

Installation of 4 Sided FD30 & FD60 Doorsets Under Certifire CF5228 & CF5229 Respectively

Please read all the instructions prior to starting installation.

All fire doors should be fitted in accordance with its fire certification and the current revision of BS8214.

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 can be 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. With 4 sided frames care should be taken to identify the head of the door to ensure the doorset is installed the correct way round.

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 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 supplements 535111 (FD30) & 535104 (FD60) & certificates CF5228 (FD30) & CF5229 (FD60) for more information with regards to the supporting construction and installation.

Please note: Doorset fixing screws must be steel, must suit the opening structure and must securely penetrate the opening structure to a minimum of 50mm depth.

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.

The threshold gap between the foot of the door and the frame sill is determined at the time of order and fixed at the factory. Where a doorset is required to provide cold smoke performance without a dropdown threshold seal the maximum threshold gap is 3mm. Where a dropdown seal is fitted or there is no cold smoke requirement the threshold gap can be specified to a maximum of 7mm. If the opening under the sill is not level it may be necessary to insert packers to ensure the doorset is level once installed. If packing below the sill is required, the threshold gap should be checked along the full width of the door leaf to ensure it remains within specification.

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 any 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. Ensure the sill is level. Insert packers between the sill and the opening if required.

Where pre-drilled fixing holes are not present in the frame jambs the fixing screws should be positioned within 150mm of the bottom of the frame head and 150mm from the bottom of the jamb with intermediate fixings spaced equally at a maximum of 400mm centres. The minimum number of fixings in the height is 4nr per jamb. Use additional fixings as the door height increases to ensure the 400mm maximum fixing centres are maintained. Optional additional fixings can be added to the sill if required. See below for positions.

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 opening 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 maybe required.

It is also important to ensure that a full width packing piece is placed immediately behind the lock striker plate where it is 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 on all 4 sides can now be filled in accordance with the current revision of BS8214.

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.

Fitting of the Doorstops

To secure the frames during transit and installation, the Doorsets are fitted with removable transit stops. Remove the transit stops from the frame. **Note:** four-sided frames require doorstops to all four sides of the frame

Door stops are usually provided cut to size and just require pinning into the door stop groove at maximum 300mm centres using steel pins. If no door stop groove is present pin the stop to leave a suitable gap (see guide below) between the door face and the door stop.

As a guide, a gap of 2mm should be left between the door face and the door stop if no acoustic seals are to be fitted in the rebate between the frame and stop and a 3mm gap if the acoustic seals are to be fitted. This gap allows for painting to the door and frame and possible movement of the door during use.

Where doorstops are supplied in uncut lengths, cut to the required length and then fit as above.

Once fitted, the door stops will cover the pre-machined frame fixing holes.

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 hand and right-hand architrave jambs with an architrave head & sill face down to form a frame. Insert the Hoffman fittings into the pre-machined cut-outs. Lift the architrave frame up and place against the frame to give a consistent reveal around the frame and pin in position using steel pins at maximum 300mm centres.

Where the architrave is supplied in uncut lengths, mitre and cut the architrave to length on-site, prior to pinning in place using the same method as noted above.

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 and door stops can be fitted.

Note: Fire rated 4-sided doorset sills are rebated for intumescent seals. Seals must be fitted to all edges in order to comply with Certifire certification requirements.

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

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 Fixing Positions

