre-cut position.

Fit the non-keyed drop bolt striker plate to the frame head in the pre-cut position.





Locating the intermediate carrier

13 Slide the intermediate carrier into the top track via the access slot.

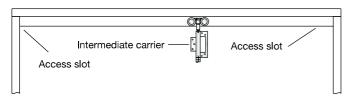
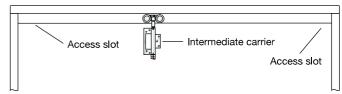


Diagram of right opening doors of set (Viewed from the outside looking in)

Diagram of left opening doors of set (Viewed from the outside looking in)

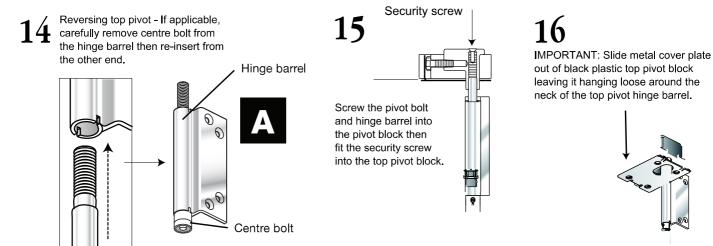


Fitting the pivot door (door 1)

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

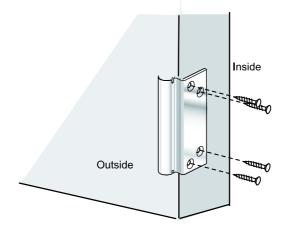
Note well: When drilling holes in the door edge to fix the hinge plates, first use the centre punch (R) to mark the hole location, then drill with the 3mm HSS DRILL (N). This applies especially to the holes in the aluminium.

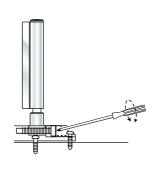
The pivots should be fitted with the hinge barrel to the outside, and the hinge flap to the inside Double check if yours are pre-set, if not they will need to be reversed.



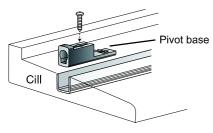
Fitting the pivot door (door 1- continued)

- Once assembled top pivot is fitted into track, slide and click cover plate onto the pivot block. Screw through cover plate into rear of access slot-taking care to ensure the pivot block is tight up against the jamb.
- 18 Fix bottom pivot hinge only to door 1 using screws supplied in pre-drilled holes
- Remove the centre part of bottom pivot by unscrewing the adjustment screw



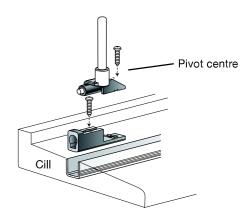


 $20 \begin{array}{l} \text{Insert the pivot base into cill channel} \\ \text{fitting tight up against frame jamb.} \\ \text{Drill pilot hole in the channel and fix} \\ \text{with self tapping screw.} \end{array}$



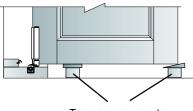
Re-assemble centre part with plate to inside and barrel towards outside.

Drill a second pilot hole and fix with self-tapping screw through complete unit.

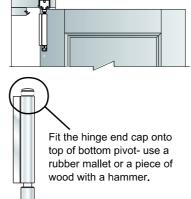


VERY IMPORTANT: When installing the doors, always use the door installation protector to rest the doors on and never place the doors directly on the cill.

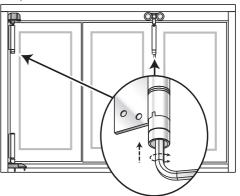
22 Lift door 1 onto the bottom pivot, support the door and use protectors as shown below.



Temporary supports and door installation protectors to prevent damage to the cill. Screw through the top and bottom pivot hinges into the pre-drilled holes in the door.



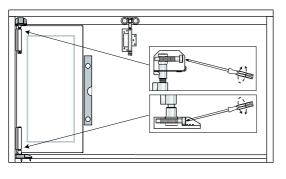
Adjust the height on the top pivot hinge as shown below, until the door swings freely. Insert the allen key provided into the end of the pivot and rotate clockwise for up and anti clockwise for down.

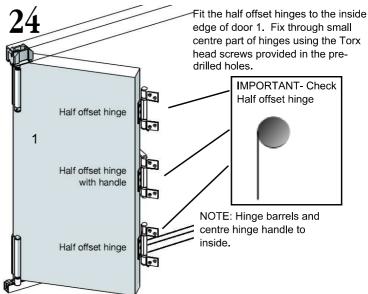


NOTE: To avoid damaging the door, always use the door installation protector on the surface of the door and under the pivot before adjusting.

Fitting the pivot door (door 1- continued)

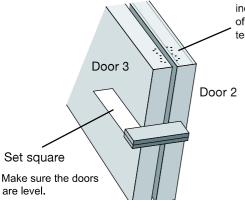
23 Adjust alignment of pivot door as shown below. Leave a 7mm gap between the door edge and the frame jamb.





Fitting the right mid door (door 2)

25 Lay doors 2 & 3 on their edges with the red and blue dots uppermost and the aluminium clad facing each other.



The red and blue dots on the door edges indicate approximate positions for drilling of pilot holes. Double check these using templates on pages 9 & 10 beforehand.

Use RED dots for Option A RIGHT opening

IMPORTANT- Check Straight hinge

Use BLUE dots for Option

B LEFT opening

26

VERY IMPORTANT: Using the intermediate carrier set as templates on the door edge, refer to drawings on pages 9 & 10 to measure and mark the precise location of the pilot holes to fit the intermediate carrier set.

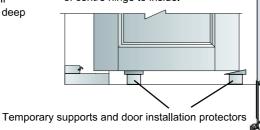
Only when you are sure the exact hole position has been correctly marked, drill pilot holes 2.5mm diameter and 20mm deep in doors 2 & 3.

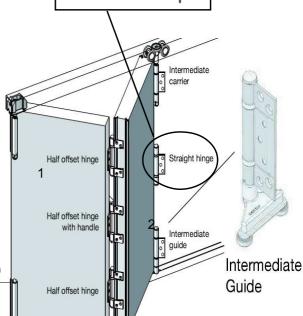
Finally, fix the intermediate carrier set to DOOR 2 ONLY.

27

Lift door 2 and locate the intermediate guide in the bottom channel. Support door on door installation protectors, then using the door protector under the pivot to avoid damaging the cill.

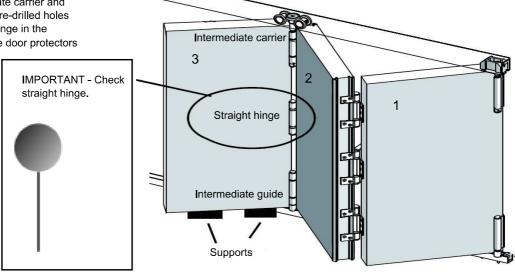
Finally, fix doors 1 & 2 together using the half offset hinges. NOTE: handle of centre hinge to inside.





Fitting the right fixed access door (door 3)

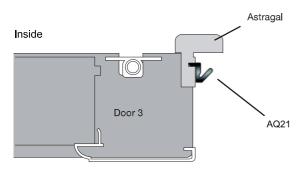
Attach door 3 to the intermediate carrier and intermediate guide using the pre-drilled holes as a guide. Use the straight hinge in the central position. Again, use the door protectors to support the doors.



Fitting the astragal to door 3

29

Fit the astragal to door 3, screwing into the edge of the door and then fit the AQ21 seal into the groove with the open end facing towards the astragal.

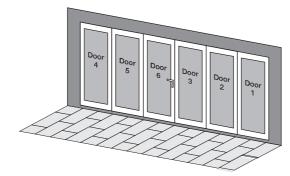


Outside

Fitting the left opening three doors of set

30

Repeat steps 13-28 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.)



Door 6 is the daily access door

View is from outside, looking inside

Fitting the weather seals to the doors

31 Fit the draft seals to the doors as follows:

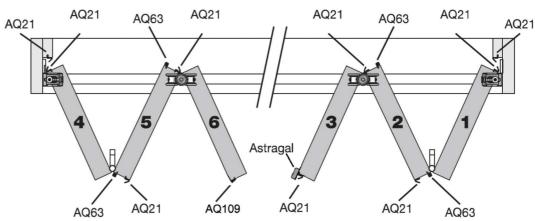
1 strip type AQ21 to door 1 1 strip type AQ21 to door 4 2 strips type AQ63 to door 2 2 strips type AQ63 to door 5 1 strip type AQ21 to door 3 1 strip type AQ109 to door 6 2 strips type AQ21 to door 2





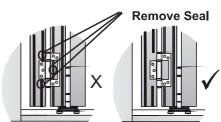
2 strips type AQ21 to door 5





VERY IMPORTANT

DO NOT FIT SEALS IN BETWEEN THE HINGES AS THIS WILL CAUSE PROBLEMS IN OPERATION AND WOULD LEAD TO WATER INGRESS.



Fitting the magnetic catches to the doors

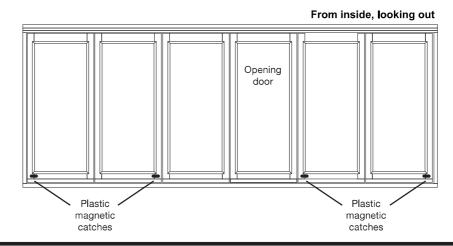
IMPORTANT: Mark the catch fixing holes with the centre punch (R) then drill a pilot hole with the 3mm HSS drill (N.) Measure from edge of door to ensure each half will corrrectly line up. Take care to avoid screwing through the joints of the door stiles and rails.

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

OPTIONAL EXTRAS

Opening door Plastic magnetic

'receiver'



catches

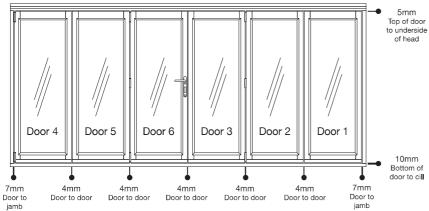
'male' fitting

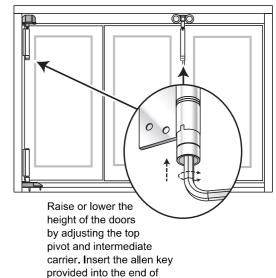
Adjusting the operation of the doors

IMPORTANT: Always place the door adjustment protector under the adjustment bolt to protect the aluminium before turning with a screwdriver.

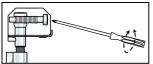
33

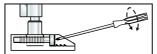






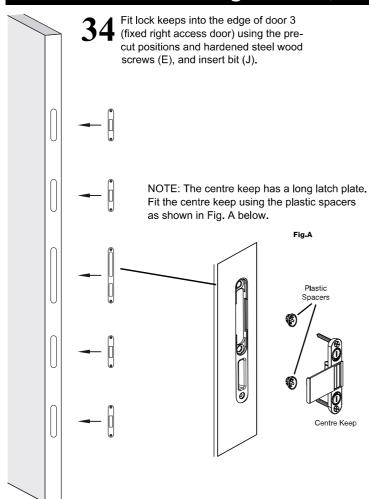
the pivot and rotate clockwise for up and anti clockwise for down.





Adjust the left/right position of the doors using the top and bottom pivots.

Fitting the lock, handle and keeps

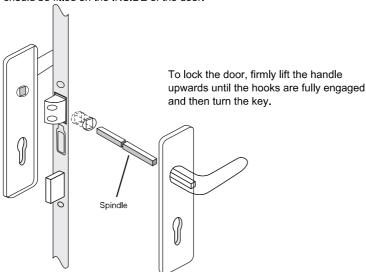


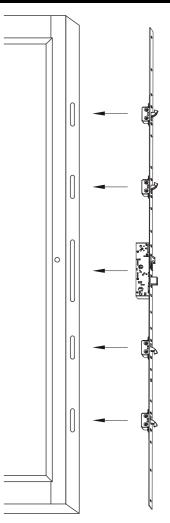
Fitting the lock, handle and keeps (continued)

Fit the lock into door 6. Apply the masking tape (S) to the face of the door and mark the holes for the keyhole and handle locating screws. The keyhole is always at the bottom VERY IMPORTANT: Use the centre punch (R) to mark the holes, then drill a pilot hole with the 5mm HSS drill (O). Next use the 14mm HSS drill (P) for the handle and keyhole. Finally, use the 22mm HSS drill (Q) for the keyhole only. Remove any wood or aluminium shavings from the recess, secure the lock in place and then remove the masking tape.

36 Insert the spindle through the lock and fix both handles together using the screws provided IN THE INSTALLATION BAG (F) and insert bit (K).

The handle with the fixing screws showing should be fitted on the INSIDE of the door.



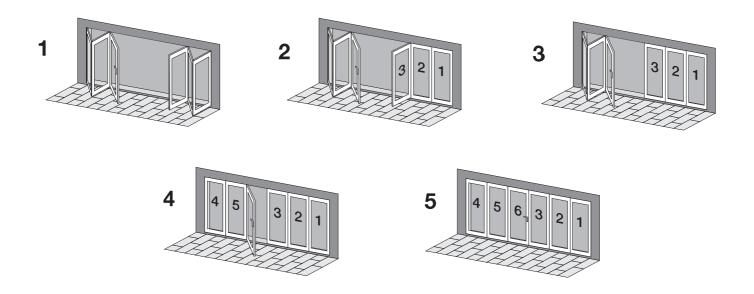


Correct operation of the doors

37

When closing the right hand doors of the set, first close doors 1 & 2, securing them in place with the drop bolts. Then close door 3, securing it in place with the drop bolts. To close the left hand doors of the set, first close doors 4 & 5 and secure them in place using the drop bolts. Finally close and lock door 6.

IMPORTANT: Failing to close the doors in this order can potentially damage the doors and/ or frame.





DECLARATION OF CONFORMANCE

DoC No: JCI/FSD72

Product Type: 72 Range - Timber External Folding Sliding Door

Intended Use: For use in domestic and commercial premises

Not intended for use on escape route

Declared System of Assessment Performance: 3

Provisions to which the Product Conforms: Annex ZA of BS EN 14351-1:2006+A1:2010

Reference to Supporting Product Certification and/or Test

Reports (supportive of compliance):

Build Check Ltd - Weather Tightness Report W12292-3 Build Check Ltd - Thermal Performance Report CU11245-7b

Declared Performance:

Essential Characteristics Performance

Resistance to Wind Load: Class A3 (1600Pa) Watertightness: Class 3A (150Pa)

Dangerous Substance: No emissions of dangerous substances emitted

Load Bearing Capacity of Safety Device: Npd
Acoustic Performance Npd

Thermal Transmittance: 1.0w/(m²K)

Radiation Properties: Npd

Air Permeability: Class 2 (300Pa)

This declaration of performance is issued under the sole responsibility of JCI Limited.

Signed for and on behalf of the Company by

Name of Representative: John Collins Job Title: Managing Director

Representative Signature: Date of Issue: 10th May 2013

Product CE Marking Detail:

CE

JCI Limited

Macclesfield. SK10 2BN

13

BS EN 14351-1:2006+A1:2010

Timber Folding Sliding Door DoC Nº: JCI/FSD72

Not intended for use on escape route