DOORPAC LIMITED
Unit 6
Ranskill Court
Sheffield
S9 5FZ
Office: 0114 256 1615
enquiries@doorpac.co.uk
www.doorpac.co.uk

Installation of Halspan FD90 Doorsets Under Chilt/A05151 Revision K

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.

The structural opening into which the Halspan fire resistant FD90 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. The supporting construction may be rigid or flexible and of a minimum fire resistance to match the doorset i.e., it must be capable of staying in place and intact for a minimum of 90 minutes. For flexible wall types such as steel and timber stud partitions the structural opening must be prepared in line with test evidence provided by the wall manufacturer.

Doorset fixings must be 8 x 100mm long steel screws minimum. They must suit the opening structure and must securely penetrate the opening structure to a minimum of 50mm depth.

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 doorset must 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.

Note: The maximum gap between the bottom of the leaf and the top of the floor covering should not exceed 6mm in order to remain compliant with fire test evidence. Where smoke control is required a maximum threshold gap of 3mm should be maintained. Gaps in excess of 3mm are permitted provided a suitable threshold drop seal is provided. In all cases a 6mm gap shall not be exceeded.

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 500mm centres. The minimum number of fixings in the height is 5nr per jamb. Use additional fixings as the door height increases to ensure the 500mm maximum fixing centres are maintained.

Additional fixings in the frame head are not necessary although packers must be inserted.

Use an ordinary drill to make a clearance hole in the frame and then a suitable bit to drill 70mm into the opening structure.

Insert the fixing into the hole and loosely tighten.

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.

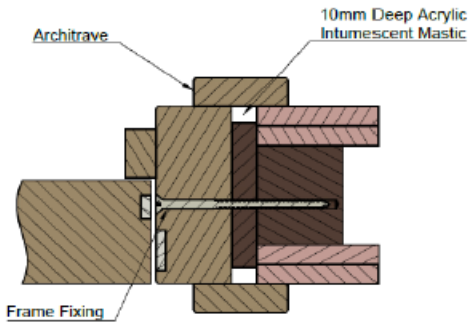
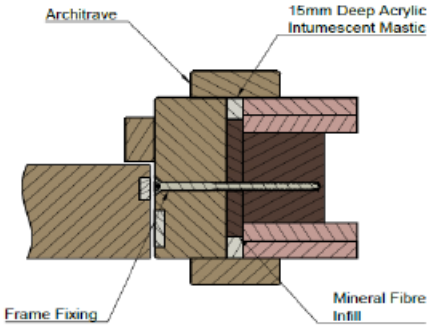
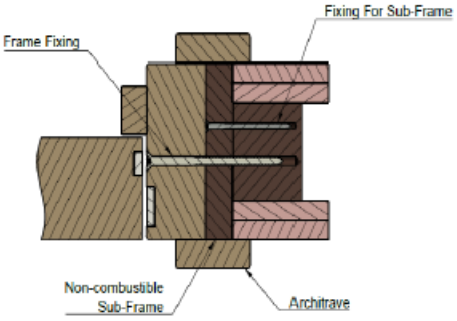
It is also important to ensure that a full width packing piece is placed immediately behind the lock striker plate where it is positioned in the frame.

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

After fixing is complete, ensure that the door makes 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.

DOORPAC LIMITED
Unit 6
Ranskill Court
Sheffield
S9 5FZ
Office: 0114 256 1615
enquiries@doorpac.co.uk
www.doorpac.co.uk

Three methods of sealing the frame to the structural opening are approved:

1. Gaps up to 18mm must be filled with expanding PU foam and sealed on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. (A 10x10mm shadow gap may be used with this detail providing the PU foam and mastic fire stopping materials were tested without architraves and at the required width and depth).	
2. Gaps up to 10mm must be tightly packed with mineral fibre, capped on both sides with a 15mm depth of acrylic intumescent mastic. Products must be tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1.	
3. Gaps up to 20mm must be filled with non-combustible sub-frame up to 20mm thick, with any gaps between the components sealed with acrylic intumescent mastic. Products must have been tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1.	

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. This should be a three-coat system - primer, basecoat and topcoat.

Further information is contained in the Operating and Maintenance Manual.

DOORPAC LIMITED
Unit 6
Ranskill Court
Sheffield
S9 5FZ
Office: 0114 256 1615
enquiries@doorpac.co.uk
www.doorpac.co.uk

Frame Fixings Positions