54 UNF SLIMLINE

Sliding Folding Patio 3 Door Set

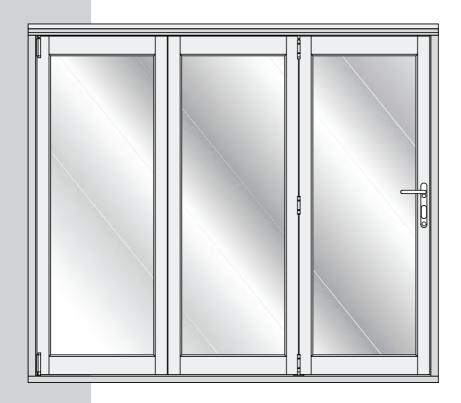
1.8M - 1790mm W x 2090mm H

2.1M - 2090mm W x 2090mm H

2.4M - 2390mm W x 2090mm H

2.7M - 2690mm W x 2090mm H

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 Closures and Operators

The hardware systems are designed for manual operation. Poorly
adjusted automatic operator closers can import 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. (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.

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 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 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

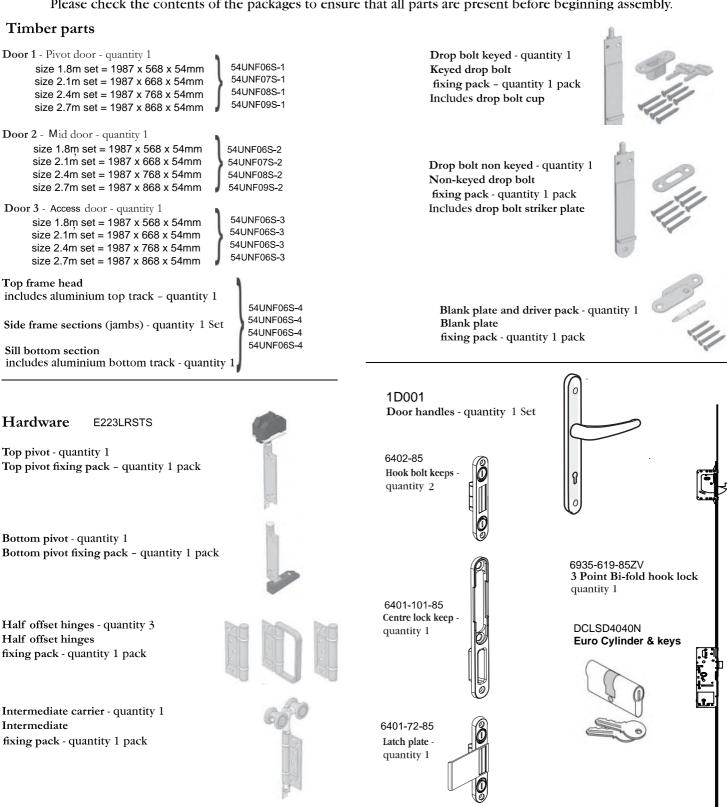
No two trees produce identical grains or colour of wood and this adds to the beauty of a natural product. We therefore cannot guarantee that all doors and frame components will look exactly the same in grain and colour. Warping of wood is not a defect if it does not exceed 1/4 inch (6mm) in its installed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

Maintaining the doors and frame

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.



Straight Hinge - Quantity 1 Straight Hinge

fixing pack - quantity 1 pack

Intermediate guide - quantity 1 Intermediate guide fixing pack - quantity 1 pack





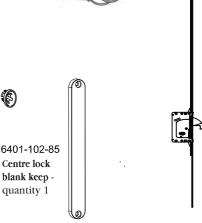
6402-102-85

Hook bolt

blank keeps

quantity 2





Contents (2)

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

K71570911(38)

Installation Bag Contents

Direct Frame Fixings - quantity 22

Hardened Steel Wood Screws

 $M5 \times 100$ mm - quantity 4 $M5 \times 70 mm$ - 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

 $6.5 mm \ x \ 210 mm$

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

Steel M6 nuts zinc M6 x 80 - quantity 14

a2 machine screws philips raised countersunk $\,$ M5 x 65 $\,$ - $quantity \,$ 2 $\,$

Hardened steel wood screws pozi flat countersunk M4 x 40 - quantity 37



FWB16MM

12mm Flat Wood Bit - quantity 1



22mm Flat Wood Bit - quantity 1



Silicone - quantity 1

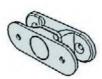
Assorted bag of packers - quantity 1

Seal quantities per set -	1.8 and 2.1 sets	2.4 set	2.7 set
Draft seal AQ21 black AQ21BLK2.3	2.3 meters x 6	2.3 meters x 6	2.3 meters x 4
Draft seal AQ21 black AQ21BLK3.5	-	-	3.5 meters x 2
Draft seal AQ63 black AQ63BLK2	2 meters x 4	2 meters x 4	2 meters x 4
Brush seal grey BRUSHSEAL2.317	2.3 meters x 1	2.3 meters x 2	2.3 meters x 2

Optional Extras

Magnetic catches

Plastic magnetic door holders - quantity 1 set



DDDS035 Metal door holder - quantity 1 set





IB54UNFNN08S

Installation Instructions - quantity 1

Pre-finishing the wooden parts - FOR UNFINISHED SETS ONLY

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.

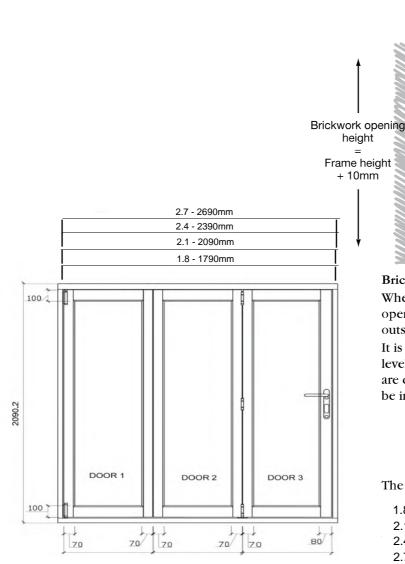
Please do not proceed with installation or assembly before applying high quality water-repellent sealant to all wooden parts as recommended below. It will be difficult for you to apply the sealants correctly once the product is assembled and installed. Failure to do this will cause the wooden parts to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

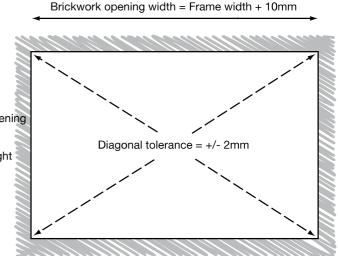
- Apply at least 3 coats of water-repellent protective finish to all faces, edges and top/bottom of each door and wood frame component prior to starting assembly or installation. Ensuring the backs of each frame is well sealed. For your convenience the under side of the wood components in the sill have 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.

For sets factory pre-finished

Please see the seperate booklet (Home owners manual) with detailed information and maintenance guidelines.

Preparing the site





Brickwork opening:

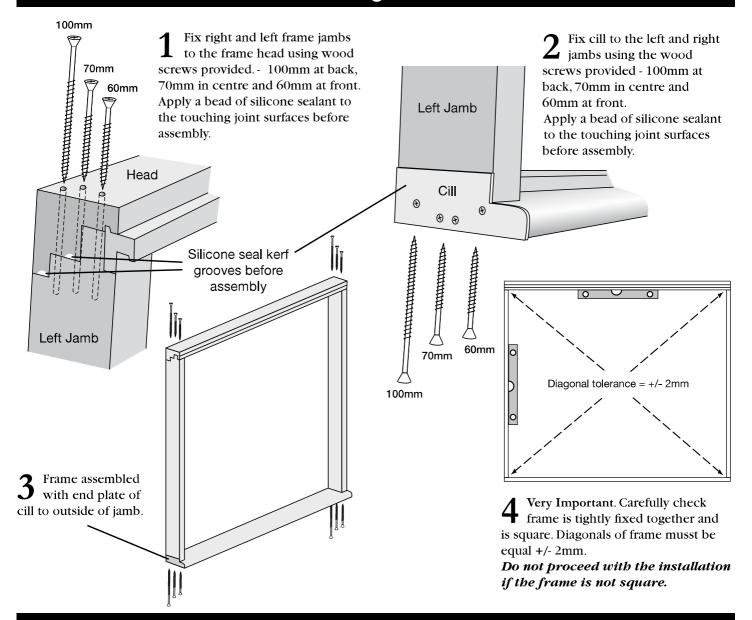
When preparing the site please prepare the brickwork opening to be 10mm more in height and width than the outside assembled frame size.

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 Tri-fold door set outer frame sizes are as follows:

1.8m Tri-fold door set = 1790mm Wide x 2090.2mm High 2.1m Tri-fold door set = 2090mm Wide x 2090.2mm High 2.4m Tri-fold door set = 2390mm Wide x 2090.2mm High 2.7m Tri-fold door set = 2690mm Wide x 2090.2mm High

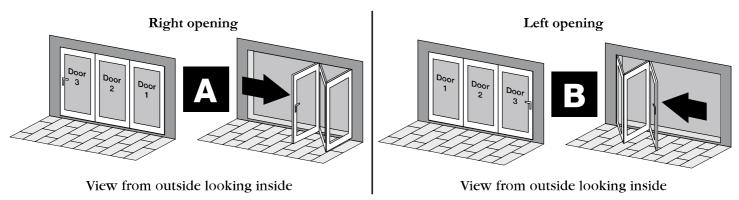
Assembling the frame



Opening options

Choose the opening direction before installing the frame. The Tri-fold door set is reversible, with left or right opening options. Before assembling the frame or fitting the doors, choose the direction you wish the doors to open. This will determine which instructions, **A** or **B**, to follow and which door to fit first.

(The Tri-fold doors always open outwards.)

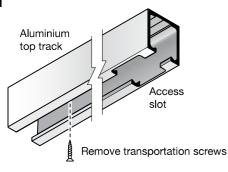


Follow the appropriate instuctions for your choice of opening. Follow **A** for Right opening. Follow **B** for Left opening.

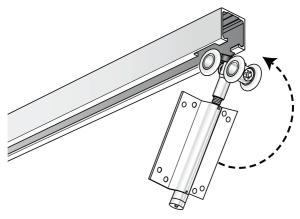
Assembling the top track

A

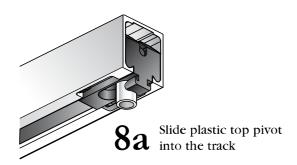
Instructions for Right opening

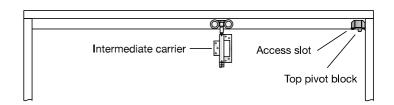


6a Remove the two transportation screws to release the aluminium top track from the frame head.



7a Slide the intermediate carrier wheels into the track.





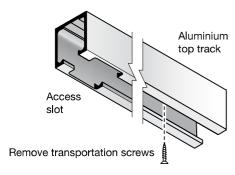
Re-secure the top track to the frame head using the two transportation screws *only* at this stage.

Important - The track access slot is on the right

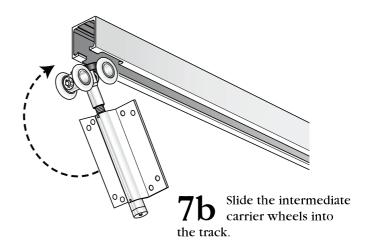
Assembling the top track

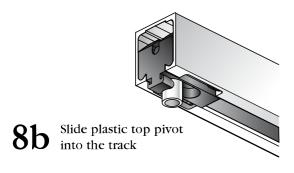
B

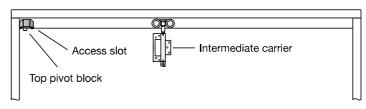
Instructions for Left opening



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







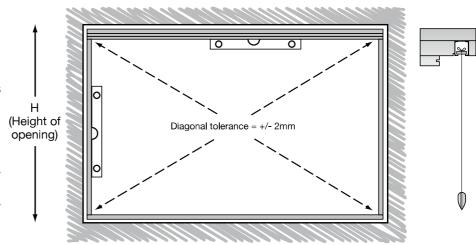
9b Re-secure the top track to the frame head using the two transportation screws *only* at this stage. *Important - The track access slot is on the left*

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 height (H) must be the same across the whole width of the opening, +/- 2mm.

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



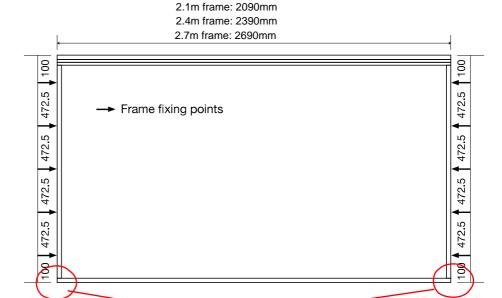
1.8m frame: 1790mm

10 Fix the outer frame into the brickwork, setting it to overbang 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.

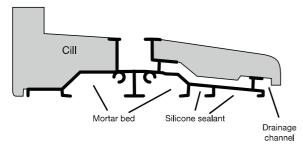
Use the *direct frame fixings* as follows:

- 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*.



Direct Frame Fixing

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





IMPORTANT NOTE

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

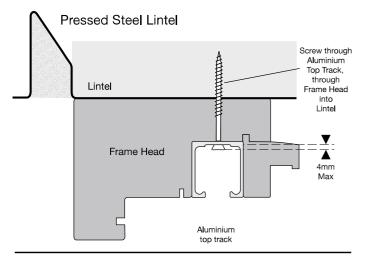
Important information about direct frame fixings

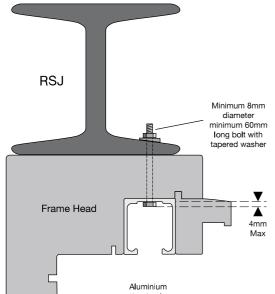
The Direct Frame Fixings supplied will screw directly into brickwork and up to 2.5mm thickness of steel. It is essential to use the 6.5mm drills and Tork T30 bit provided to ensure a secure fixing.



Installing the assembled frame continued

HIGH IMPORTANCE: The Set is 'Top Hung, so it is vitally important to fix through the top track and frame head into the Lintel





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 the *direct frame fixings* provided, through every predrilled hole in the top track.

Use the *direct frame fixings* as follows:

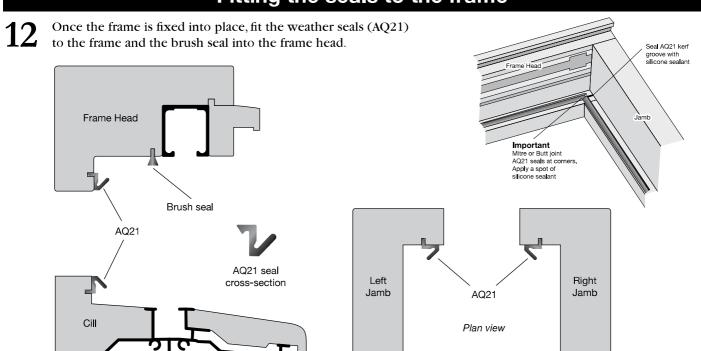
- 1) Locate the pre-drilled holes in the aluminium top track (either 7 or 8 holes depending on width of frame).
- 2) Use the 6.5mm HSS drill (supplied) to drill through pre-drilled holes, through timber frame head and through pressed-steel lintel.
- 3) Use the 6.5mm SDS masonry drill (supplied) to drill through same holes into brickwork above lintel.
- 4) Use the Torx T30 bit (supplied) to screw in the *direct frame fixings*.

IMPORTANT: 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.)

Please note that the maximum screw head that can be used is 4mm without inhibiting the performance of the sliding/folding action. (Wheels along upper track). We have provided fixings to suit a steel lintel. For any other type of lintel such as concrete, timber or other we recommend you consult with a structural engineer before deciding on the best fixings to use.

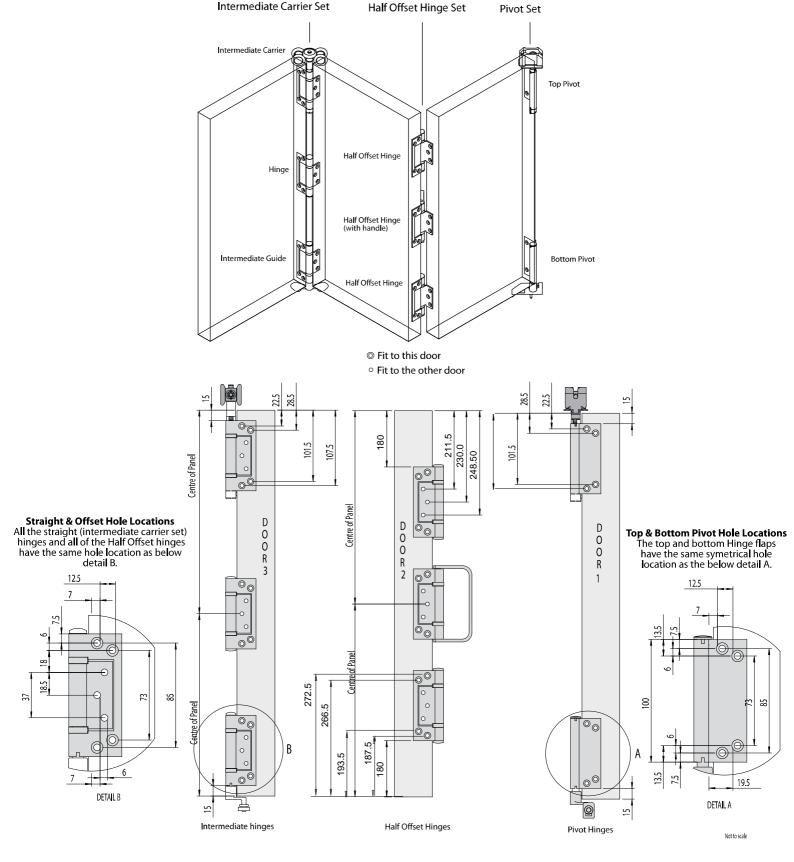
For fixing into RSJ / "I" Lintel use nuts and bolts (not provided). Do not use *direct frame fixings*.

Fitting the seals to the frame



13a

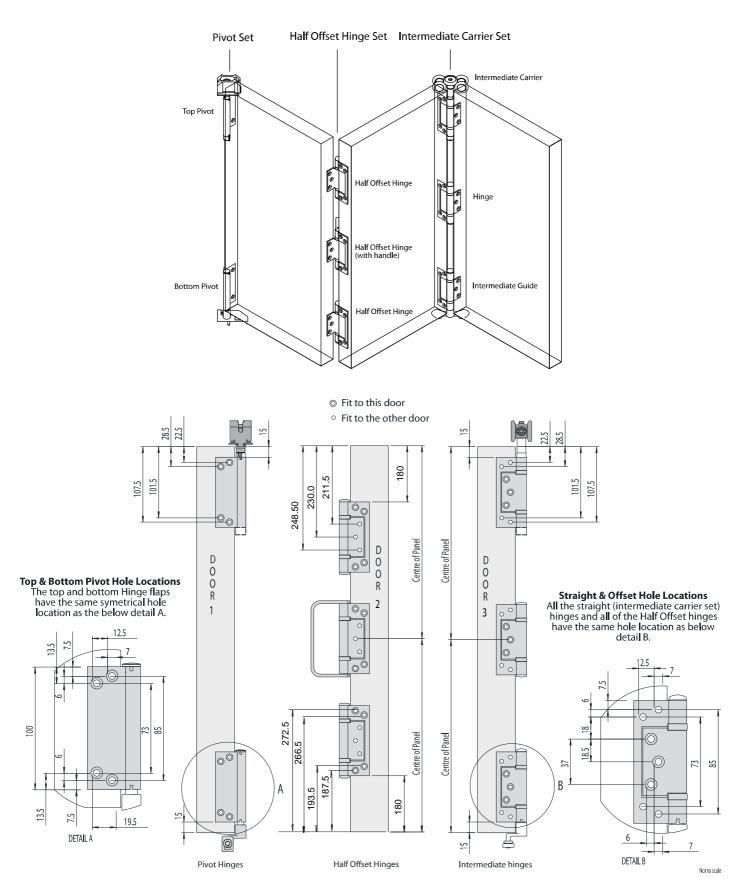
Choice A for Right opening



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

13b

Choice **B** for Left opening

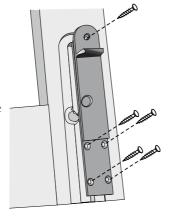


Note: Pivots are reversible. The pivots are delivered set up for this option 'B' - Use without change.

Fitting the dropbolts

14 Fit the keyed drop bolt to the bottom of door 1 using the pre-cut position.

Fit the non-keyed drop bolt to the top of door 1 using the pre-cut position.



15 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.



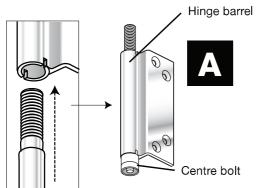
Use the blank plates to cover the unused pre-cut positions.



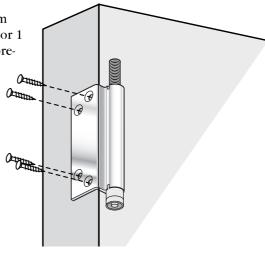
Fitting the pivot door (door 1)

Before fitting door 1 thoroughly clean the top and bottom tracks

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



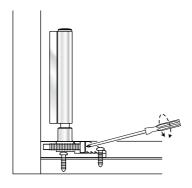
17 Fix top and bottom pivot hinges to door 1 using screws supplied in premachined positions.



Assemble top pivot block. Slide and click cover plate onto the pivot block. Screw through cover plate into rear of access slot ensuring the pivot block is sitting tight up against the frame jamb.



19 Remove centre part of bottom pivot

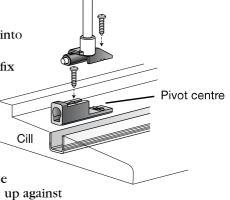


Insert pivot base into cill channel. Drill pilot hole in channel and fix with self-tapping screw.

Re-assemble centre part with pivot to *outside*.

Drill second pilot hole and fix with self-tapping screw through complete unit ensuring the pivot block is sitting tight up against

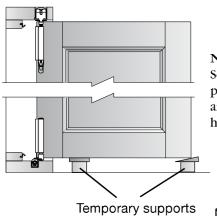
the frame jamb.



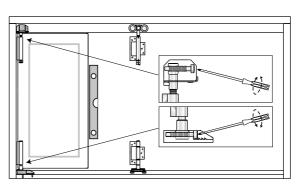
Fitting the pivot door (door 1) continued

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

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



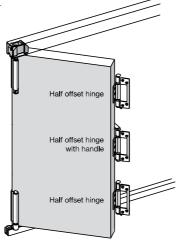
Note: Screwing top pivot bolt in and out adjusts height.



Fit half offset hinges to the inside edge of door 1. in the machined position using screws provided.

Note:

Hinge barrels and centre hinge handle to inside.



Fitting the middle door (door 2)

Lay door 2 and 3 on their edges with the red and blue dots uppermost and the raised mouldings to the inside.

Make sure the doors are level.

Door 3 Door 2 Set square

The red and blue dots on the door edges indicate approximate positions only for drilling of pilot holes to fit the intermediate carrier set

Use Red dots for Option

Right opening

Use Blue dots for Option Left opening

VERY IMPORTANT Using the intermediate carrier set as templates on the door edge, refer to drawings 13a or 13b to measure and mark the precise location of the pilot holes to fit the intermediate carrier set.

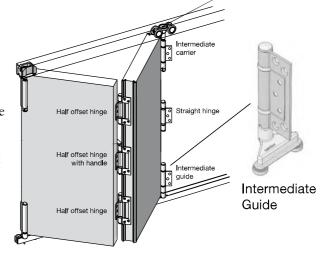
Only when you are sure the exact hole position has been correctly marked, drill pilot holes 2.5mm diameter and 20mm deep in doors 2 and 3.

Finally, fix intermediate carrier set to door 2 only.

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.

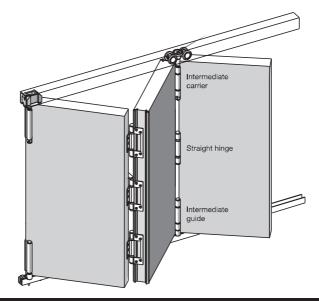
Note: Handle to inside



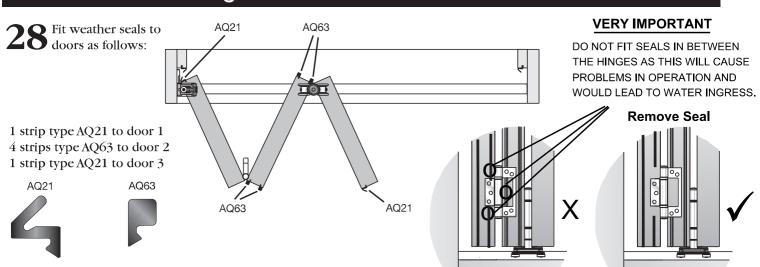
Fitting the access door (door 3)

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

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

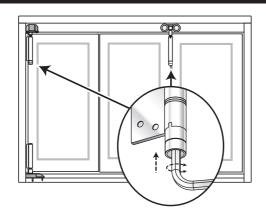


Fitting the weather seals to the doors

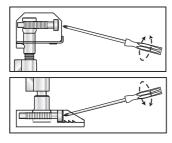


Adjusting the operation of the doors

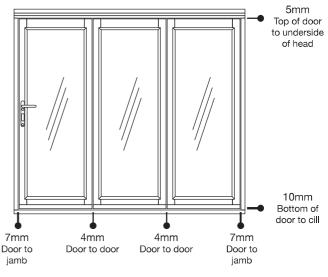
Raise or lower the height of the doors by adjusting the top pivot and intermediate carrier. Insert the Allen Key provided then turn clockwise to raise and anti clockwise to lower the doors.



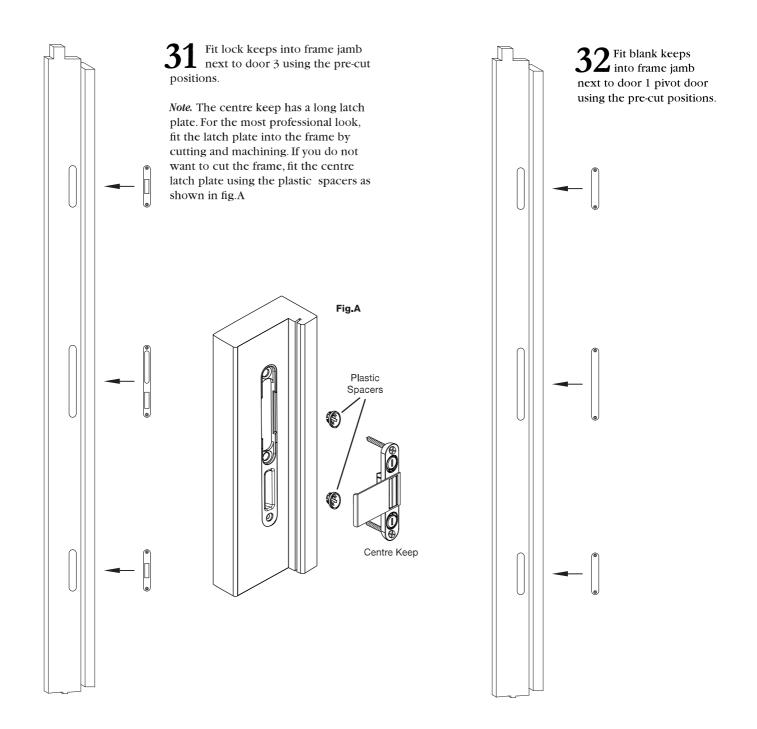
30 Adjust the top and bottom pivots to move the doors left or right.



Final adjustment, correct spacing



Fitting the lock and handle



Fitting the lock and handle continued

Due to the reversible nature of the door set (left-hand or right-hand opening), we have pre-machined the central spindle hole in the access door stile, as well as the slot for the multi-point locking mechanism along the edge of the door. However, the screw holes for the handle and the Euro Cylinder hole must be created on-site after you have determined the final handing (left or right opening) and the door is fully installed.

To assist with installation, 12mm and 22mm flat wood drill bits have been provided.

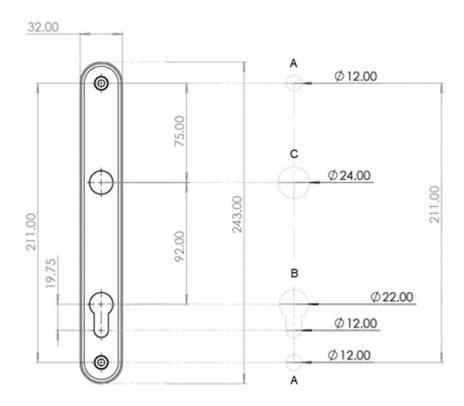
33 Handle & Lock Preparation

Refer to the diagram titled 'Handle & Lock Preparation' and follow these steps carefully:

Apply low-tack masking tape to the door surface where the handle and lock will be fitted. This helps protect the finish and allows for accurate marking.

Using the diagram as a guide, measure and mark the two handle screw holes (A) and the Euro Cylinder hole (B). The spindle hole (C) is already pre-machined.

Handle & Lock Preparation



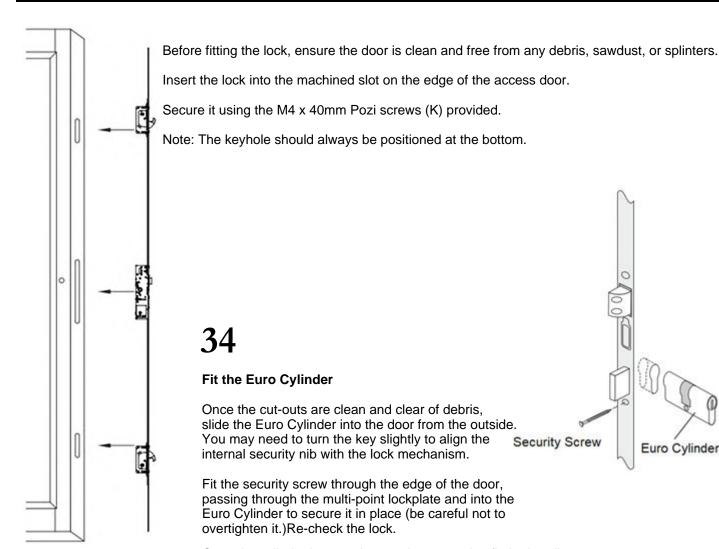
Drill the two handle screw holes (A) and the Euro Cylinder hole (B)

Note: The bottom of the cylinder hole may require light chiseling or filing to achieve a clean finish.

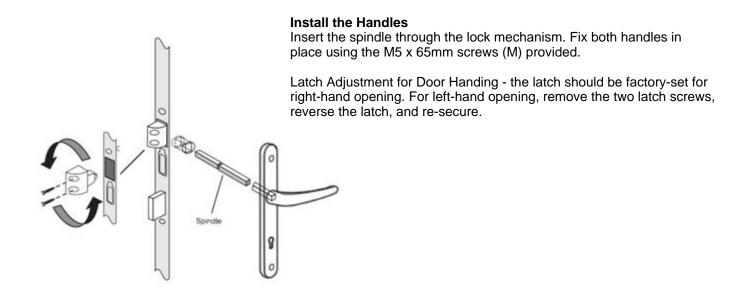
Important:

Always drill from both faces of the door to avoid splintering. Do not drill all the way through from one side or exit through the face of the door.

Fitting the lock and handle continued



Once the cylinder is seated correctly, proceed to fit the handles.

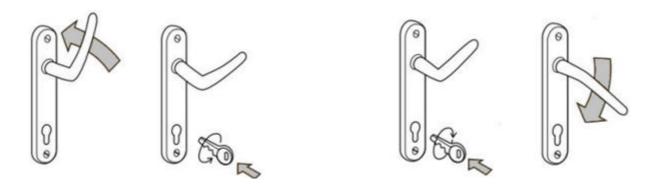


Euro Cylinder

Fitting the lock and handle continued

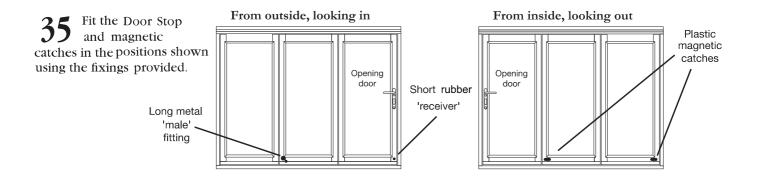
Test the Locking Mechanism

With the door in the fully open position, lift the handle fully upwards and turn the key to engage the lock. Reverse the process to ensure it unlocks smoothly.



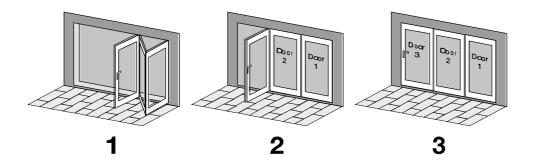
Fitting the catches to the doors

OPTIONAL EXTRAS



Operation of bifold doors

When closing the door set, first close doors 1 and 2, securing them with the dropbolts Then close and lock door 3.





Macclesfield, Cheshire SK10 2BN

DECLARATION OF CONFORMANCE

DoC No: JCI/FSD54S

Product Type: 54 Range - Timber 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 EN 14351-1:2006+A2:2016

Reference to Supporting Product Certification and/or Test

Reports (supportive of compliance):

Build Check Ltd - Weather Tightness Report W5089-1

Build Check Ltd - Thermal Performance Report CU21182-1 Rev1

Declared Performance:

Essential Characteristics Performance

Resistance to Wind Load: Class A2 (800Pa) Watertightness: Class 2A (50Pa)

Dangerous Substance: No emissions of dangerous substances emitted

Load Bearing Capacity of Safety Device: Npd
Acoustic Performance Npd

Thermal Transmittance: 1.4w/(m²K)

Radiation Properties: Npd

Air Permeability: Class 4 (600Pa)

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: 12th May 2015

Product CE Marking Detail:

CA

JCI Limited

Macclesfield. SK10 2BN

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EN 14351-1:2006+A2:2016

Timber Folding Sliding Door DoC Nº: JCI/FSD54S

Not intended for use on escape route