

RELIABILITY *for real life*[®]

OAKFOLD FOLDING SLIDING PATIO FITTING & FIXING GUIDELINES



CAUTION SAFETY: This product needs to be installed by a competent tradesperson with assistance. Two people are required to carry out the installation, as some components are heavy. The outer frame requires fixing to the supporting structure above the opening. The opening **MUST** be capable of carrying the load of the doorset in all conditions.
IMPORTANT: See notes on page 2.



SELECTION

Introduction

To enable the arrangement of doors of the Sliding Folding Patio Doorset to operate either from the left or right certain operations that determine the handing of a door leaf will need to be undertaken on site.

The stiles of the door leaves will need to be pilot drilled to suit the arrangement of the hinges and holes to receive the lock cylinder and the bottom fixing screw of the handle set will need to be added to the mortise in the stile of the locking door leaf.

Information showing the position of the hinges and the preparation to the lock mortise are given in these instructions.

Prior to receipt of the doorset you should have received an advanced information sheet advising you of the need to check that a suitable structure has been prepared to which the head track of the doorset can be fixed and that will be able to support the additional loads imposed by the door leaves. This leaflet can be down loaded from www.jeld-wen.co.uk

IMPORTANT: You should have already received a copy of the Sliding Folding Pre-Installation Information leaflet. This can be downloaded from www.jeld-wen.co.uk if required. Part M primary access compliance is only achieved if all doors leaves are opened and is dependant on the installation detail used. If in doubt consult your building designer.

All loads are taken by the head track (to ensure smooth, light operation and long life) thereby avoiding troublesome bottom track loading prone to dirt and restriction.

Prior to installing this doorset, inspect for damage and do not proceed to fit if any noticeable damage or defect is evident. This doorset should be stored in a dry flat location before installation.

1 Pack contents



Frame Fixing Pack

- 54 x 3.5 x 37 CSK Pozidrive Twinhead Woodscrew
- 14 x 7mm Brown Masonry Plugs
- 18 x 5 x 80 self drilling screw CSK Pozidrive
- 10 x 100mm Frame Fixings
- 8 x 5 x 90 CSK Pozidrive Woodscrew
- 6 x 3.5 x 25 PAN Pozidrive Woodscrew
- 10 x Brown M6 push-in cover
- 10 x White M6 push-in cover
- 14 x 147 x 17 Tie Plate
- 20 x 100 x 24 Wedge Packer (1 to 3mm, grey)
- 46 x 100 x 24 Flat Packer (3mm, white)
- 64 x 100 x 24 Flat Packer (1mm, green)

The number of components in the frame fixing pack suit the installation of a 4.2mm wide doorset. For other widths there will be excess fittings.

2 Structural opening

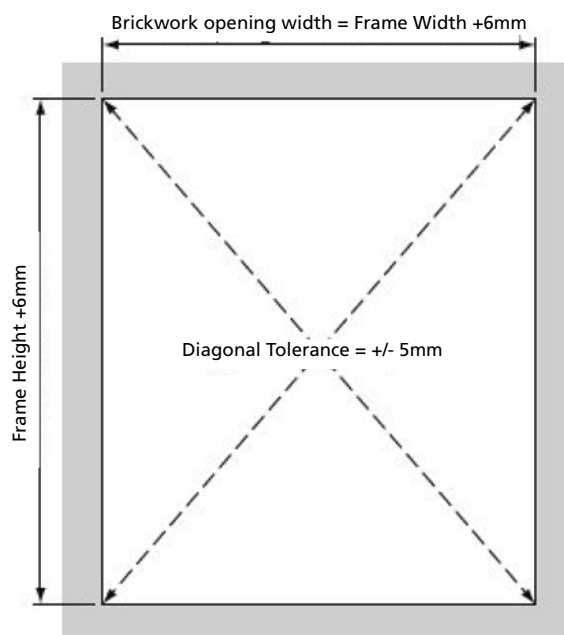
To ensure correct operation of the Sliding Folding Patio Doorset it is necessary for the top track to be fixed to a suitable structure that is capable of supporting the loads imposed by the doors, glazing and hardware. The Pre-Installation Information Sheet, that you should have already received, gives information relating to these loads.

It is recommended that the opening into which the Sliding Folding Patio Doorset is to be installed is 10mm larger in both height and width than the overall doorset sizes that are given in the table.

Module Size	Frame Width*	Frame Height*
1800mm	1794mm	2094mm
2100mm	2094mm	2094mm
2400mm	2394mm	2094mm
3000mm	2994mm	2094mm
3600mm	3594mm	2094mm
4200mm	4194mm	2094mm

Structural Opening

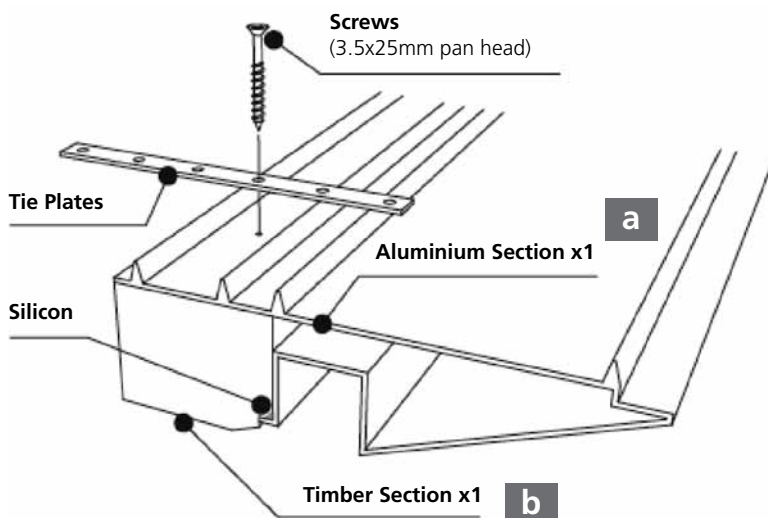
*Width and Height are actual frame sizes.



3 Preparing the sill for assembly

Prior to assembling the frame prepare each component for installation by drilling as described below.

Note: Apply a bead of silicon to the full length of the timber part (as shown) push the timber part onto the aluminium part so that it is fully home.



Note: Pilot Drill 2.5 x 25mm into underside of sill assembly, through the aluminium and into the timber, at positions 100mm, 250mm and 400mm from each end, then at no more than 400mm centres in between.

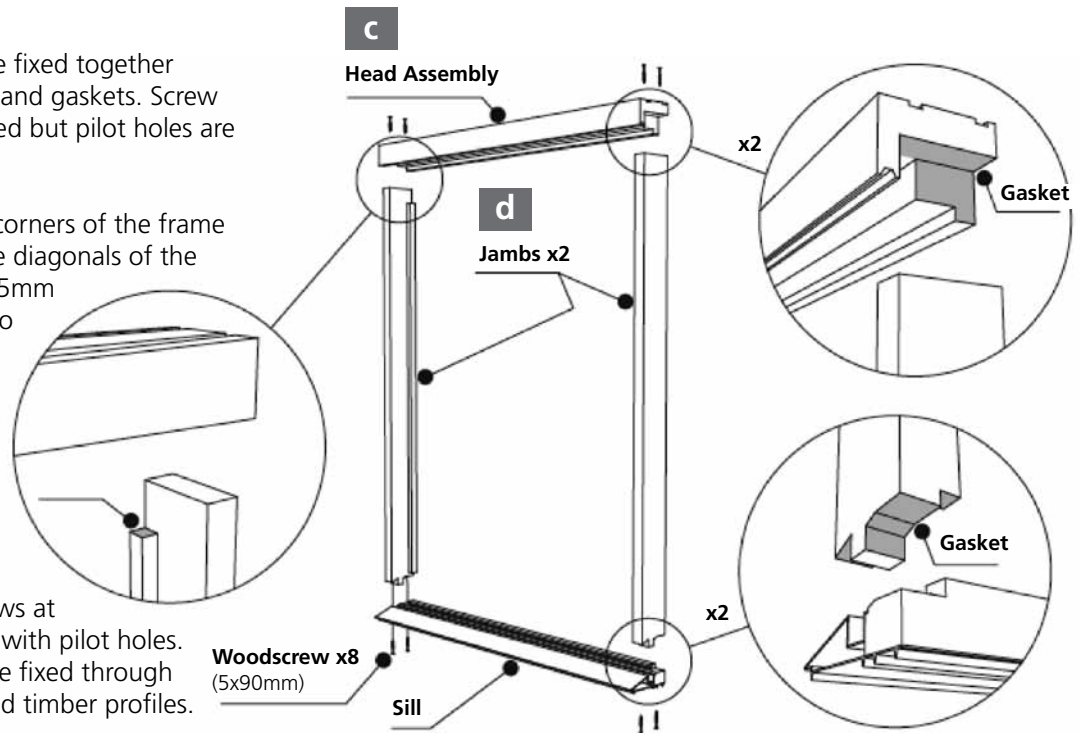
4 Frame assembly

Frame Assembly

The four assemblies are fixed together using the woodscrews and gaskets. Screw positions are pre-marked but pilot holes are required before fixing.

Note: Check that the corners of the frame are square and that the diagonals of the frame measure within 5mm of each other. If they do not, loosen the screws at the joints, adjust the frame then re-tighten the joints.

Secure the Tie Plates to the underside of the frame using the 3.5 x 37mm woodscrews at the positions prepared with pilot holes. Ensure the tie plates are fixed through both the aluminium and timber profiles.



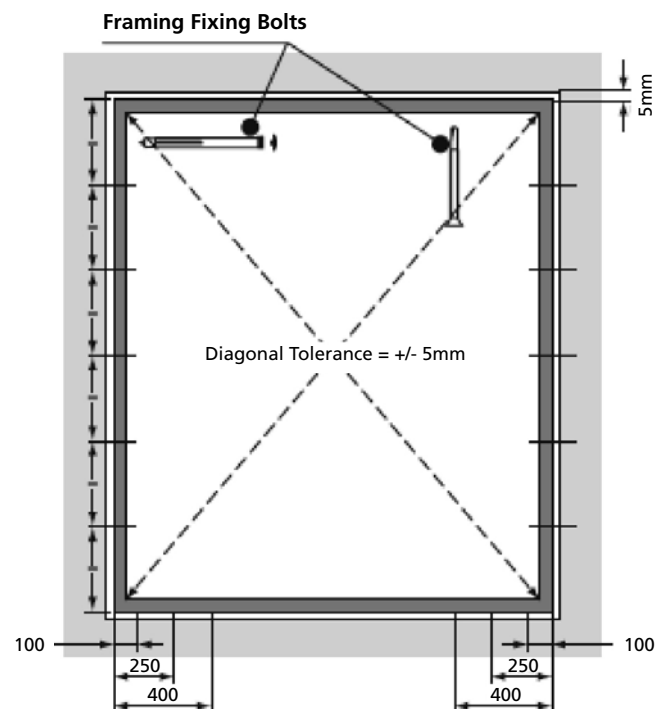
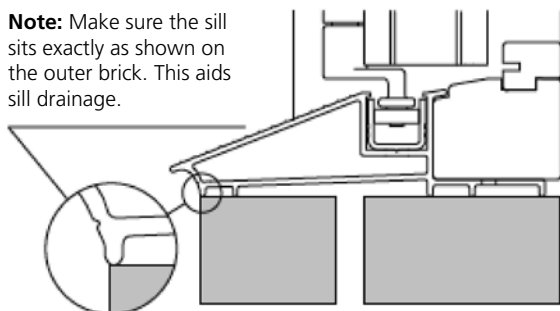
5 Fixing frame in opening

Fixing Frame in Opening

Offer the frame into the structural opening and adjust its position to ensure that the fixing holes in the head track are in the correct position to match the supporting structure (i.e. in the centre of the external flange of a lintel). Also, make sure the sill sits exactly in the brick opening as shown below.

Note: Jamb fixing points may be hidden behind keep or blanking plates.

Note: Make sure the sill sits exactly as shown on the outer brick. This aids sill drainage.



Pre-drilling

All fixings to lintel are essential and must be completed before doors are fitted.

Once the position of the frame is correct, pre-drill the lintel with a 4mm diameter hole using the prepared holes in the head track as a guide. Remove the frame head, from this position, to allow pre-drilling of any masonry above the lintel.

The masonry will need to be drilled through the 4mm holes in the lintel to a depth of at least 40mm to receive the length of the fixing screw that passes through the head track into the lintel.

Locating the Frame

When the position of the frame is correct place 5mm of packing above each jamb between the head and the top of the structural opening then place packers below the sill until the head packers are tight. Using a spirit level, check that the head and sill are level, make adjustments as necessary, then pack at each of the sill fixing points ensuring that the sill remains level.

Use the spirit-level to check that the jambs are vertical. Position packers at each of the jamb fixing points ensuring that the diagonals of the frame remain within 5mm of each other.

Fixing Jambs

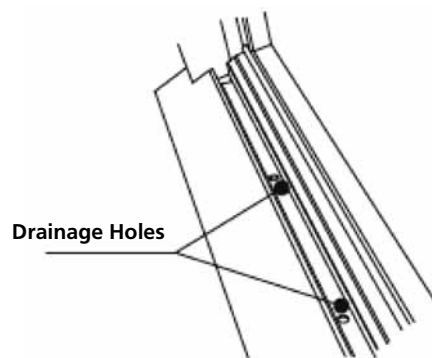
While the frame is temporarily secured by the packers, and ensuring the frame is not knocked out of position, drill 8mm

diameter holes 70mm into the structure either side of the frame, we recommend five fixings equal distance apart on the length of the jamb. Insert the frame fixing bolts through the jambs and into the structure and tighten ensuring the jambs are not distorted.

Fixing the Sill

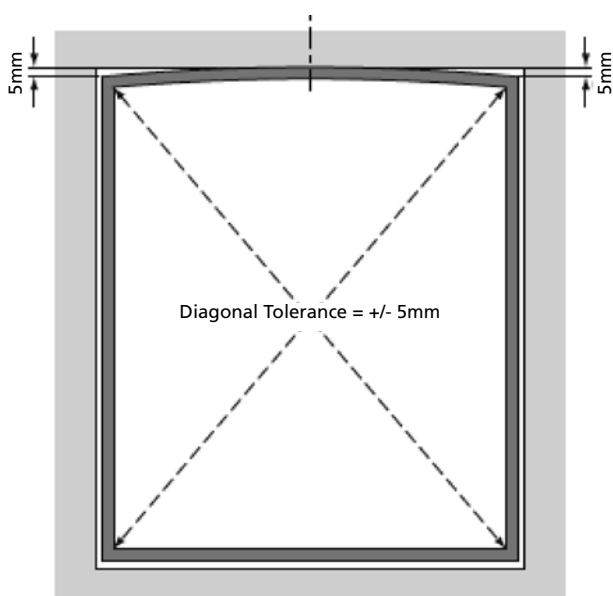
For each of the sill ties locate a suitable fixing point and drill for the 7mm masonry plug then fix the sill ties using the plugs and the remaining 3.5 x 37 woodscrews.

DO NOT secure the sill by inserting screws through the drainage holes located in the bottom track.



Check once more, that the jambs are vertical, that the head and sill are level and that the diagonals are within 5mm of each other.

6 Fixing the head



In order to produce a camber in the head track as shown opposite the fixings to the head need to be fitted in stages reducing the gap between the head and the supporting structure at each stage.

Starting with the two outer fixings offer up the fixing screw and tighten until it is just pulling. **DO NOT FULLY TIGHTEN AT THIS STAGE.**

At a central fixing point lightly tighten a screw until the head is pulling close to the lintel.

Working from the jambs inwards lightly tighten screws varying the thickness of packing between the head and the lintel creating a slight upwards curve to the head varying from approximately 5mm at each jamb to zero in the middle.

Once the correct curve of the head has been achieved tighten the fixing screws. **DO NOT OVERTIGHTEN.**

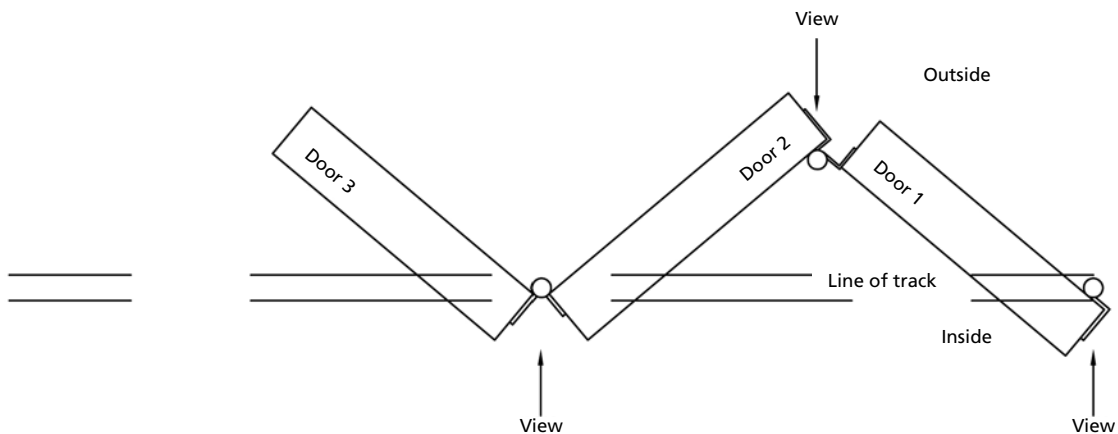
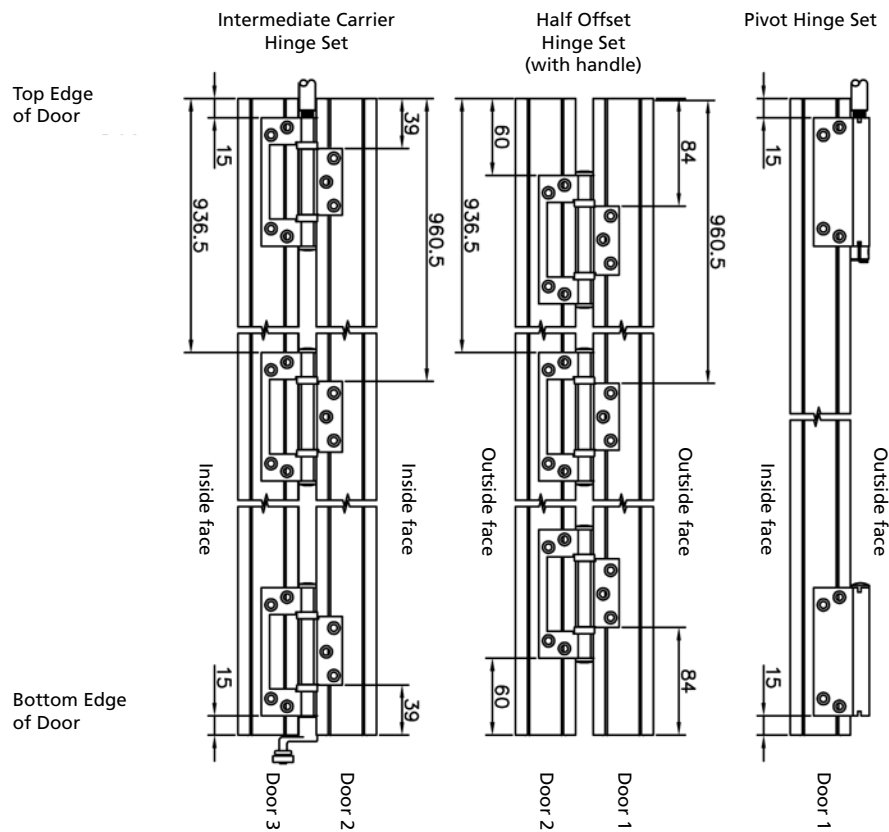
7 Preparing the doors ready to receive the hinges

When the glazing is beaded, the beads should be facing towards the inside of the building.

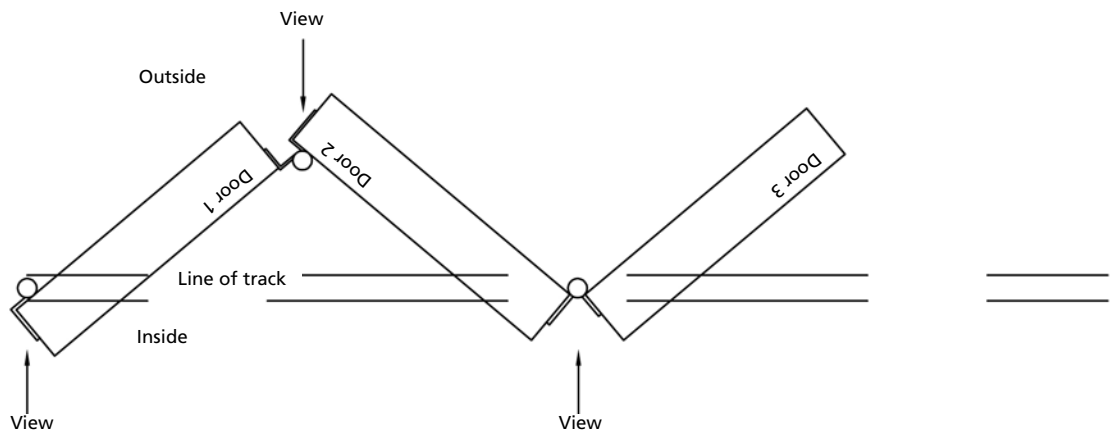
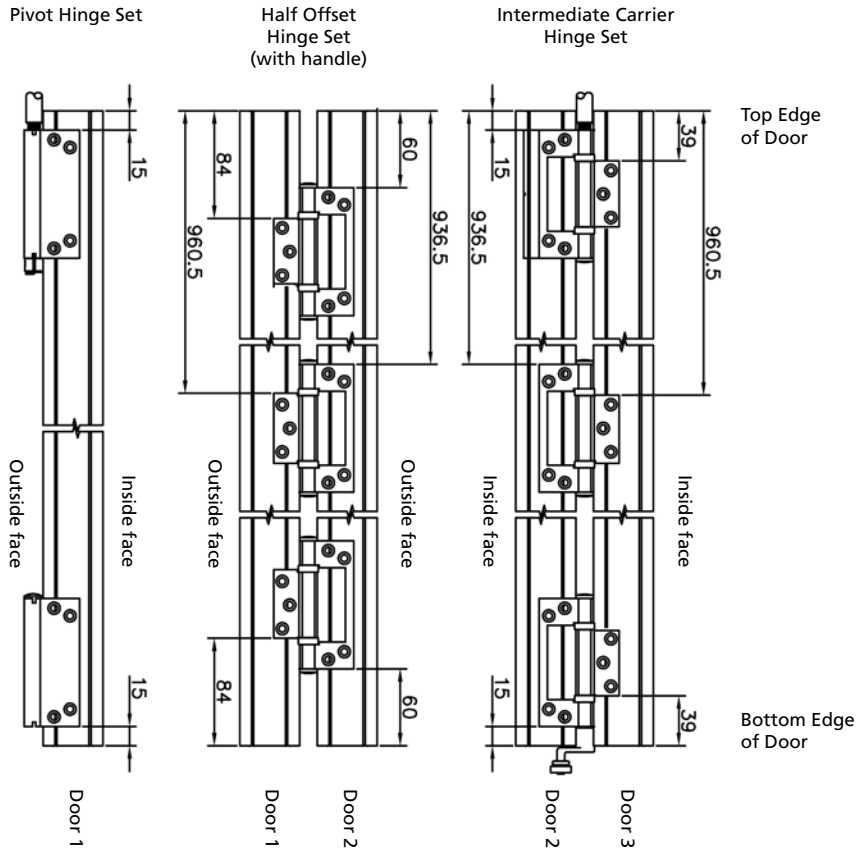
Note: The edges of the door leaves will need to be pilot drilled in preparation for the hinges to be fitted. Using the hinges as a template, position the hinge as shown in the relevant diagram and drill a hole 3.0mm diameter and 30mm deep. Ensure that the knuckle of the hinge is pressed firmly against the correct face of the door.

Ensure flat hinges and cranked hinges are not mixed on the same door edge.

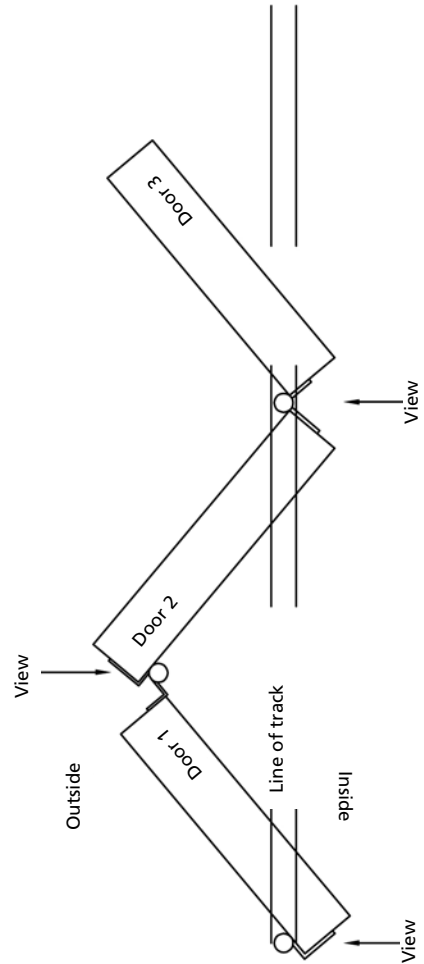
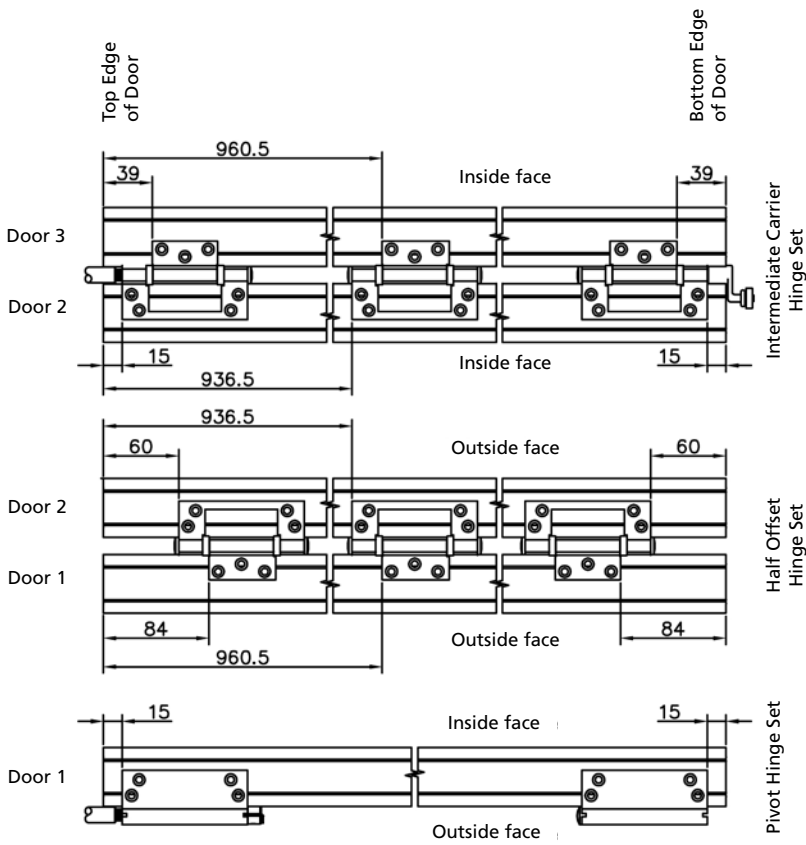
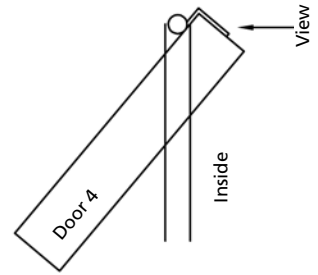
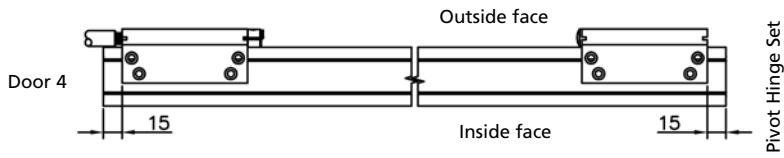
3L



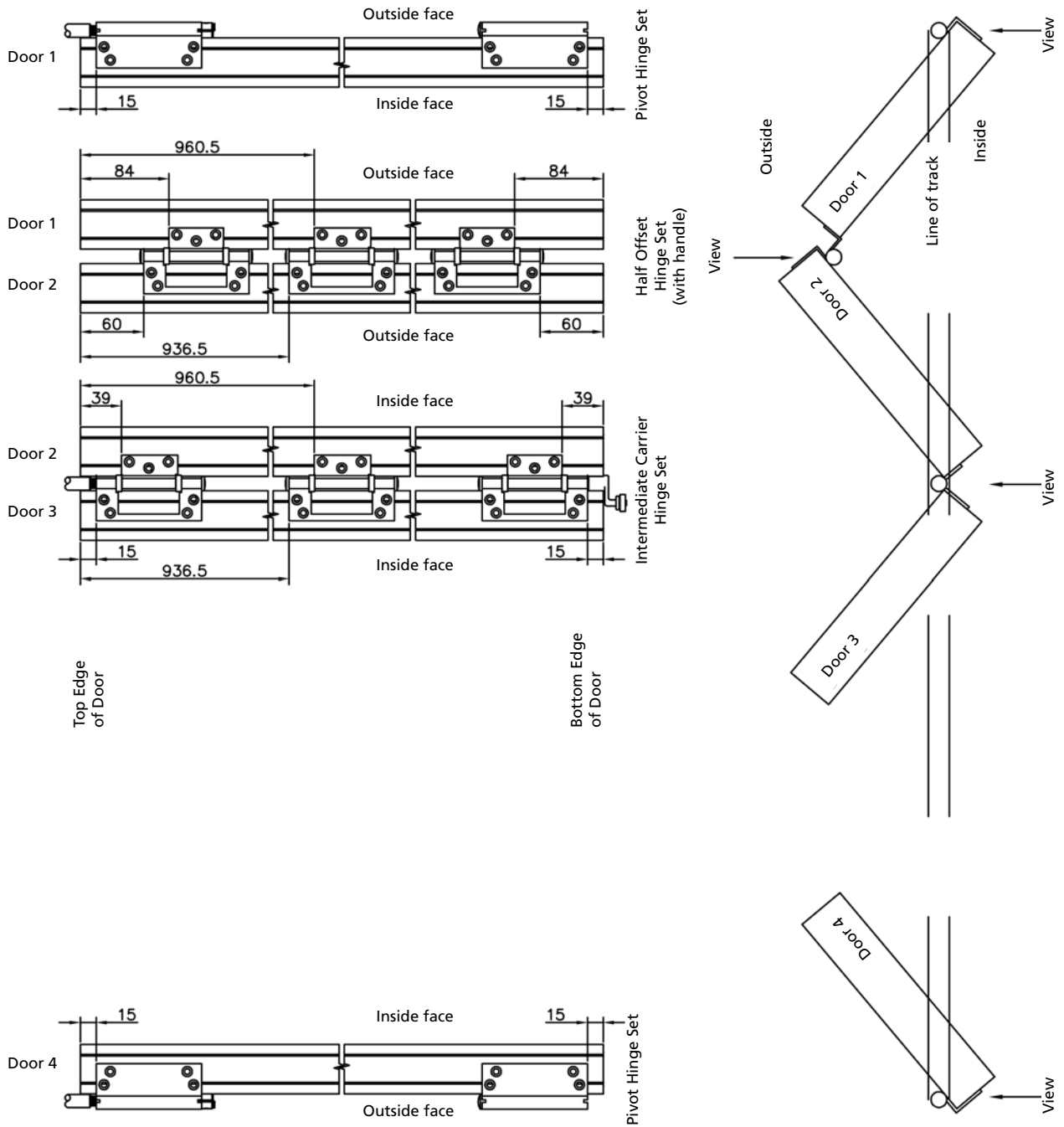
3R



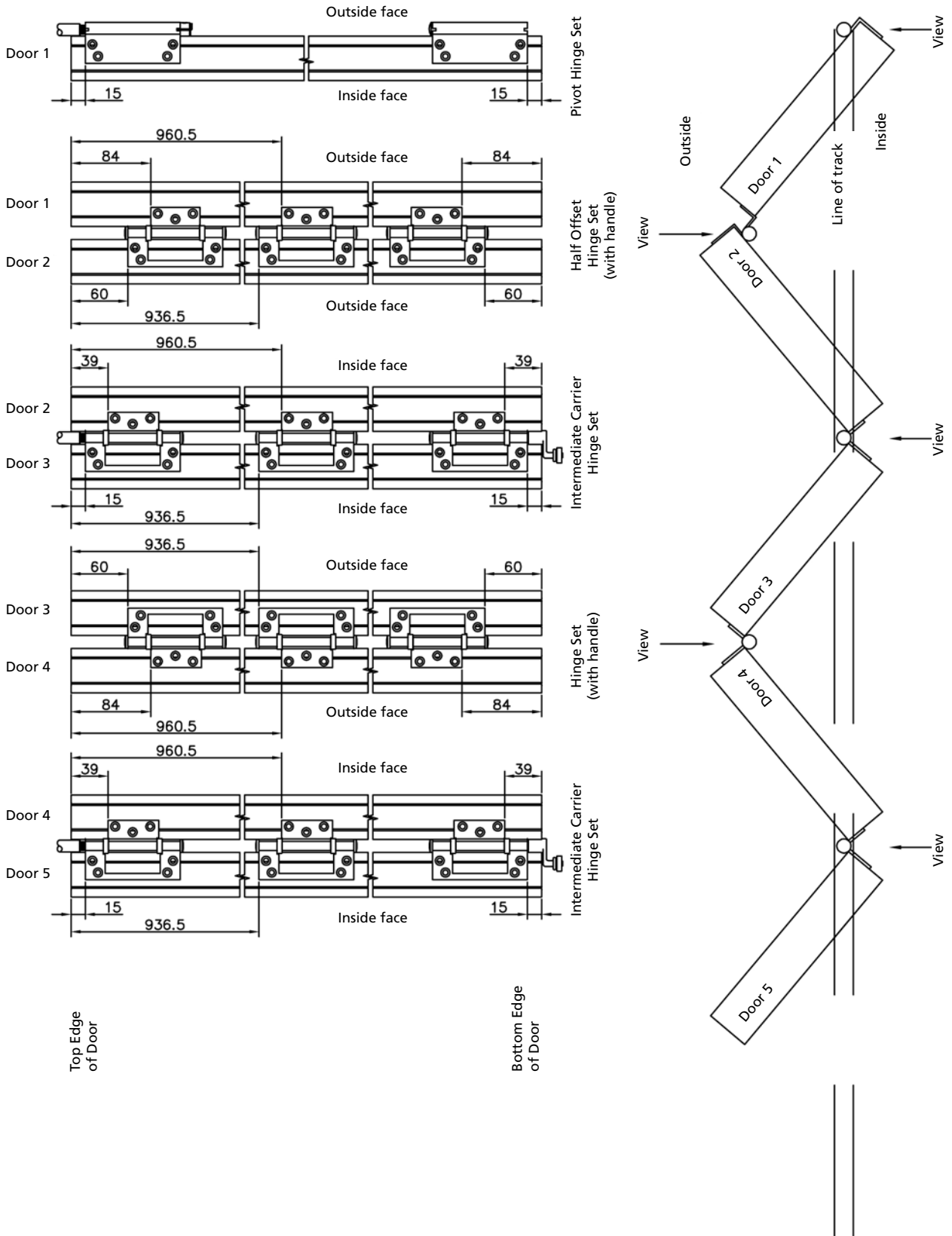
1L3R



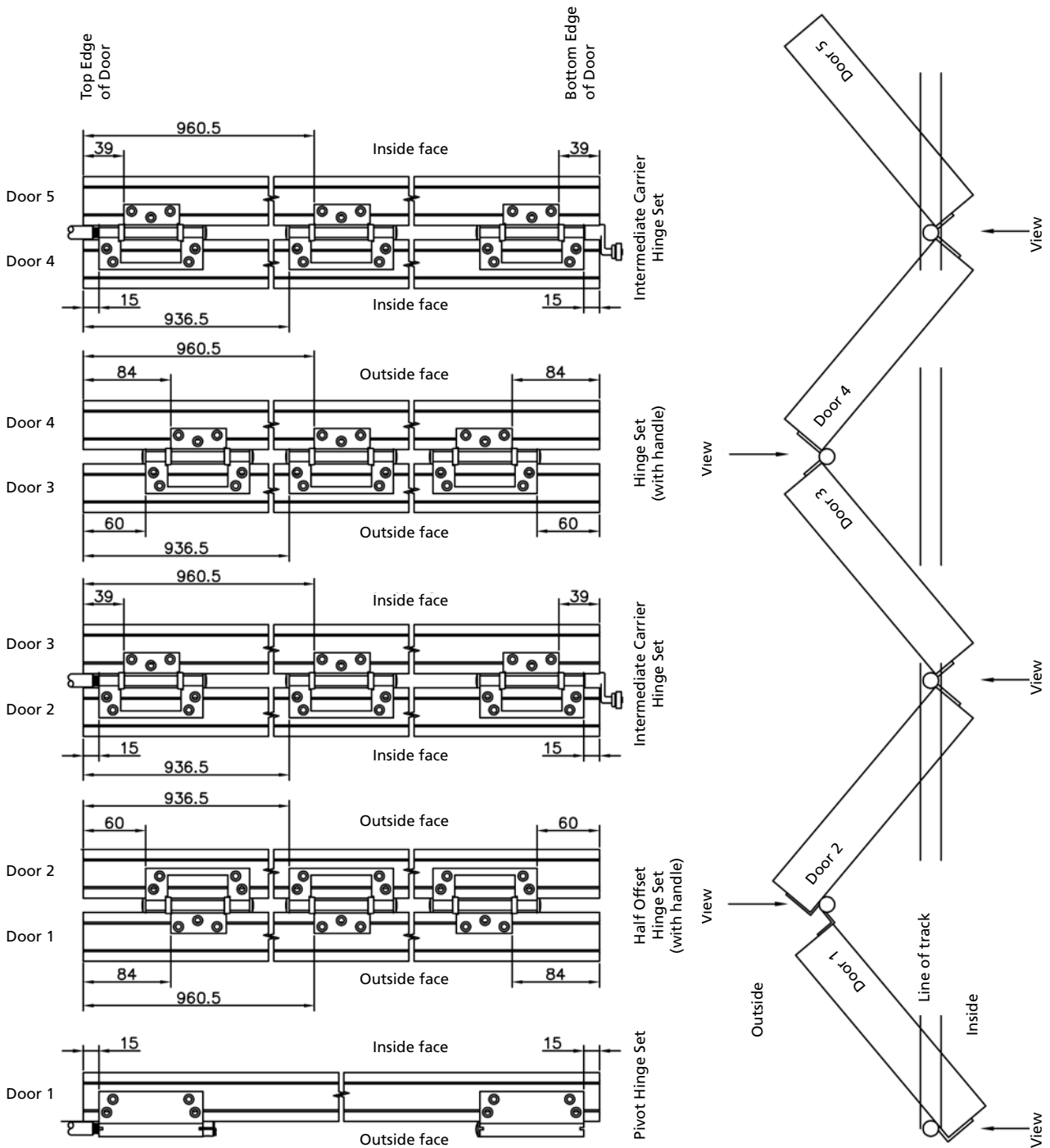
3L1R



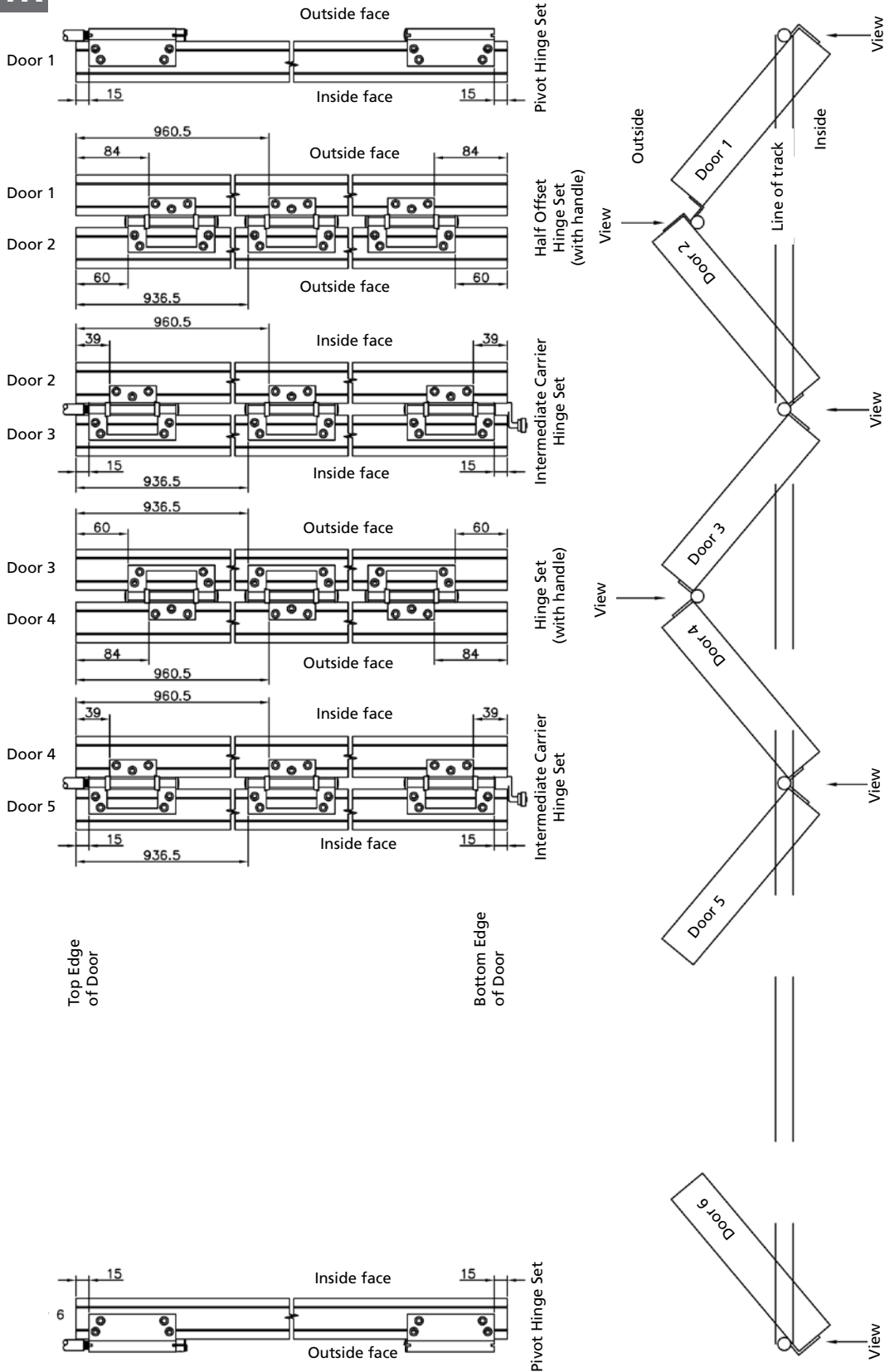
5L



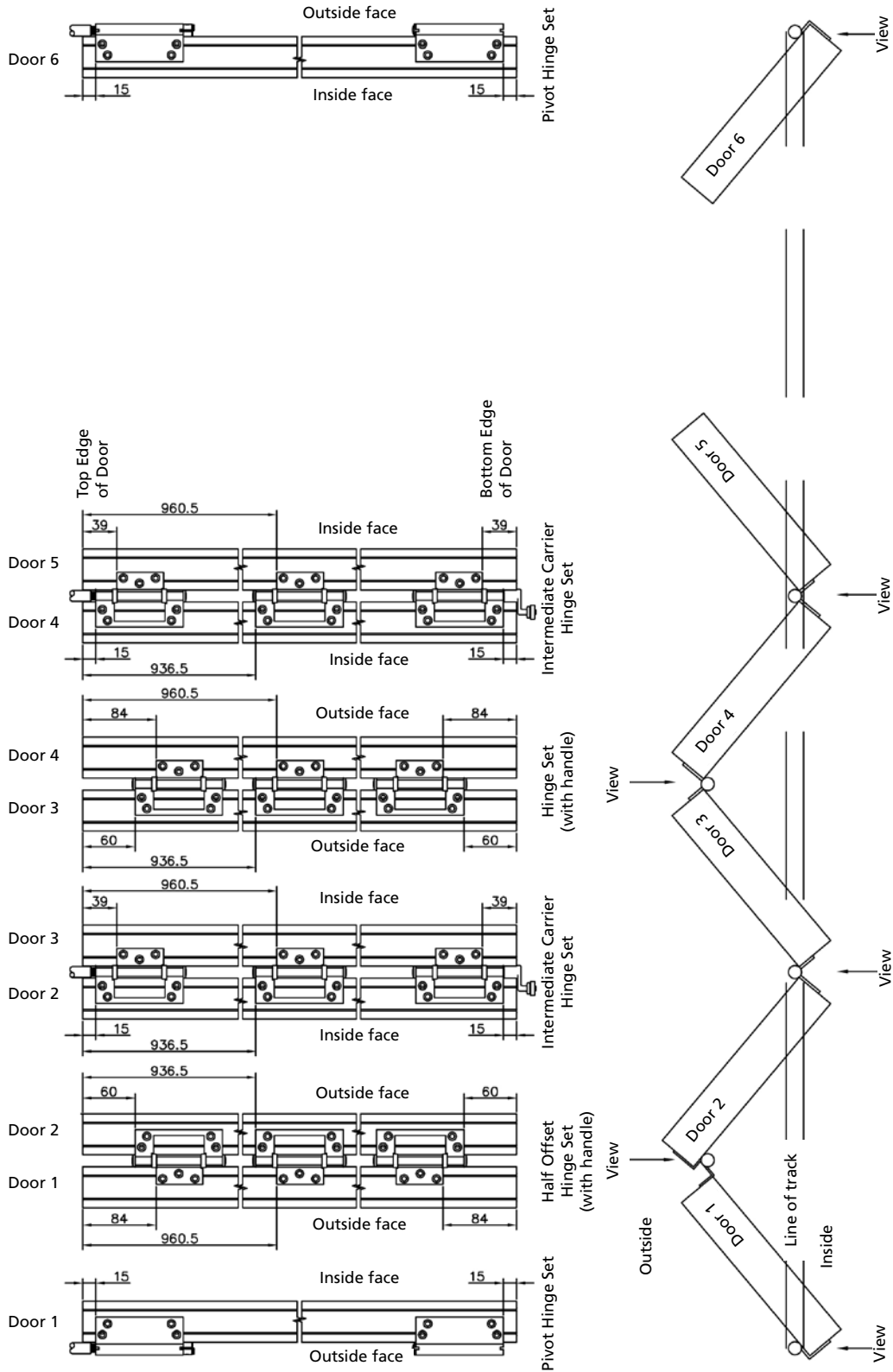
5R



5L1R

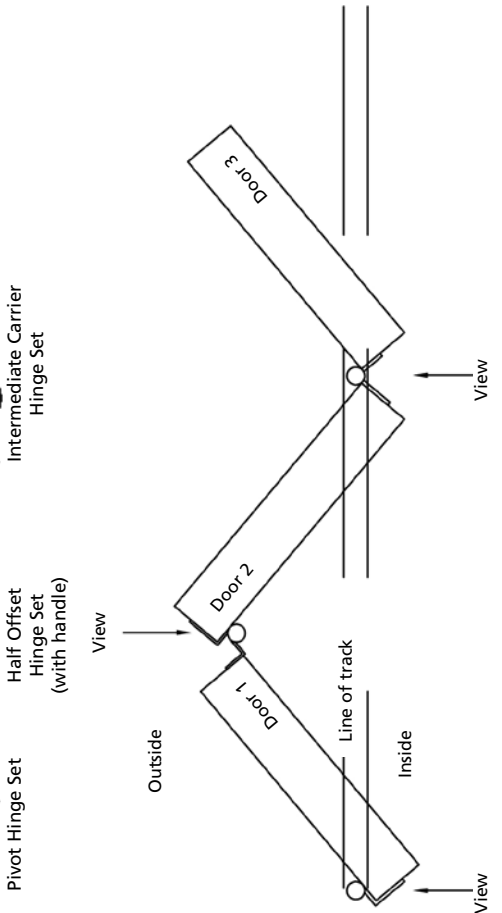
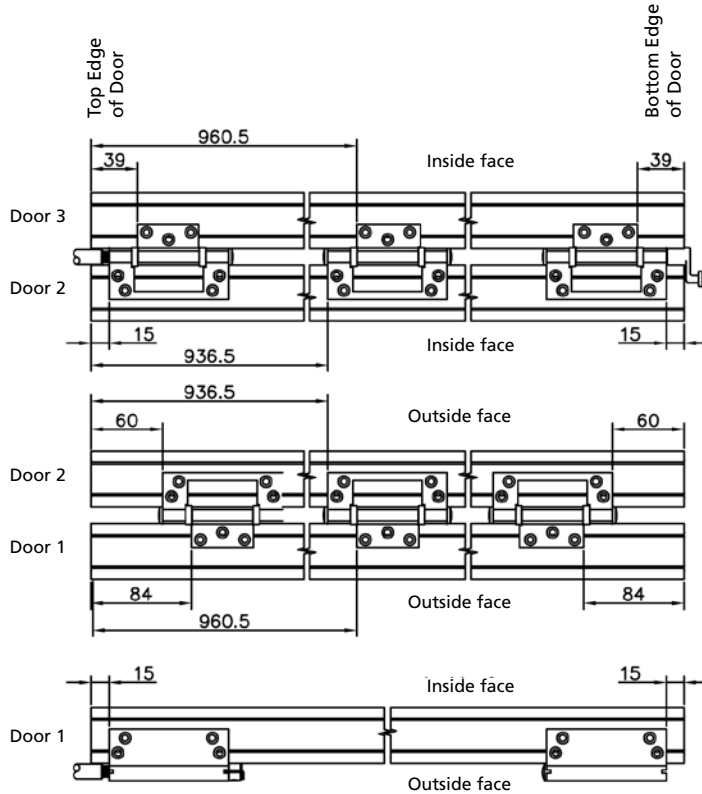
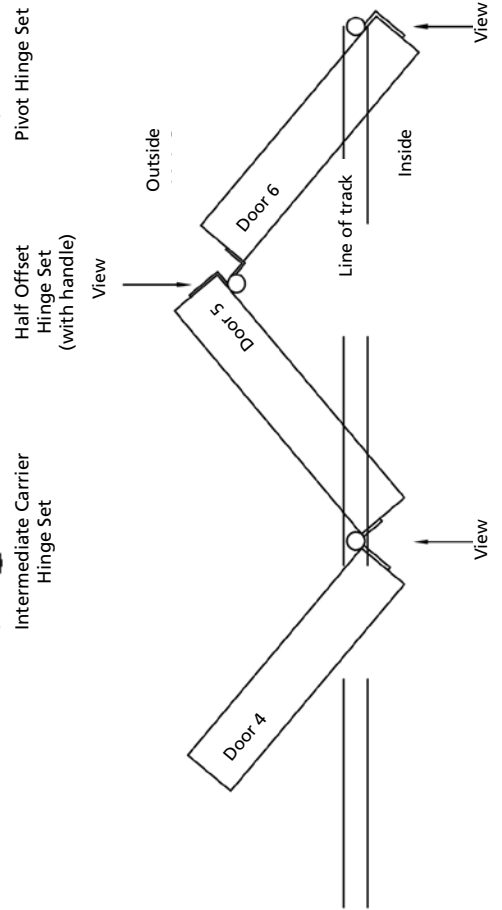
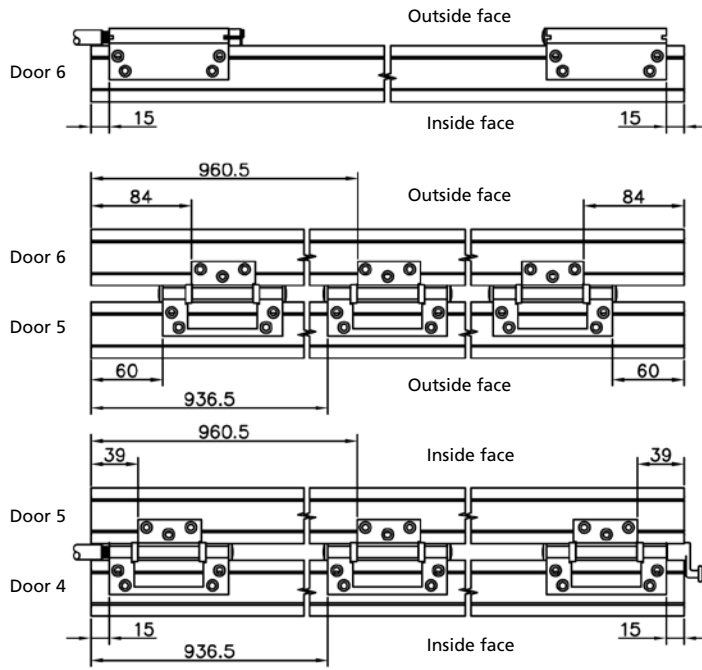


1L5R



Outside

3L3R

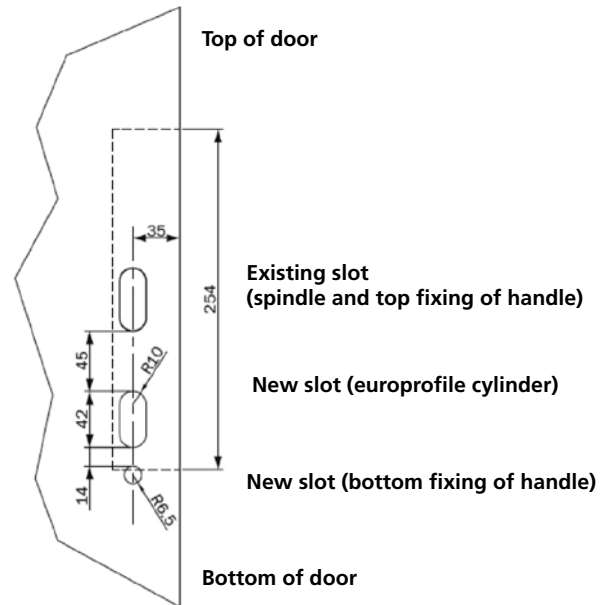


8 Fitting the multipoint Lock

The door leaf that is to receive the multipoint lock is mortised and machined for the face plate of the lock.

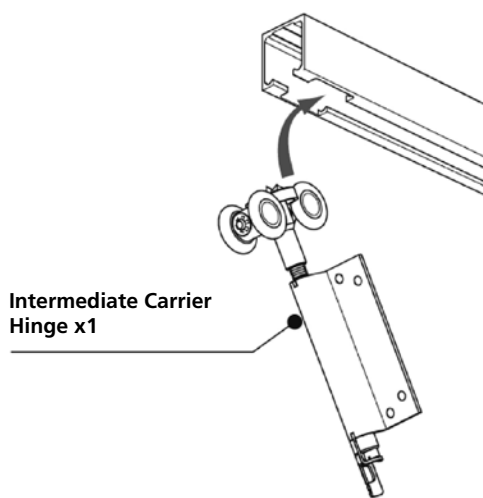
Once the handling of the door is determined and therefore the top and bottom edges of the doors are established, additional holes need to be prepared through the central mortise as shown on the diagram below.

The multipoint lock is fitted into the machined edge of the door, positioned to match the newly prepared holes in the central mortise. It may be useful to loosely fit the handles, spindle and euro-cylinder to locate the lock accurately (see section 12). Pilot drill each fixing position in the face-plate of the lock with holes of 3.0mm diameter and 30mm deep. Secure the lock with the 3.5 x 37mm woodscrews.

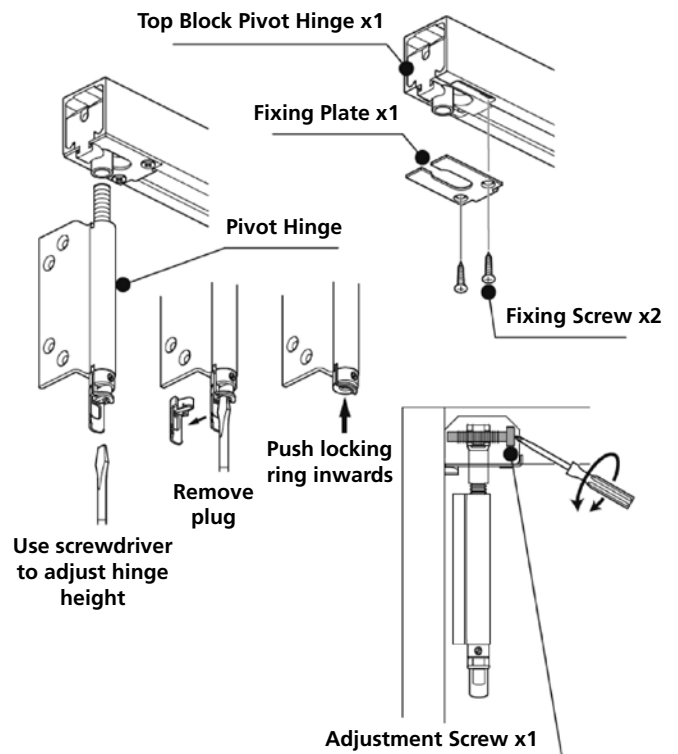


9 Fitting the carrier & pivot pings

In preparation for hanging the door leaves, the intermediate carrier hinge needs to be fitted into the top track first via the cut-outs that can be at one or both ends of the top track.

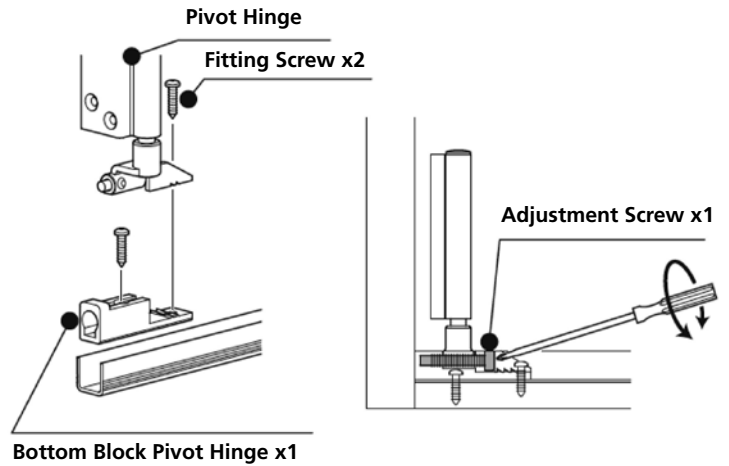


The top block for the pivot hinge is to be positioned next, so that the adjustment screw can be accessed after the doors are fitted as shown in the diagrams below.



10 Pivot hinge location

The bottom block for the pivot hinge is to be positioned next, so that the adjustment screw can be accessed after the doors are fitted as shown in the diagrams opposite.



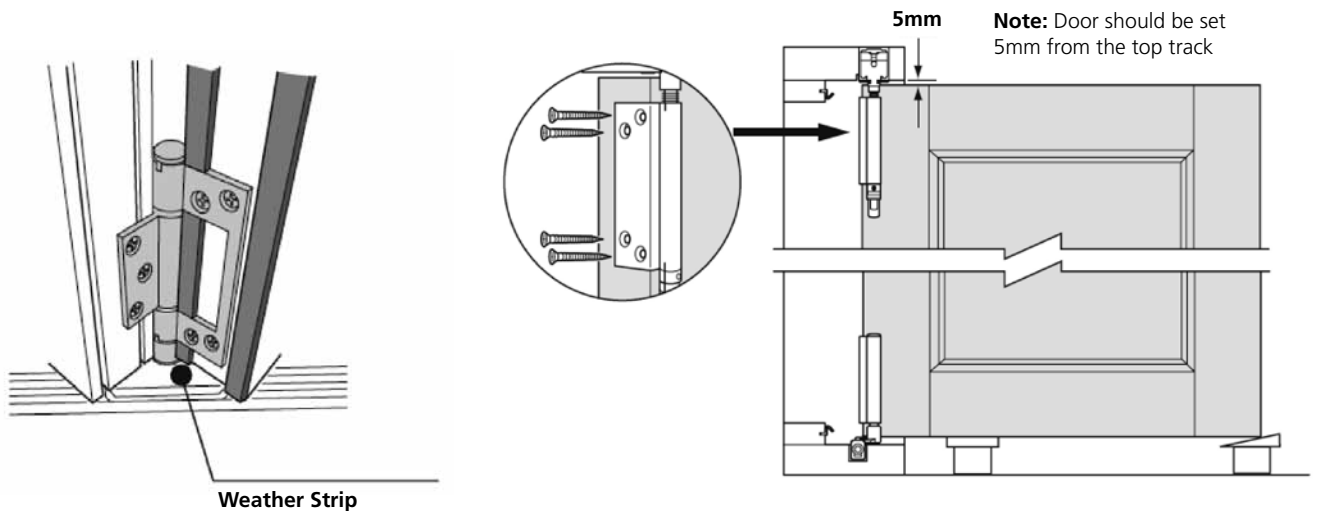
11 Hanging the doors

Doors should be fitted to the pivot hinges first. Use the prepared holes to fix the hinge (screws are provided in the hinge pack).

Where a hinge obstructs the weather strip, cut the weather strip around the hinge. The hinges must not have weather strip trapped beneath them. The seal fitted to the pivot door should be fitted in the groove adjacent to the hinges.

Adjust the top and bottom pivot hinges to ensure the door is vertical and set 5mm from the top track.

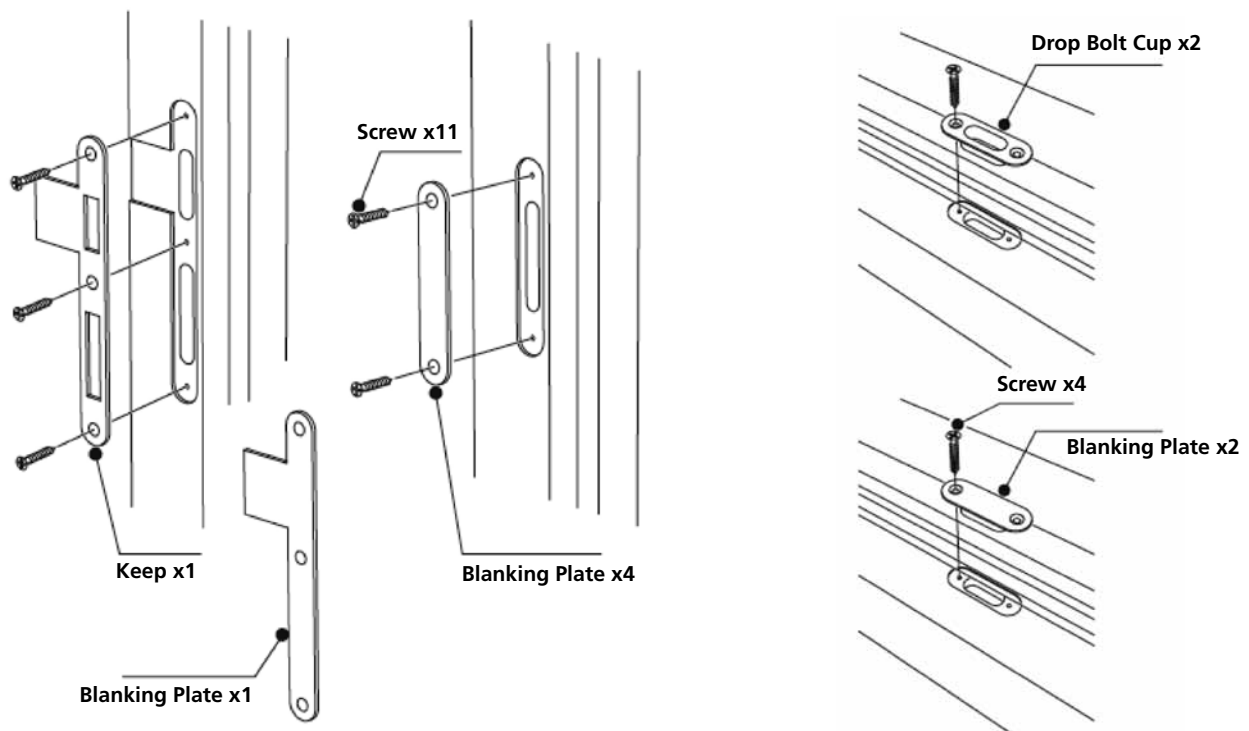
***Always hang doors in sequence as section 7 drawings**



12 Fitting the keeps & blanking plates

To complete the frame installation fit the dropbolt cups, keeps and blanking plates as the positions shown on the arrangement sheet for your doorset.

Note: These doors are handed, use blanking plates on the jambs where necessary.



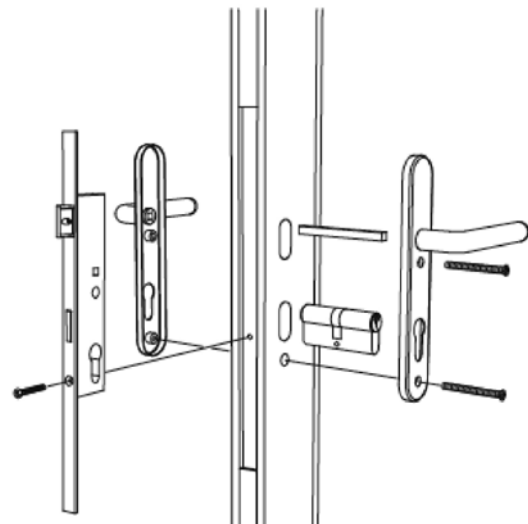
13 Fitting of handles

Note: For the correct operation of the lock, the latch may need to be reversed of the lock.

- Release the screw holding the latch
- Remove the latch, reverse and replace
- Refit the holding screw

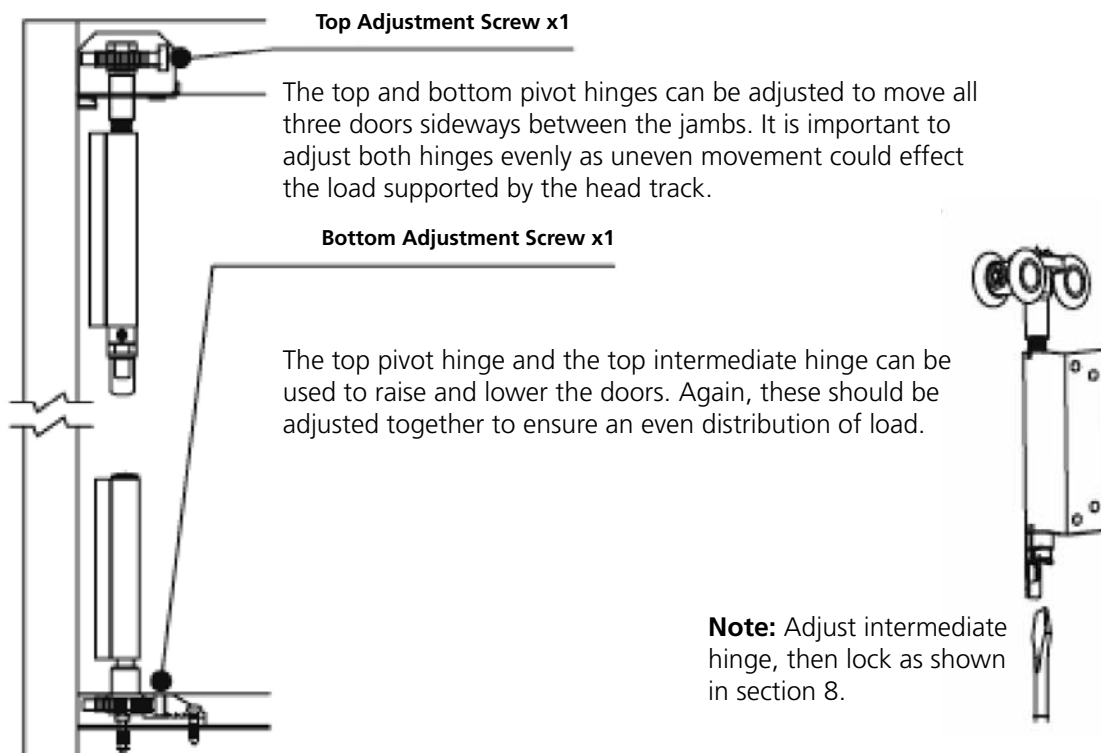
Note: These doors are handed, use blanking plates on the jambs where necessary.

Screws for handles and lock cylinder may need to be cut to the correct length.



14 Adjusting the doors

Adjustments can be made to the top and bottom pivot hinges and to the top intermediate carrier hinge located in the head track.

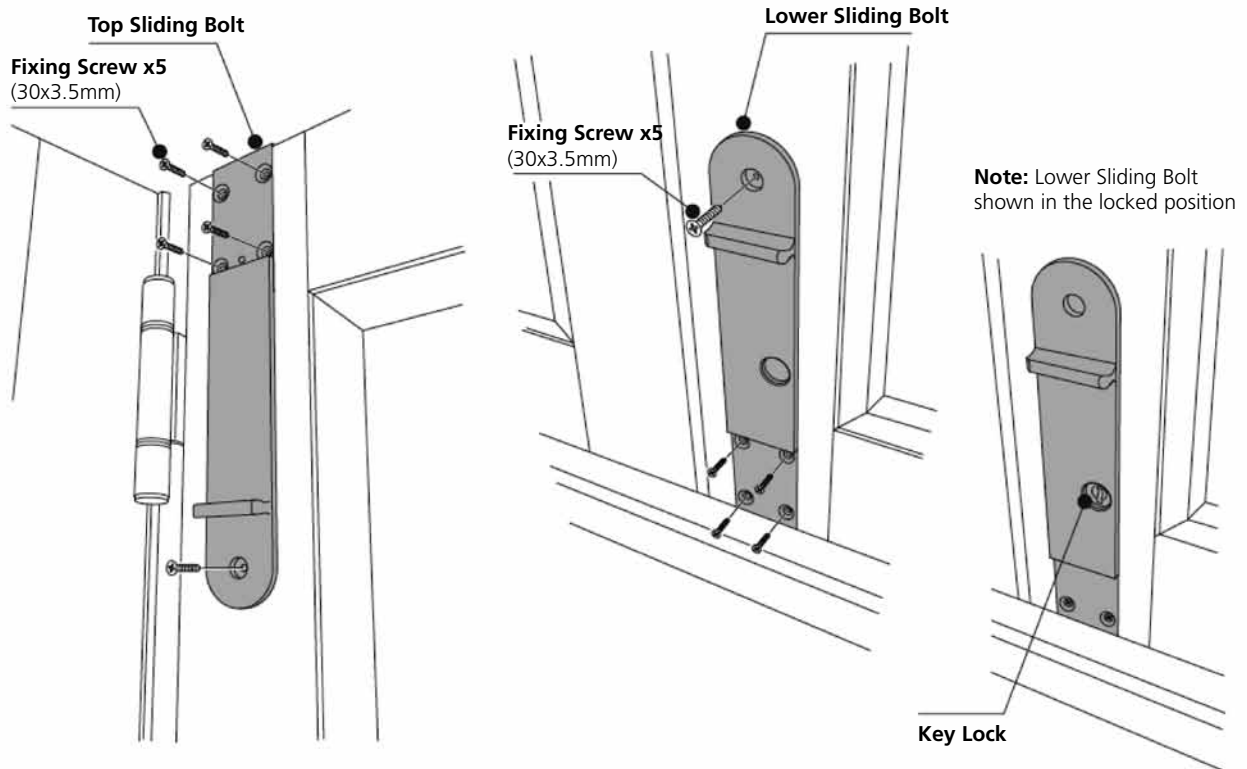


The doors should be adjusted so that there is an even gap at the head, sill and jambs. The nominal clearance at the head and sill is 5mm and that at the jambs is 8mm. If movement of the timber has occurred creating clearances greater than the target dimensions the gap at the multipoint lock should be altered by adjusting the pivot hinge(s) so that the latch engages correctly.

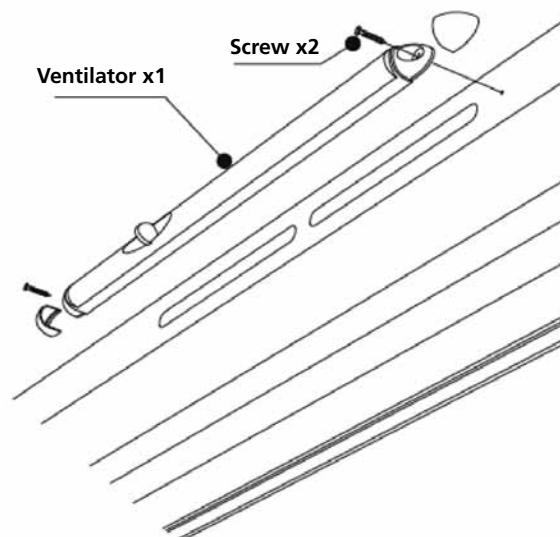
This may create a clearance at the pivot hinge greater than 8mm but this will be accommodated by the weather strips on the stile and jambs.

15 Fitting the sliding bolts

There are 2 types of sliding bolts. Top Sliding Bolt and the Lower Sliding Bolt (which has the key lock).



16 Fitting the ventilator



17 Finishing & maintenance

Finishing

After finishing the installation of your doorset, check that all the fixings are secure, all the specified dimensions are achieved and seals correctly fitted. This is vital for proper operation and long life of your Patio doorset.

Factory finished product requires no further decoration other than touching up damage that may have occurred during installation, unfinished patios must be primed or sealed immediately after delivery/ collection and **prior** to installation. This should be carried out in dry weather conditions. All faces and edges should be suitably sealed immediately after un-wrapping. Before priming or sealing lightly sand off any handling marks and variations caused by exposure and ensure the surface is dust free. Microporous paints and medium or high build wood stains are recommended for all exterior products. The manufacturer's instructions should be followed. 'Low Build' stains, varnishes, Danish Oil or any other finishes should **not** be used. Pigmented translucent finishes generally perform much better than clear. It is recommended that dark coloured stains or paint should be avoided if the doorset is exposed to the full heat of the sun, particularly on south or south west elevations. Dark finishes increase surface temperatures and cause excessive drying out; this can lead to surface deterioration requiring more regular maintenance.

Maintenance

These 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.

Automatic Closers and Operators

All Door Hardware systems supplied are designed for manual operation only.

Hardware

Handles, hinges and bearings in buildings are subject to deterioration from everyday use, and also from 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. JELD-WEN UK Ltd requires the following minimum maintenance to be followed otherwise the warranty shall be void.

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 a light machine oil or one of the corrosion preventative sprays 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.

Track and Bearings

Using a spatula or similar item (not your finger), apply a small amount (typically a 1/4 teaspoon) of white petroleum jelly (Vaseline) or similar lubricant to the inner lip of each side of the top track. Ensure that the wheels pass through the lubricant and it is distributed evenly along the track. Put additional lubricant around bearings. Lubricant reduces wear, improves smoothness and further protects against corrosion of track and bearings. Remove all surface contaminants by wiping all visible track surfaces with a damp soft cloth and a mild detergent, then wipe clean with a clean cloth. In severe environments, apply a thin film of a corrosion preventative by wiping with a soft cloth moistened with one of corrosion preventative products. Stainless-steel bearings are manufactured from hardening-grade stainless steel and although this material performs considerably better than plated steels, it is still susceptible to corrosion unless maintained as described above.

Hangers, Pivots and Brackets

A light spray application of a corrosion preventative 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 down with warm soapy water and a soft rag, and then rinsed clean before applying preventative.

Dropbolts

Spray application of a suitable lubricant 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 dropbolt products so that this can be done without removing the locks from the doors.

Handles

Refer to leaflet in box.

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 environments 6 monthly
- Marine and industrial environments 3 monthly

Regular maintenance is required to all hardware, even stainless steel; otherwise the manufacturer's warranty may be voided.

18 Guarantees

In keeping with our quality policy, JELD-WEN offers the following guarantees on its products. These guarantees are subject to JELD-WEN UK Terms and Conditions of Sale. Defects that are caused in whole or in part by failure to adhere to JELD-WEN UK recommendations relating to storage, handling, installation, decoration, glazing and maintenance, are not covered by the guarantees below:



Exceptional wear and tear of hardware through extreme use is not covered. JELD-WEN will accept no responsibility for products cut down in size after receipt, or when utility or structural strength is impaired in fitting or application of hardware.

Hinges, aluminium rails and other hardware fitted must never be painted, and must be kept clean and lightly lubricated at all times. Use Vaseline or neutral oil. Keep rivets and moving parts lightly lubricated. Lubricate at least once a year, in coastal areas and/or places with high pollution, clean and lubricate more often.

All joinery shall be installed correctly in accordance with normal trade practices and adequately maintained in service.

The decorative finish applied to external joinery must be maintained in service and moisture must not be allowed to penetrate into the timber throughout its life.

Regular maintenance of the paint or stain finish of the product is essential for the long-term performance of all the components of your patio doorset. The period between maintenance checks will vary depending on the type of paint or stain finish and also the local conditions for the site. External joinery products must be cleaned at a maximum of six monthly intervals using a mild non-abrasive cleaner and soft cloth. Both internal and exterior faces should be cleaned.

Make regular checks to ensure that any drainage holes, channels and spaces are kept clear. Use a soft flexible brush or pipe cleaner with care to remove obstructions.

Finished joinery is guaranteed for 2 years against blistering, cracking, flaking or erosion excluding natural resin exudation and movement around knots. Annual inspection should be made and touching up carried out as necessary in areas of wear and tear (for example, exposed areas of sills or where the paint film has been breached).

Guarantees to the finished product are also on condition that:

- No physical or chemical damage to the doorset or coating has occurred
- No repairs or alterations to the surrounding buildings have occurred which are detrimental to the joinery performance.
- No failure of the coating has occurred caused by failure of ancillary products, or glazing.
- No damage to the coatings has occurred prior to, or during, installation.
- No damage to the coating has occurred, caused by bad maintenance of the building or poor design of the building.

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WINDOWS & DOORS

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