

**Installation of Halspan FD120 Doorsets UnderBMT/CNA/F15082 Revision F**

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 FD120 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 120 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. 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.

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 600mm centres. The minimum number of fixings in the height is 5nr per jamb. Use additional fixings as the door height increases to ensure the 600mm 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.

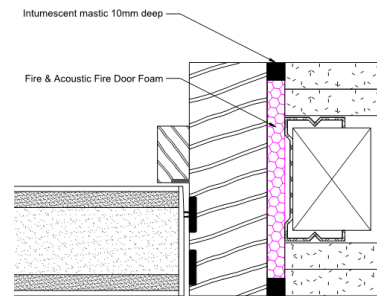
It is also important to ensure that a full width packing piece is placed immediately behind the lock striker plate where it is positioned in the frame.

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

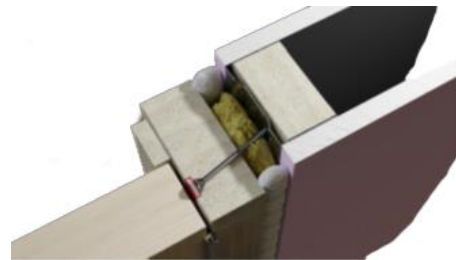
After fixing is complete, ensure that the door makes full and uniform contact with the smoke / acoustic seals. Check the diagonals and ensure that no distortion or twisting has occurred during installation. Check also that the door does not "bind" on the frame when it is being opened or closed. Check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

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

**Method 1 Fire Foam:** Gaps up to 20mm may be filled with a tested fire foam such as **Fire & Acoustic Fire Door Foam** or **STS ST99** foam successfully tested for 120 minutes, and once set, scrape 10mm depth out of the foam to allow 10mm depth capping of **Fire & Acoustic Intumescent Acrylic Sealant** or **STS ST99 mastic** applied over the foam on both faces. Architraves are **NOT** required. Please Note: Use only the tested foams & sealants noted above to ensure compliance with test certification.



**Method 2 Mineral Fibre:** Gaps up to 15mm may 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 BS476: Part 22 or BS EN 1634-1. An MDF architrave measuring 45mm wide x 18mm **MUST** be used.



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.

### Frame Fixings Positions

