

OAKFOLD & WELLINGTON FRENCH PATIO DOORSET FITTING & FIXING GUIDELINES



CAUTION SAFETY: Doorsets are heavy and may be hazardous. Great care **MUST** be taken to avoid injury during manual handling and particular precautions are required when working at height. The following instructions and recommendations should be followed. Failure to do so may affect the guarantee and the long term performance of the window and glazing.

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IMPORTANT:

Installation of these patio doorsets should be carried out by a minimum of two people.

Prior to installing this doorset please ensure you have carefully inspected each package. In the unlikely event you discover any damage or defect do not proceed to fit until you have notified JELD-WEN (0845 122 2893 option 3).

This doorset and all its components should be stored in a dry flat location prior to and during installation.

Introduction

Thank you for purchasing a French patio doorset from JELD-WEN.

Wherever possible all machining has been completed for you, however there are certain operations you will need to undertake once you have determined which handing you require. Door leaves will need to be pilot drilled for the hinges as well as routing out to receive the lock cylinder and handle set.

Information showing the position of the hinges and lock are contained within these instructions.

Depending on the product you have purchased i.e. Factory finished or unfinished, varying levels of additional finishing may be required. Where additional machining has been carried out all untreated surfaces should be suitably decorated. **Unfinished products should be fully decorated prior to installation. Please now refer to pages 3 & 4 for more information.**



JELD-WEN factory glazed windows and external doorsets have been CE marked as directed under European law. Each product is labelled and full Declaration of Performance can be downloaded from www.jeld-wen.co.uk

1 Patio Doorsets Fitting, Finishing and Care Instructions

Please also refer to Section 18

Unfinished, Patio Doorsets

These doors are manufactured using an engineered construction with veneered faces for greater stability. The timber used is a natural sustainable product, and if not correctly decorated is subject to changes caused by variation in humidity and temperature. If these doors are exposed to these changes without the correct decoration, movement or distortion such as swelling, shrinking, warping or splitting will occur. Warp in the plane of the door will only be considered a defect if it exceeds 6mm when measured, as deviation from a straight edge on the suspected concave surface of the door in its installed position.

Oakfold patio doorsets are supplied unfinished.

Wellington patio doorsets are supplied fully factory finished in white.

Handling

When handling these doors care is required to avoid physical damage, use clean gloves and do not drag doors across each other or other surfaces.

Biocide Regulations 1st September 2013

JELD-WEN exterior joinery is treated with an approved wood preservative and protected against wood decaying fungi.

For Wellington patio products the active ingredients are Carbamic acid, butyl, 3-iodo-2-propynyl ester.

For Oakfold products the active ingredients are copper carbonate and Didecyldimethylammonium Chloride.

Preserved wood should not be cut or otherwise reworked as this will expose un-preserved wood. Any surface which is exposed by cutting or drilling must be retreated with an HSE approved cut end preservative. Follow the instructions for safe use on the manufacturers' safety data sheet.

Storage

Doors must be stored in a flat position, and not on an edge or an end. They must be on a level surface and kept clear of the floor on at least three level bearers. The bearers must be longer than the width of the door, and they must be stored in a clean, dry location and should be fully sealed before use. Exposure to sunlight, UV light or extremes of humidity and heat must be avoided, and doors should never be stored in areas which are subject to extremes in temperature. The storage area should have good ventilation and must not have been recently plastered. Special attention should be made in a centrally heated or air-conditioned building where moisture content could build up. Warranty claims for twisting, bowing, shrinking, or swelling that are moisture related (while the doors are not sealed according to our guidelines) will be rejected.

Sealing

Prior to priming or sealing, lightly sand any handling marks or variations caused by exposure and ensure the door is dust free. Do not use wire wool or other sanding materials with steel or iron elements. Knotting solution must be reapplied if knots become visible. It is important that the door is then fully sealed using a suitable base sealer on both faces and all four edges, plus any cut-outs for locks, hinges and letter plates etc. Use two coats of base sealer or primer. Failing to seal doors as suggested in our instructions will invalidate any Warranty claims.

Hanging the door

Prior to hanging this door, inspect for damage and do not proceed to work on it if any damage or defect is evident. Installation of the door constitutes acceptance of aesthetics quality. Never hang a door before applying a protective coat of basecoat stain/primer. All lock or handle cavities should be kept to a minimum size and situated away from the mid rail joint, these areas must then be re-sealed. The door must be fully decorated prior to hanging.

1 Patio Doorsets Fitting, Finishing and Care Instructions cont...

Decoration (unfinished doorsets)

All door leaves and frame components must be finished with Hi-Build micro porous based stains or paints, with particular attention to ensure that any end grain is fully sealed. Our doors are not suitable for varnishes, waxes, polishes or oils as these products do not correctly seal the doorset. Three top coats of a branded stain or paint are satisfactory, but the doorset must be treated in accordance with the stain/paint manufacturer's instruction. A light sanding between coats will provide the best finish, and adequate drying time between coats must be allowed. Failure to follow these instructions will invalidate any claims for excessive movement or delamination.

'Low Build' stains, varnishes, Danish Oil or any other finishes must not be used. Pigmented translucent finishes generally perform much better than clear. It is recommended that dark coloured stains or paint should be avoided particularly if the doorset is exposed to the full heat of the sun 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.

We recommend that in areas of severe exposure, external doors should be protected by a porch or hood/canopy in addition to the recommended decorative finish. Regular maintenance of this door should be made to prevent deterioration of the wood, its construction and the finish.

Maintenance of fully finished products

JELD-WEN fully finished doorsets have a Hi-Build factory applied paint (or stained) finish. It is tough, durable and micro-porous allowing the timber to breathe, protecting build-up of excess moisture under the coating.

Modest maintenance of the paint coating is important to ensure the long service of these products.

Step by Step maintenance guide

1. Bi-Annual Inspection: The paint finish should be inspected for damage, typically caused by a window cleaners ladder or objects being passed through the doorset or window.

If damage is found it must be dealt with promptly by sanding back to the undamaged frame and touching up with a matching micro-porous paint and top coat.

2. Planned Maintenance: for all factory finished products will depend on your location and exposure – maritime or industrial areas will require more regular decoration than sheltered inland climates. Please refer to www.jeld-wen.co.uk for further information.

The first maintenance cycle should be carried out, regardless of the appearance of the doorset. The original paint finish in exposed areas will have worn away to around half its original specification and will need to be restored back to its original state. Simply wash the frame down with a dilute soap solution, dry and lightly rub down the surface with fine 'wet and dry' sandpaper, grit (280 to 400) grade. Dust off and clean using a damp cloth removing any remaining surrounding dust, then apply one top coat of micro-porous paint* over the exposed surfaces.

There should be no need to paint rebates or concealed faces as these should be in good condition and no erosion should have occurred. The doorset finish should then be in good condition until the next planned maintenance.

* Micro-porous paint can be used that are either water or solvent (oil) based. Manufacturer's instructions must be followed paying particular attention to temperature at the time of application.

Condition of Sale

In the event of this door being proven to have a manufacturing defect, where a replacement is needed, the liability of the seller shall under no circumstances exceed the price of the defective door. We shall not be held responsible for any incidental work or for problems resulting from poor workmanship applied to our doors.

The foregoing does not affect your statutory rights.

For more information please refer to our website www.jeld-wen.co.uk

Building Regulations:

Please consult with your building designer to ensure compliance with current building regulations such as Approved Documents L&F.

Replacing patio doorsets is notifiable work and **MUST** either be carried out by a FENSA or other registered installer, or with prior Building Control approval.

Registered FENSA companies can be found at www.fensa.co.uk.

Addition: Part M: These doorsets are not suitable for primary access under this regulation. If this is required you should consider a JELD-WEN French or Single doorset. You can view the full range of at www.jeld-wen.co.uk

2 Tools Required

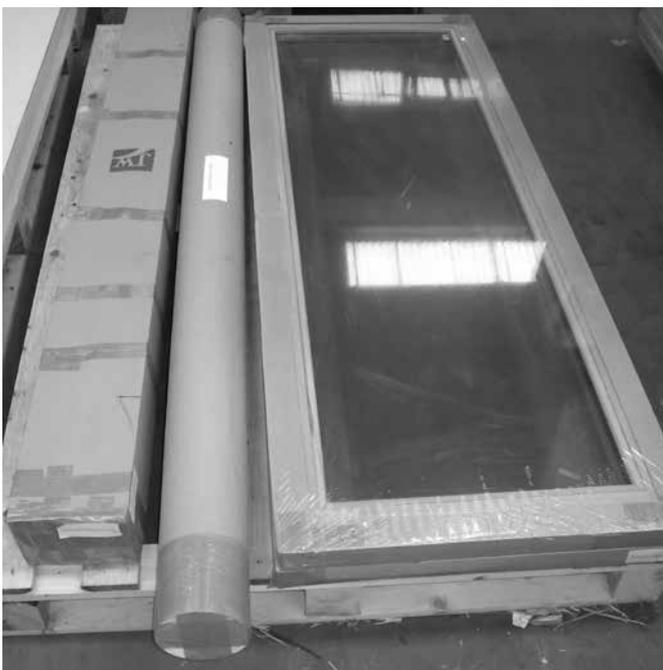
The following tools and items are required to carry out the installation of the doorset.

- Spirit level
- Masonry Drill
- Screwdriver
- Measuring tape 5 Metres
- Appropriate Silicone sealant
- Mallet - Rubber headed
- Frame packers if required
- Appropriate fixings for frame
- 13mm timber drill bit (for bottom bolt on handle)
- Timber drill bit 3mm (pre-drilling, 80mm min length)
- Masonry Drill bit 8mm Dia x 125mm length min
- Router bit 10mm Dia
- 20mm flat bit (for eurocylinder)

3 What you receive

The doorset and all its components are delivered on a pallet, check quantities on your delivery ticket are the same as those on the pallet.

If there are any items missing phone JELD-WEN on: 01664 484500



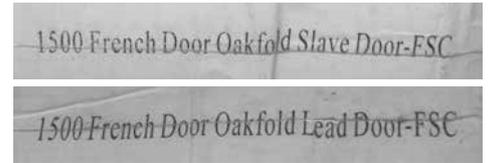
3 What you receive cont...

Pallet contents: Door Leaves (boxed individually), Frame Pack, Hardware Box and Lock Tube.

Wellington



Oakfold



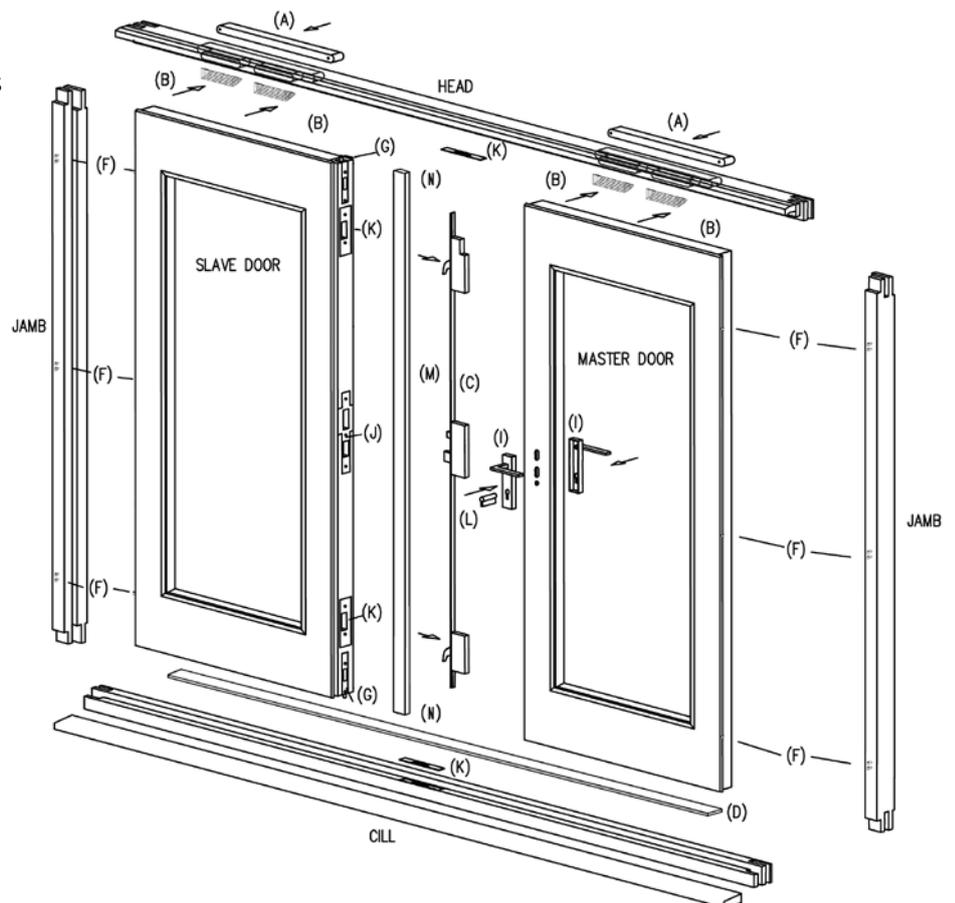
Pack contents

The hardware per door set is as follows:

- 2 (A) Titon Vents
- 2 (B) Foam inserts
- 1 (C) Espagnolette
- 1 (D) Aluminium Threshold
- 6 (F) Butt Hinges
- 2 (G) Shootbolts (Slave Doors)
- 1 (I) Pair Handles
- 1 (J) Universal Timber Centre Keep
- 4 (K) Timber Keep (Hook)
- 1 (L) Cylinder Lock
- 2 Rain deflectors
- 10 Fixing ties
- 1 (M) Cover Spline
- 2 (N) Spline end caps & screws

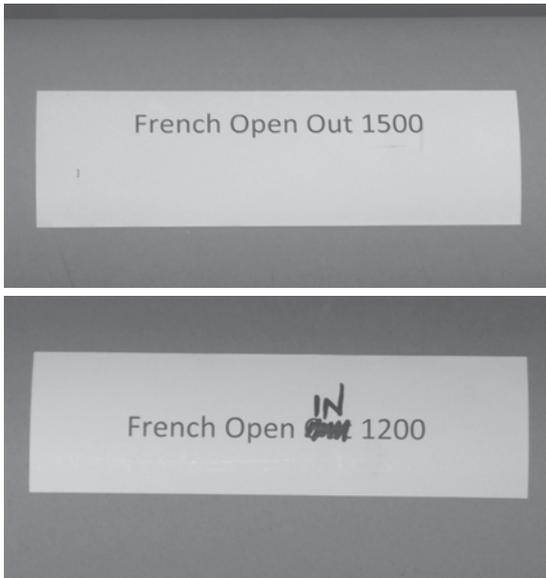
Screws:

- 4 4.0 x 40 Threshold
- 24 5.0 x 90 Frame
- 24 4.0 x 40 Hinges
- 8 5.0 x 60 Sidelight
- 11 4.0 x 40 Keeps
- 12 4.0 x 40 Lock
- 4 4.0 x 40 Shoot bolts
- 4 4.0 x 40 Vents
- 8 Brickwork with caps
- 12 4.0 x 40 Head/Sill plant



4 Pack contents cont...

Hardware Pack x 1



Contents



Flush Bolts



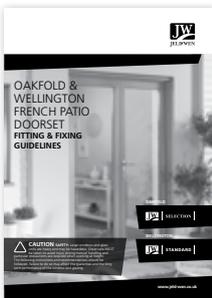
Cylinder & Keys



Head and Sill Keeps and Vent Caps



Espagnolette Lock and Keeps



Fitting Instruction Booklet



Hinges



Vents



Handle Pack

4 Pack contents cont...

Frame Pack x 1



Contents



Frame Fixing Packs x 2

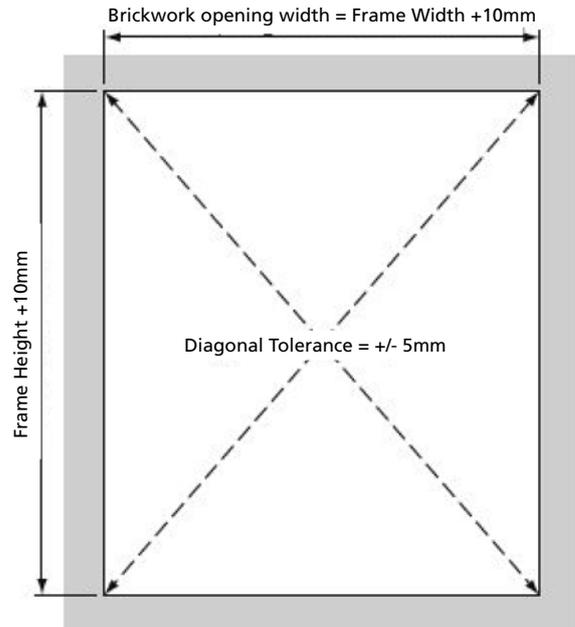


5 Structural opening

It is recommended that the opening into which the French Patio Doorset is to be installed is 10mm larger in both height and width than the actual doorset sizes given in the table below.

Oakfold/Wellington Doorset Only		
Module Size	Actual Frame Width	Actual Frame Height
1200	1190	2090
1500	1490	2090
1800	1790	2090
Wellington Winglight		
Module Size	Actual Frame Width	Actual Frame Height
300	300	2090
450	450	2090
600	600	2090
Wellington Dwarf Winglight		
Module Size	Actual Frame Width	Actual Frame Height
450	450	1490
600	600	1490

Structural Opening



Note: To calculate the overall frame width for a doorset with winglights or dwarf winglights simply add the actual frame dimensions for each component together across the width.

6 Frame assembly

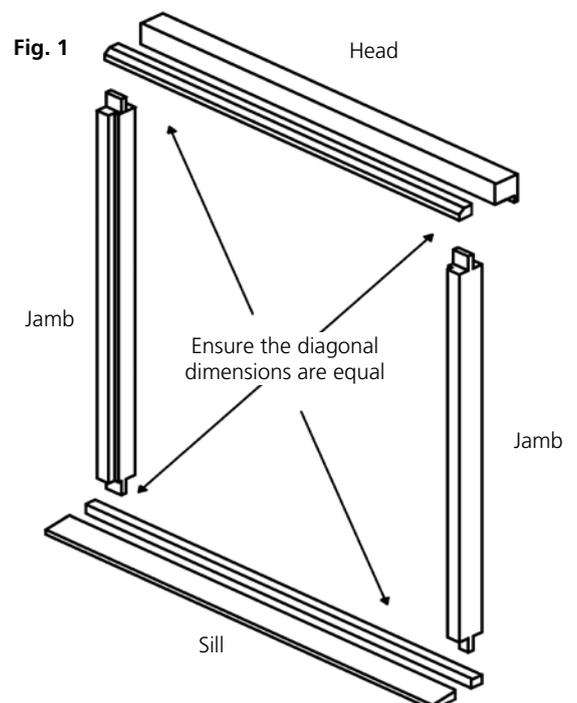
The frame is supplied with cut outs for hinges and pre-machined for the espagnolette and flush bolt keeps.

Assemble the frame on a level surface. Pilot holes are required prior to fixing screws.

Glue all comb joints with waterproof adhesive and screw through the joint with 5.0 x 90mm screws 10 gauge (not supplied).

Check the frame is square and temporarily brace as necessary to ensure stability of the frame (See Fig 1).

Glue and screw all joints.



7a Fitting sill and head plant - Oakfold only

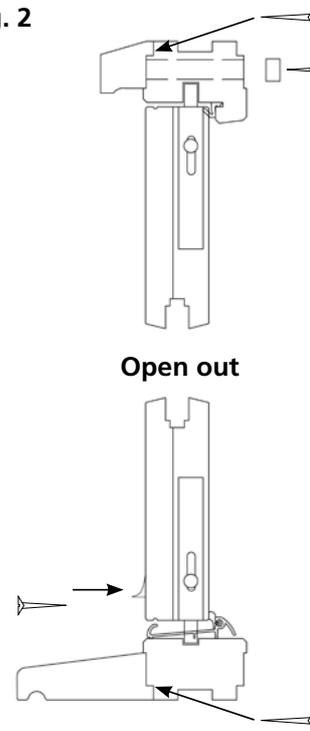
The Oakfold French is supplied open out only. Using 4.0 x 40 frame screws, fix the sill and head plant as detailed in Fig. 2.

Using 4.0 x 30 vent screws fix in to the head vent as detailed in Fig. 2.

Screw in rain deflectors.

Please note, flexible sealant must be used when joining head and sill components.

Fig. 2



7b Fitting sill and head plant - Wellington only

The Wellington French doorset can be either open in or out.

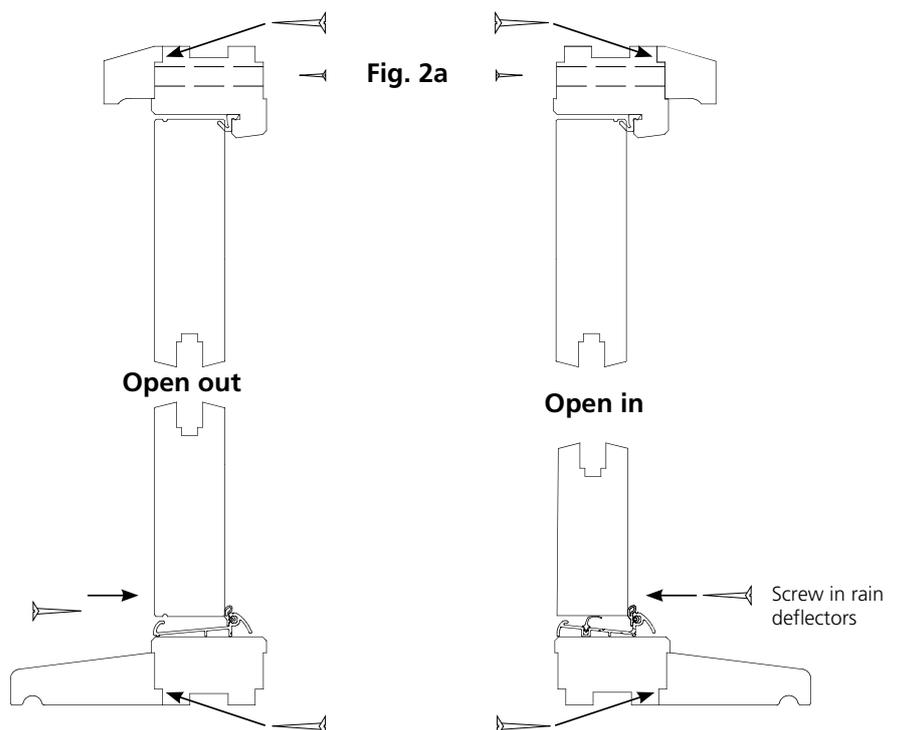
Using 4.0 x 40 frame screws, fix the sill and head plant as detailed in Fig. 2.

Using 4.0 x 30 vent screws fix in to the head vent as detailed in Fig. 2a.

Screw in rain deflectors.

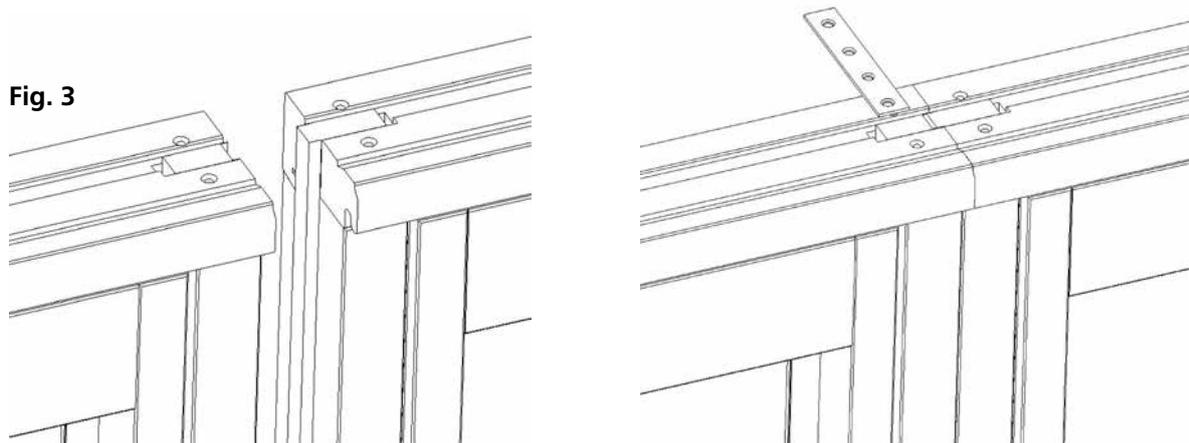
Please note, flexible sealant must be used when joining head and sill components.

Fig. 2



8 Fitting optional sidelight - Wellington only

Using 5.0 x 60 sidelight screws, fix these through the jamb where the pre-drilled holes for the hinge flags are located. Attach the sidelight as detailed in Fig. 3.



Before coupling together, seal the end grain of both head and sills with suitable end grain sealant. A flexible sealant should then be used the full length of the joint, but with particular attention at the sill joint.

9 Preparing the frame - Wellington open in

Letters in brackets refer to exploded drawing and checklist (page 6).

Prior to fitting the frame into the brickwork, fit the trickle vents (A) and foam inserts (B) into the head of the frame.

The hinges should be fitted into the recesses in the jamb (See Fig 4). Hinges should be screwed into jamb using 4.0 x 40 hinge screw.

Apply a continuous bed of silicone seal along the sill before screwing the threshold to the timber sill, ensuring that the threshold is located on the bed of silicone. (see Fig. 6.2)

Screw the aluminium threshold to the sill using 4.0 x 30 threshold screws (See Fig 5).

Screw in the top and bottom keeps (K) (See Fig 6.1) using 4.0 x 30 keep screw.

Fig. 6.1
Open in

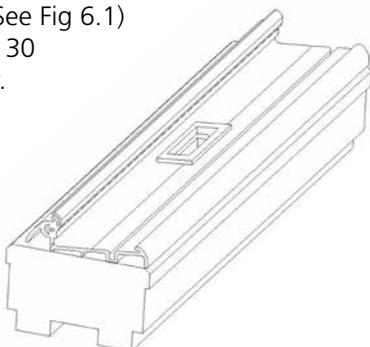


Fig. 4

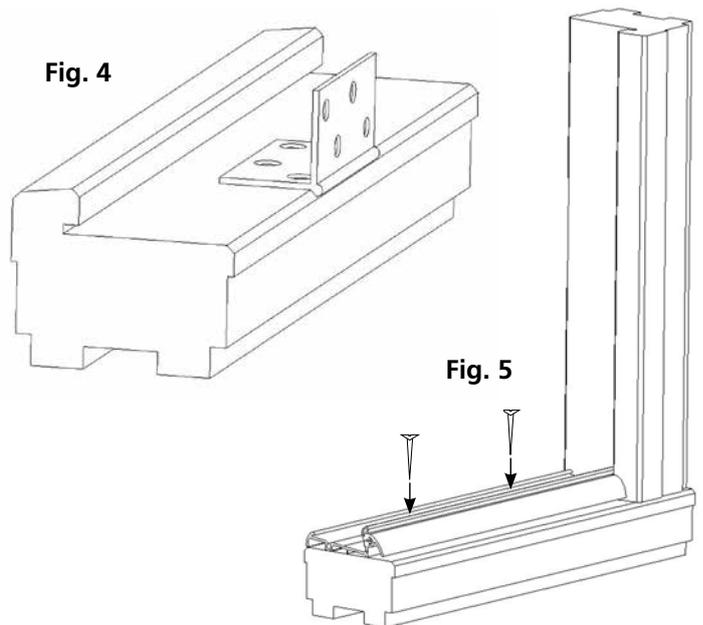
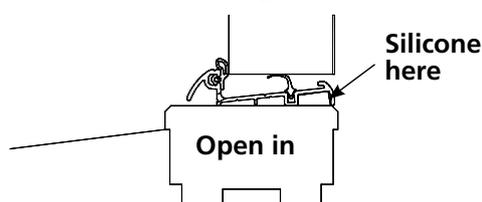


Fig. 5

Fig. 6.2



9 Preparing the frame - Wellington & Oakfold Open Out

Letters in brackets refer to exploded drawing and checklist (page 3).

Prior to fitting the frame into the brickwork, fit the trickle vents (A) and grills (B) into the head of the frame.

The hinges should be fitted into the recesses in the jamb (See Fig 4). Hinges should be screwed into jamb using 4.0 x 40 hinge screw.

Apply a continuous bed of silicone seal along the sill before screwing the threshold to the timber sill, ensuring that the threshold is located on the bed of silicone. (see Fig 6.2i)

Screw the aluminium threshold to the sill using 4.0 x 30 threshold screws (See Fig 5).

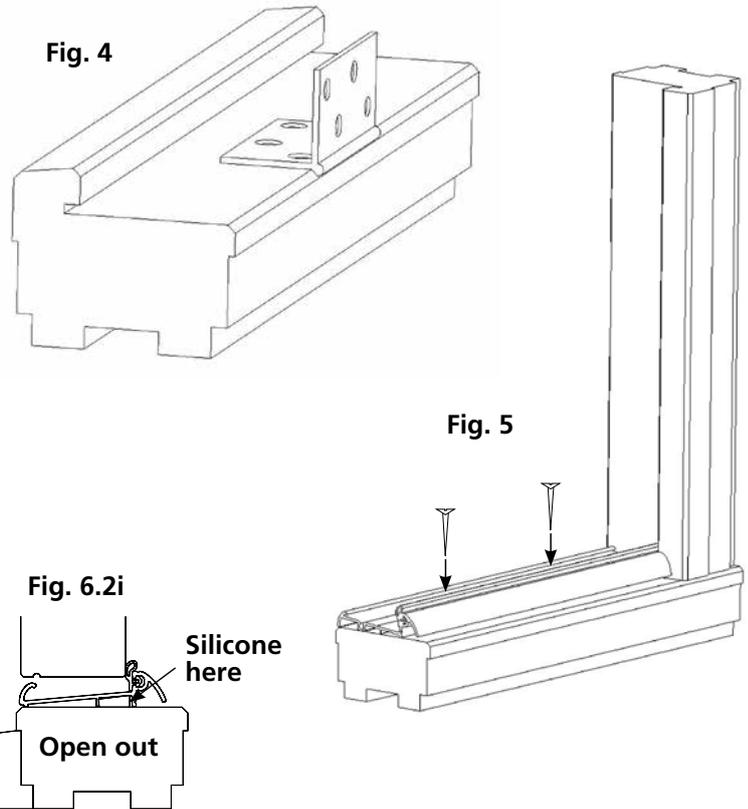
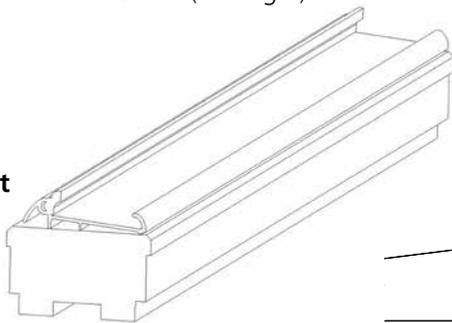


Fig. 6.0
Open out



10 Installing the frame

Prior to installing the frame, check the building structure for a secure fixing position. This is due to the weight of the finished door set. Then use a suitable fixing method (eg. frame fixings/ties).

Fixing of the frame and fitting of any dampproof course and bedding is the responsibility of the installer, and must be carried out as in normal building practice to prevent water penetration.

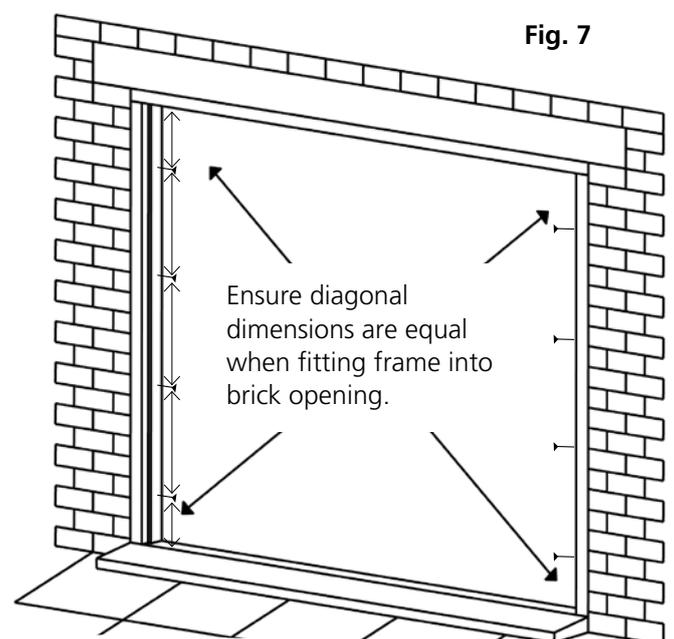
Jamb must be straight when fixed to the brickwork.

Build-in or fit the frame into the masonry opening ensuring that the sill is level and diagonal measurements equal (see Fig 6). Check the squareness of the frame and that the jambs are plumb.

Using the brickwork fixing screws, fix through the jambs as shown below.

*Frame should be set in the reveal to such an extent that the sill overhangs the brickwork.

Use appropriate sealer to fill gaps between frame and brickwork on all sides.



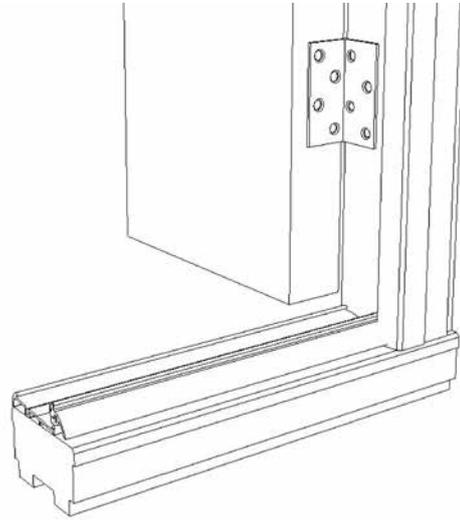
11 Hanging the doors

The doors can be either left hand hung or right hand hung, this is determined by rotating the door 180°.

Carefully offer doors up to the hinges that were fitted to the jambs.

Note: This is best done as a two person task.

The doors need to be pre-drilled to take the hinge flag, once in place screw into position using 4.0 x 40 hinge screw.



12 Fitting cylinder lock and espagnolette locking system

Once the handing 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 diagram on right.

To fit the espagnolette, locate the centre of the lock (C) into the pre-machined mortice holes, using 4.0 x 30 lock screws, setting the hook bolts to the retracted position.

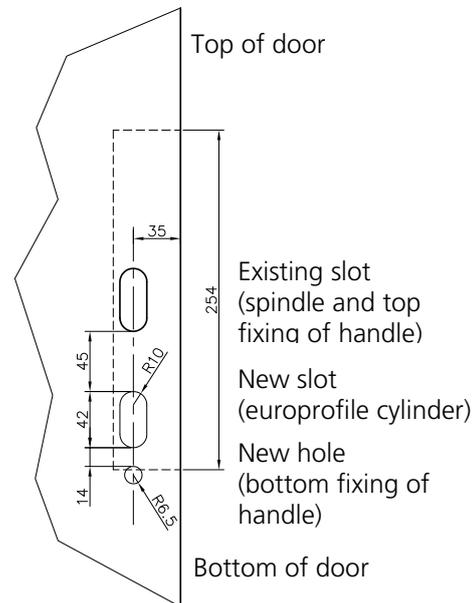
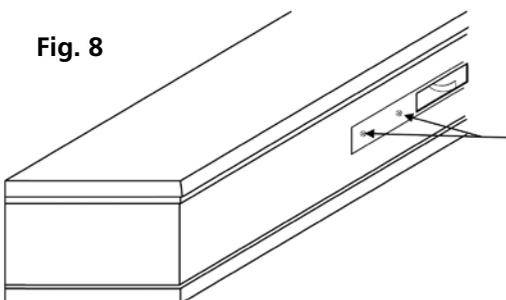


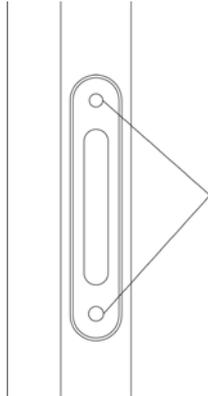
Fig. 8



Do not tamper with the two screws directly above the top hook as these hold the reverse gearbox to the Espagnolette. Fig 8

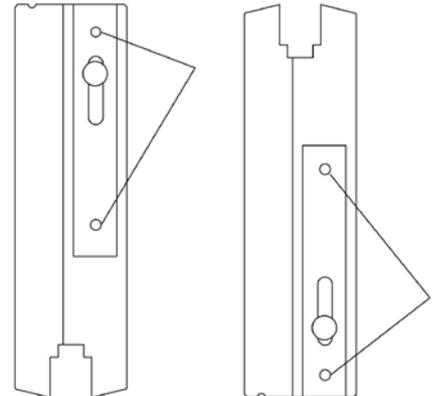
13 Fitting the lock keeps

Fix keep plates in to slave door stile using 4.0 x 30 keep screws.



14 Fixing finger bolts

Fix finger bolts to the slave door stile using 4.0 x 30 finger bolt screws.



15 Fitting the handles

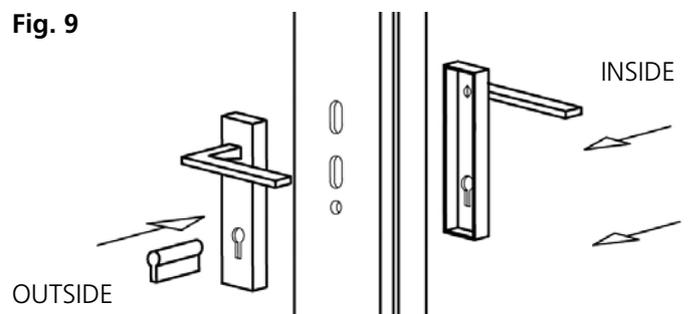
Fit door handles (I) and cylinder lock (L) (See Fig 8) and test lock system.

Failure to do these operations will cause the locking mechanism to fail, and the doors will become in-operable.

Close the doors and engage the locking system to check its operation.

Important: Ensure handle levers are facing the hinge side of the door. Handle with bolt holes on face plate goes on inside of doorset.

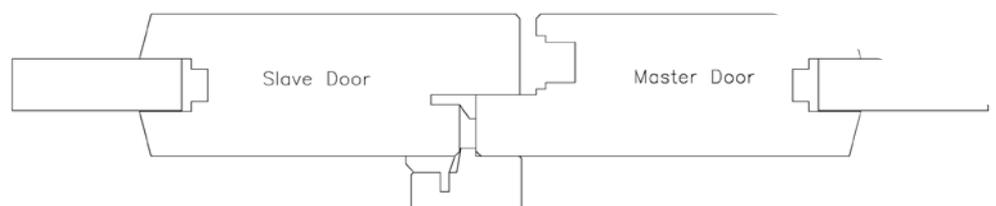
Fig. 9



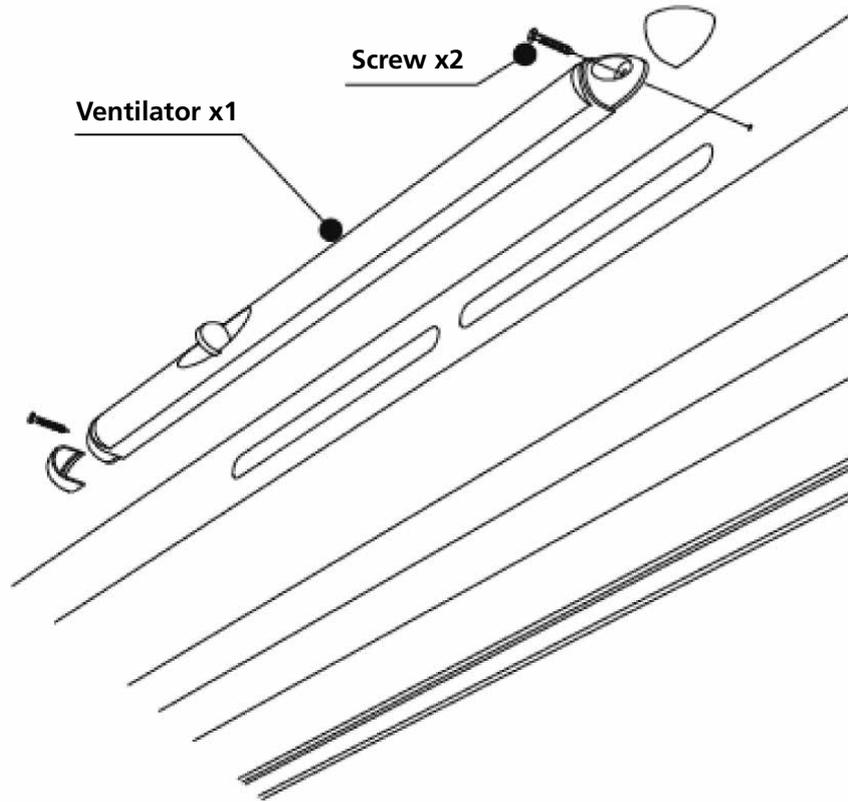
16 Fixing cover spline

Fit end caps to both ends of cover spline (M) using single screw on each.

Glue and pin cover spline in position on slave door face, overlapping the edge to cover the gap between meeting stiles and set 14mm below top edge of the door.



17 Fitting the ventilator



18 Finishing & maintenance

Please also refer to Section 1

Finishing

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

This patio doorset is;

Oakfold - unfinished

Wellington - fully finished white painted softwood

Factory finished product requires no further decoration other than touching up damage that may have occurred during installation. The hardwood unfinished doorset must be primed or sealed immediately after delivery/ collection and **prior** to installation. This should be carried out in dry weather conditions. All faces, edges and any cut-outs should be suitably sealed immediately after unwrapping. Before priming or sealing lightly sand off any handling marks and variations caused by exposure and ensure the surface is dust free. Micro-porous paints and medium or Hi-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 must not be used. Pigmented translucent finishes generally perform much better than clear. It is recommended that dark coloured stains or paint should be avoided particularly if the doorset is exposed to the full heat of the sun 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.

We recommend that in areas of severe exposure, external doors should be protected by a porch or hood/canopy in addition to the recommended decorative finish. Regular maintenance of this door should be made to prevent deterioration of the wood, its construction and the finish.

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.

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.

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.

Handles and Hardware

All hardware should be regularly cleaned using a soft cloth and mild detergent to prevent build up of pollutants such as salt etc. In maritime and industrial environments the intervals should become shorter in some instances week cleaning may be required. Harsh chemical cleaners and abrasive materials should be avoided at all times.

Glass Units

Scratches to external glass faces not reported at time of delivery and shattering caused by thermal shock are not covered under the JELD-WEN product or glass guarantees.

19 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.

This product must not be used in areas of high humidity, e.g. swimming pools or similar.

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 ansillary 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.

20 Troubleshooting guide

My door doesn't lock:

Is the cylinder correctly fitted?

Is the multi-point lock correctly positioned?

Does the lock line up with the keeps?

Refer to pages 13 & 14. Fitting the multi-point lock

My doors drag on the sill

Check you have adjusted the height correctly

Check you have installed the frame correctly - is the sill bowed upwards? Is the head bowed down?

How often should I decorate my doors?

This will depend on the exposure environment of the location - severe industrial or maritime locations will require more frequent decoration than sheltered.

It is recommended that every six months you check the finish and wipe down all surfaces with a damp cloth.

Any signs of damage/wear to the finish will require redecoration. follow the instructions within this document

How often do I have to clean the hardware?

This will depend on the exposure environment of the location - severe industrial or maritime locations will require more frequent cleaning than sheltered. Follow the instructions within this document.

Do I need to clean the handles?

Yes build up of environmental deposits such as salt will damage the finish. A wipe down with a soft non abrasive cloth will be required, the frequency will depend on the location - maritime locations a minimum of once a month possibly more frequent.

Clashing doors - check that you have adjusted the width correctly, check you have not fitted the hinges over the weather seals.

Doors 'gapping' on seals - check adjustment

Key won't turn in the lock - have you lifted the handle fully to lock? If unable to lift through the full range of movement - check adjustment and fitting of lock. Refer to page 31. Fitting the multi-point lock

