

Installation of PAS 24 doorsets

Please read all the instructions prior to starting installation.

All fire doors should be fitted in accordance with its fire certification and BS8214:2016

The Doorsets are delivered to site palletised to suit your build program. Typically 6 to 7 Doorsets per pallet.

To help secure and protect the Doorset during transit, each unit is covered in bubble wrap and braced.

Doorsets are palletised “head to toe” so that any pre-fitted ironmongery is not damaged during transit.

Each Doorset is clearly labelled so that the Joiner can quickly identify its correct location.

When moving doorsets on site care must be taken to ensure the door leaf is adequately supported in its frame to prevent damage to the locking mechanism or the leaf itself. Transportation bracing should only be removed once the doorset is in place and ready for installation. Please see our separate guide for handling doorsets on site.

The structural opening into which the Doorpac PAS24 fire resistant FD30 or FD60 doorset is to be fitted must be suitable for the application & robust in its construction in order to achieve a secure installation for the doorset throughout its lifetime. Please refer to Certifire certificates CF5228 (FD30) & CF5229 (FD60) for more information with regards to the supporting construction and installation.

We recommend a fixing with a recommended load of 0.8kN minimum in the structural material the frame is being fixed to, examples are:

Concrete (\geq C20/25)	Fischer F10S with a minimum anchorage depth of 50mm e.g. 10 x120mm
Solid Brick (\geq Mz12)	Fischer F10S with a minimum anchorage depth of 50mm e.g. 10x 120mm
Cold Formed Steel of 2mm thickness	Evolution TSTF e.g. 5.5 x 85mm
Timber or Metal Stud with Timber Insert	Evolution WS50100 e.g. 5 x 120mm with a minimum embedment depth of 43mm

*(Please note the fastener length may need increasing to accommodate frame
to structural opening gaps greater than 10mm)*

Prior to Installation

Prior to offering the doorset up to the opening, check the dimensions of the opening and compare to the overall frame dimensions for the doorset. The dimensions of the opening should be at least 10mm greater than the width and height of the doorset. Take several measurements of the width and height to ensure that the dimensions are constant. Do not force the doorset into position as distortion or damage may occur.

Prior to fitting the doorset the distance between the bottom of the door and the end of the frame jambs should be checked to ensure that when the doorset is installed the correct gap is achieved between the bottom of the door and the top of the finished floor level. For fire doors with smoke control this gap should be no more than 3mm if a drop down seal isn't fitted. Where a dropdown seal is fitted or the door is a fire door without smoke control the maximum gap permitted is 7mm. The frame jamb length should be adjusted to ensure the correct gap is achieved. If the floor level under the jambs is not level it maybe necessary to pack under the jambs so that the doorset is level once installed. If packing is required, the maximum threshold gaps given above cannot be exceeded.

The doorset should be installed as a complete unit. Use the door as a template to “square” the door frame position, removing it only to allow for final fixing, decoration, or protection. The Quick2Gap guide pads between door and frame should be left in situ while fitting and only removed once the frame has been fitted squarely into the opening. Note; the gaps between the door leaf and frame once installation is complete should be between 3 – 4mm. Gaps greater than 4mm will invalidate fire test certification. Achieving a 3mm gap is recommended to allow for future movement.

Prior to installation remove the transit braces and bubble wrap.

Installation

Position the Doorset within the structural opening ensuring the doorset fits comfortably within the opening and flush to the wall.

The fixing bolts should be positioned as shown in the diagram overleaf.

From the push side use a drill to make a clearance hole in the top frame fixing point on the hinge side and then a suitable bit to drill to the required depth into the opening structure.

Loosely secure the hinge side jamb within the opening using the top frame fixing point.

Adjust the position of the doorset to ensure the hinge jamb is level in each plane and then drill and loosely fix the remaining fittings along the hinge jamb.

Insert solid packers between the frame and the wall at the fixing points. Note; the packers should be the same width as the frame section less allowance for appropriate fire stopping. This will avoid the frame distorting.

Tighten the fixings along the hinge jamb.

The Quick2Fit Pads –fitted around the edge of the door will indicate where further adjustment is required. The Joiner can use a wedge between the frame and wall whilst inserting/removing packers to adjust the gap between the door and frame, if needed.

Once the Quick2Fit Pads are touching the frame on the hinge side, drill, fit and pack the fixings on the latch side jamb, whilst ensuring the doorset is level in each plane and the 3 to 4mm gap is maintained.

Once all the fixings are secured, double check the doorset is level in each plane and the 3-4mm gap has been maintained. Adjust if required.

Depending on site conditions additional fixings may be required.

It is also important to ensure that a full width packing piece is placed immediately behind the lock striker plates where they are positioned in the frame.

When screwing home the fixings taking care not to over tighten the fixing as this may cause damage or distortion to the frame.

The gap between the door frame and supporting structure can now be filled in accordance with BS8214:2016.

After fixing is complete, ensure that the door will make full and uniform contact with the smoke / acoustic seals. Check the diagonals and ensure that no distortion or twisting has occurred during installation. Check also that the door does not “bind” on the frame when it is being opened or closed. Check the locking system operates smoothly, if needed the keeps can be adjusted.

Electric Strikes: Doorsets supplied with electric strikes require precise vertical alignment between the latch & the strike. This is set in the factory and must be maintained following installation to ensure correct operation. Where electric strikes are fitted a maximum 3mm door to frame gap is recommended. **Do not** discard intumescent protection from the strike when connecting to its electrical supply. Its removal will adversely affect fire performance and will invalidate the doorset’s Certifire certification.

Fitting of the Architrave

Architraves are usually provided loose, pre-sized, mitred and machined for Hoffman fittings, for installation without further cutting.

On a clean flat surface, place the left and right hand architrave jambs with an architrave head face down to form a goal post. Insert the Hoffman fittings into the pre-machined cut-outs. Lift the architrave goalpost up and place against the frame to give a consistent reveal around the frame and pin in position.

Where the architrave is supplied in uncut lengths, mitre and cut the architrave to length on-site, prior to pinning in place.

As a guide, mitre and cut the architrave to give a 16mm reveal between the edge of the architrave and the edge of the frame. This will ensure that any latches don’t hit the architrave before the strike plate.

Following installation of the Doorset

Once the doorset has been installed any seals, door closer and doorstops can be fitted.

Please see our separate guide on intumescent, smoke and acoustic seals to ensure the correct seals are fitted in the correct location.

Prior to fitting the door closer please ensure the fixing screws provided are suitable for the materials the closer is being fitted to. Additional packing may also be required within the structural opening to provide a secure fixing point for the closer.

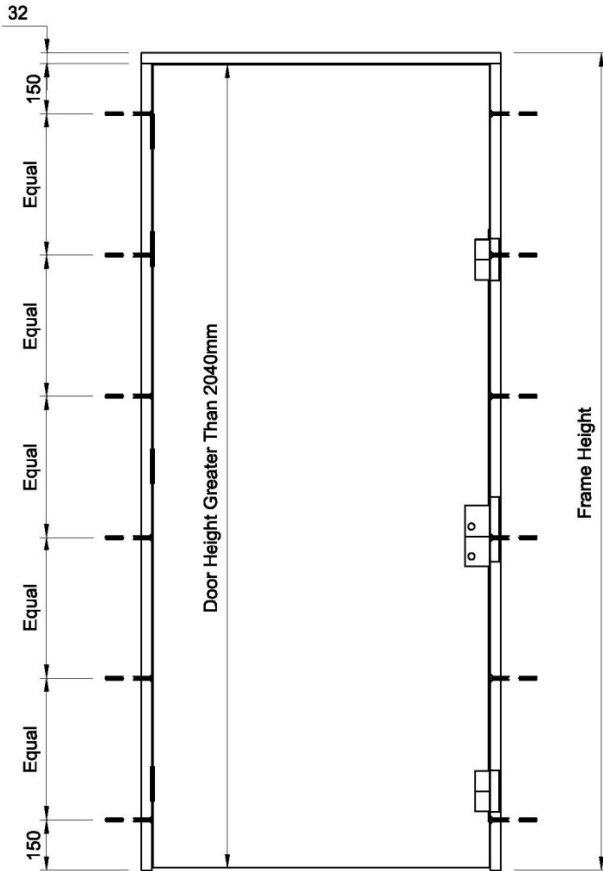
Once the floor finishes have been installed then any floor threshold can be fitted if required and/or the drop down threshold adjusted.

Please note, some movement within timber door leaves may occur after installation.

Unfinished doorsets should be painted immediately after installation using a good quality paint system in accordance with the paint manufacturer's instructions. Do NOT paint over or damage the labels affixed to the head of the door leaf as this will invalidate the doorset certification.

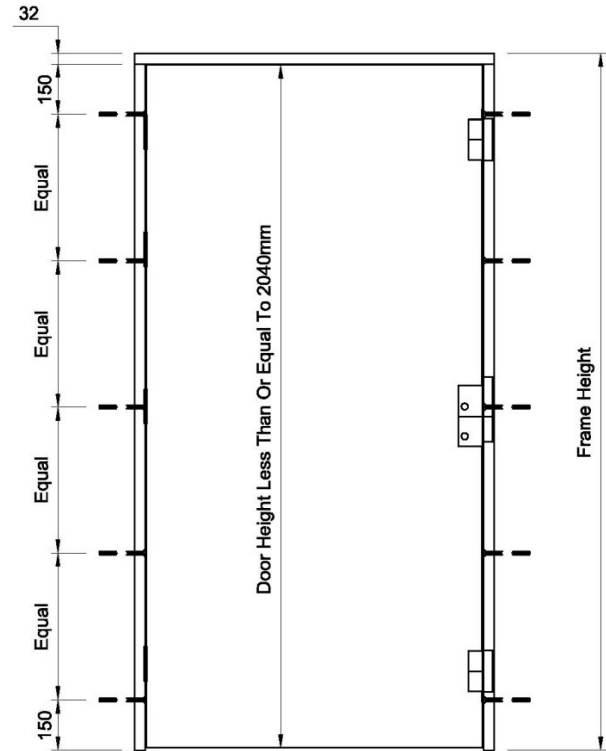
Further information is contained in the Operating and Maintenance Manual.

Frame Fixings Positions



Doors Greater Than 2040mm

150mm From Top & Bottom With 4nr
Fixings Equally Spaced Between -
6nr Fixings In Total Per Side



Doors Less Than Or Equal To 2040mm

150mm From Top & Bottom With 3nr
Fixings Equally Spaced Between - 5nr
Fixings In Total Per Side