

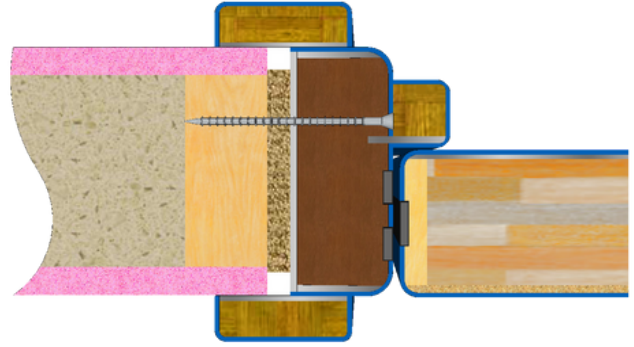
INSTALLATION GUIDE

# Lead frame fitting instructions.

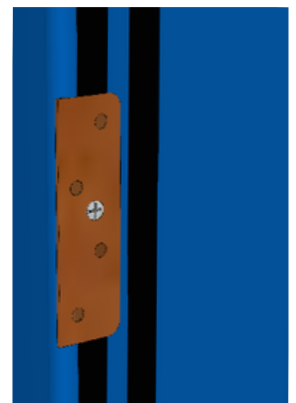
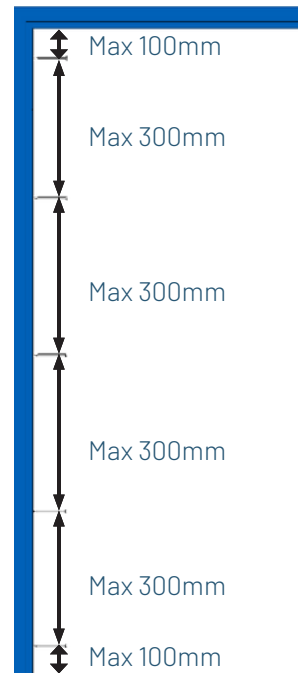
## Frame fixing.

Before you start, check the structural opening is plumb and square, with no loose brickwork or cables.

When installing the door frame, ensure the fixings are positioned such that they will be covered by the doorstop, as illustrated. Note – doorstops vary in size. Check the door schedule to see what size of doorstop has been scheduled for the door you are fitting.



- Screws must penetrate a minimum of 40mm into the substrate.
- 6.0 x 100mm screws.
- Frame fixings are to be spaced a maximum of 100mm from the top and bottom of the jamb and spaced no more than 300mm apart.
- Frame packers must be selected according to the fire rating of the doorset – refer to the table below for more details.
- For a single doorset, fixings are not required in the head of the frame. For all other door configurations fixings are required in the frame head. Positioned at 150mm from internal corners and max 600mm centres. It is good practise to add a fixing behind the top hinge in order to give more support for the weight of the door.
- Additionally, if the frame has intumescent grooves in it, fixings can be placed within these grooves, and concealed behind the intumescent strip.



## Packers table.

	NFR	FD30	FD60	Comments
Plastic	✓			Must be cut back to 10mm and capped with mastic
Softwood	✓			DO NOT need cutting back and capping
Hardwood	✓	✓	✓	DO NOT need cutting back and capping
Non-Combustable (i.e Blue 60)	✓	✓	✓	DO NOT need cutting back and capping



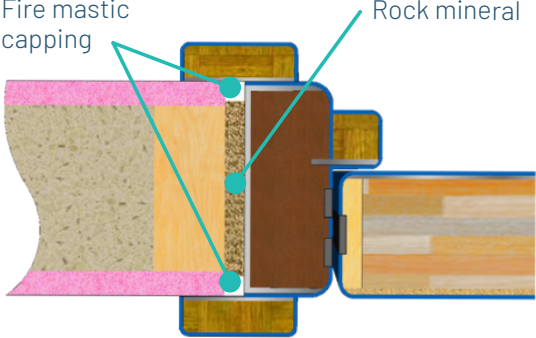
## Door hanging.

Once the frame is installed, the door leaves should be hung to ensure that the frame is fitted correctly before proceeding with fire stopping.

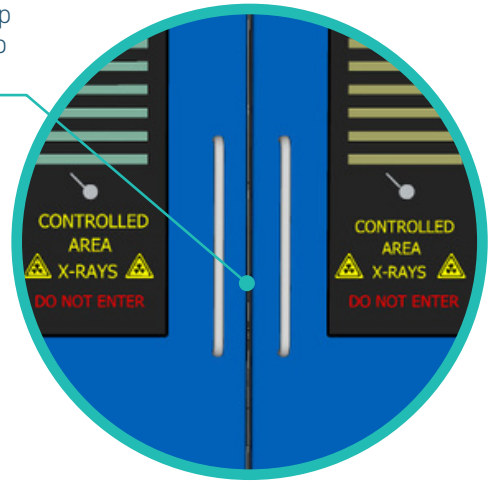
- Some doorsets require intumescent hinge pads – refer to Intumescent Table on page 12.
- Ensure hinges are fully butted into the recess and fixed flush with no protruding screws.
- Ensure the gaps around the door, between both vertical edges and the head are a minimum of 2mm and a maximum of 4mm (including meeting stiles). See images on page 4.
- If the door is fire rated - gaps under the door must be a maximum of 10mm between the finished floor level and the underside of the door.
- If the door is designated as Smoke Rated (FD30s/FD60s) the gap under the door must be a maximum of 3mm without a drop seal, or up to 10mm if fitted with a drop seal.
- Ensure the door swings freely with no impediments.

## Fire stopping/ mastic or foam.

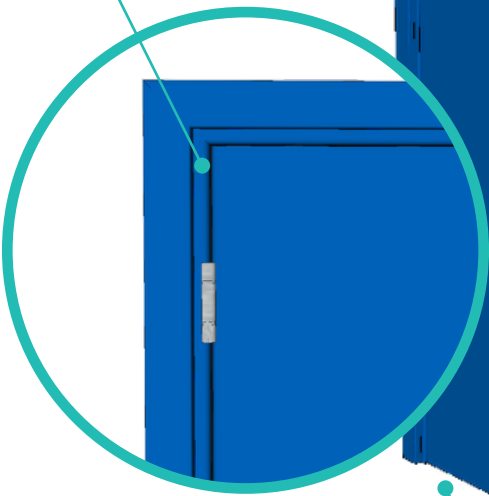
NOTE: All fire stopping/mastic must comply to either BS 476 part 22/ BS EN1634-1

<p><b>Gaps from 5mm to over 20mm</b></p>	<p>For gaps between 10mm and 20+mm, the gaps should be tightly packed with mineral wool fibre with a 10mm gap each side for fire rated mastic.</p>	 <p>The diagram illustrates a cross-section of a fire-stopped gap. A central gap is filled with a fibrous material, labeled 'Rock mineral'. This gap is flanked by two layers of 'Fire mastic capping', which are shown as pinkish-brown material. The mastic is applied to the sides of the gap, creating a seal. The surrounding structure is shown in various shades of brown and tan, representing different materials or components of the assembly.</p>
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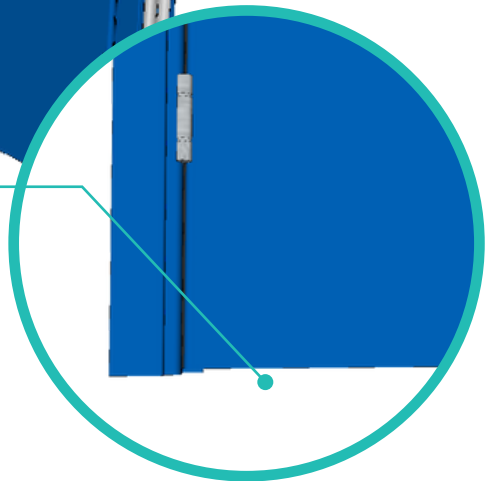
Minimum 2mm gap  
Maximum 4mm gap

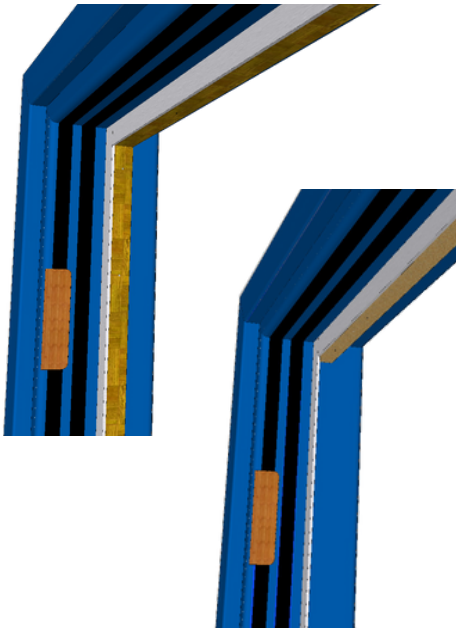


Minimum 2mm gap  
Maximum 4mm gap



Maximum 10mm gap



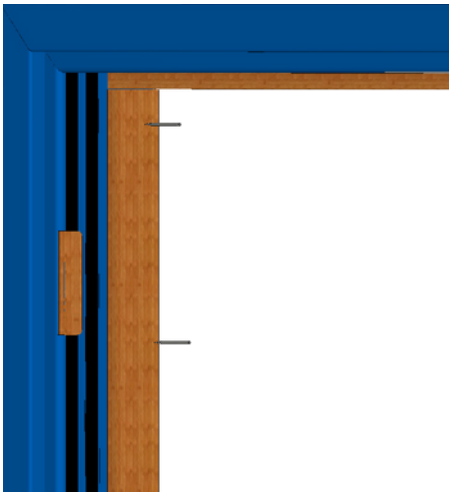


## Lead details.

The MDF core is to be placed alongside the lead tongue in the frame. As shown in the images below.

## Doorstops.

Note – doorstops vary in size. Check the door schedule to see what size of doorstop has been scheduled for the door you are fitting.

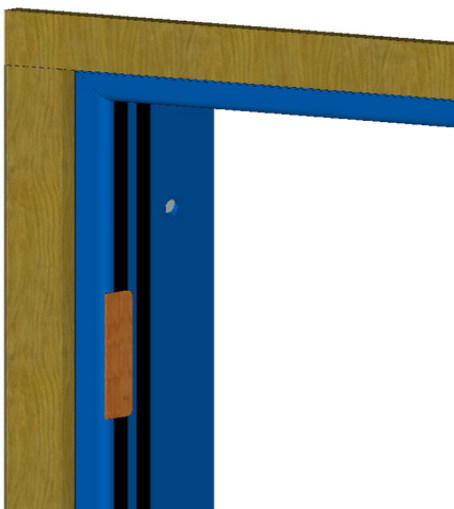
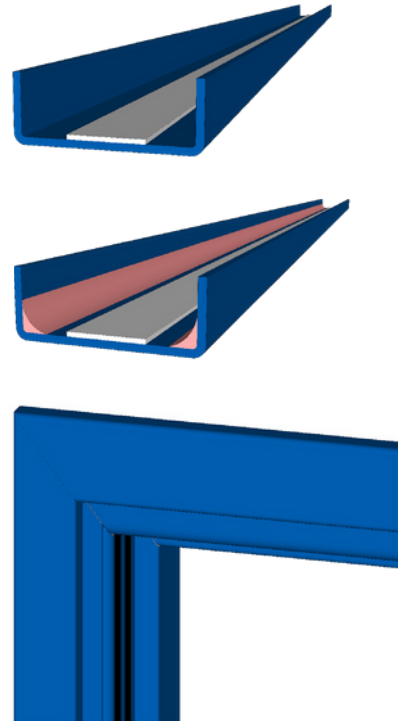


## MDF doorstop core.

- Cut the MDF doorstop to suit the internal size of the door frame.
- Install the head section first, running the full internal width of the frame (butt jointed as illustrated).
- Cut the vertical sections to fit underneath the head section.
- Pin or screw the MDF cores into place, ensuring it is butted up against the lead tongue (5mm if the doorset is to be fitted with batwing seals – refer to page 07 for more details).
- Ensure MDF cores are left dust-free ready for the PVC covers.

## PVC doorstop covers.

- Mitre PVC covers to correct sizing.
  - Once mitred, ensure the PVC covers are clean and free of dust.
  - Apply a strip of the supplied double-sided foam tape to the centre of the PVC cover.
- 
- Apply a bead of PinkGrip adhesive to both internal corners of the PVC cover.
- 
- Push the PVC covers onto the MDF core, ensuring that the double-sided tape makes contact with the MDF core. The double-sided tape will provide an instant but temporary hold, whilst the PinkGrip adhesive cures. Fit one jamb, followed by the head and then the remaining jamb.
  - Ensure there are no gaps in the PVC covers.



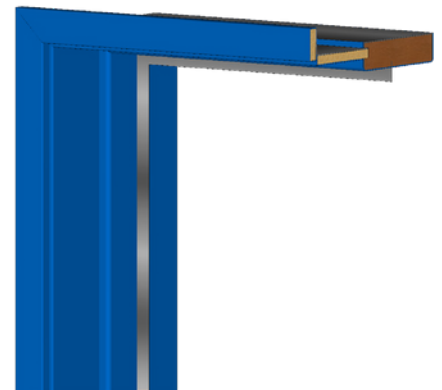
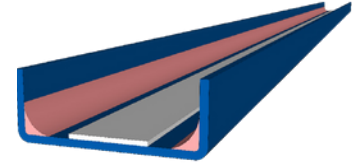
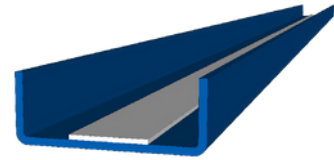
## Architrave MDF cores.

Architraves (including the PVC covers) must overlap both frame and the wall by 15mm.

- Cut the MDF architrave to suit the size of the door frame. Architrave MDF to be butt jointed as illustrated.
- Fix the vertical and horizontal MDF sections to the frame using pins/screws.
- Repeat on other side of the frame.
- Ensure MDF cores are left dust-free ready for the PVC covers.

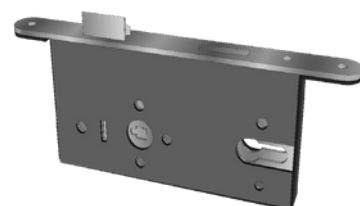
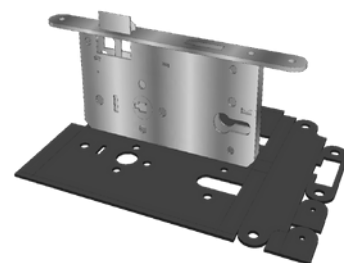
## Architrave PVC covers.

- Mitre PVC covers to correct sizing.
  - Once mitred, ensure PVC covers are clean and free of dust.
  - Apply a strip of the supplied double-sided foam tape to the centre of the PVC cover. (Two strips of tape can be used for wider doorstops).
- 
- Apply a bead of 'PinkGrip' adhesive to both internal corners of the PVC cover.
- 
- Push the PVC covers onto the MDF core, ensuring that the double-sided tape makes contact with the MDF core. The double-sided tape will provide an instant but temporary hold, whilst the 'PinkGrip' adhesive cures. Fit one jamb, followed by the head and then the remaining jamb.
  - Ensure there are no gaps in the PVC covers.
  - The finished door frame should have no visible fixings.



## Adding ironmongery.

- Refer to the schedule to ensure you have the correct fitment details and refer to the manufacturer's fitting instructions to ensure the fitting is compliant to BS 476 part 22/ BS EN 1634-1.
- Apply intumescent to all hardware that requires/comes with an intumescent kit.



## Closers.

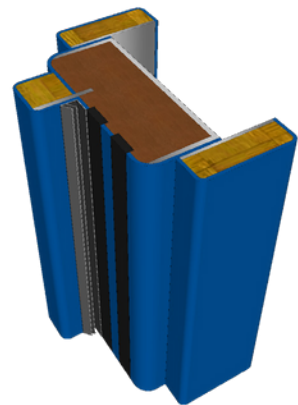
For the fitting of a closer, please refer to the manufacturer's fitting instructions.

## Adjusting dropseal.

It is vital that a dropseal, fully seals the threshold when the doors are in the closed position. If the dropseal doesn't fully seal the threshold when the doors are closed, you can adjust the dropseal. To do this, simply wind the plastic thread (closing edge) in small increments, checking the seal to the threshold after each adjustment.

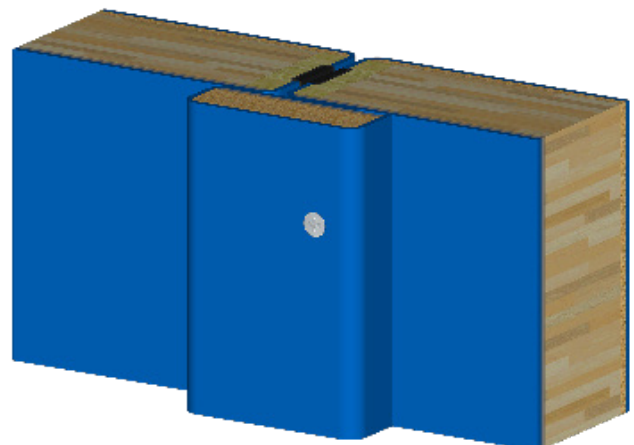
## Batwing seals.

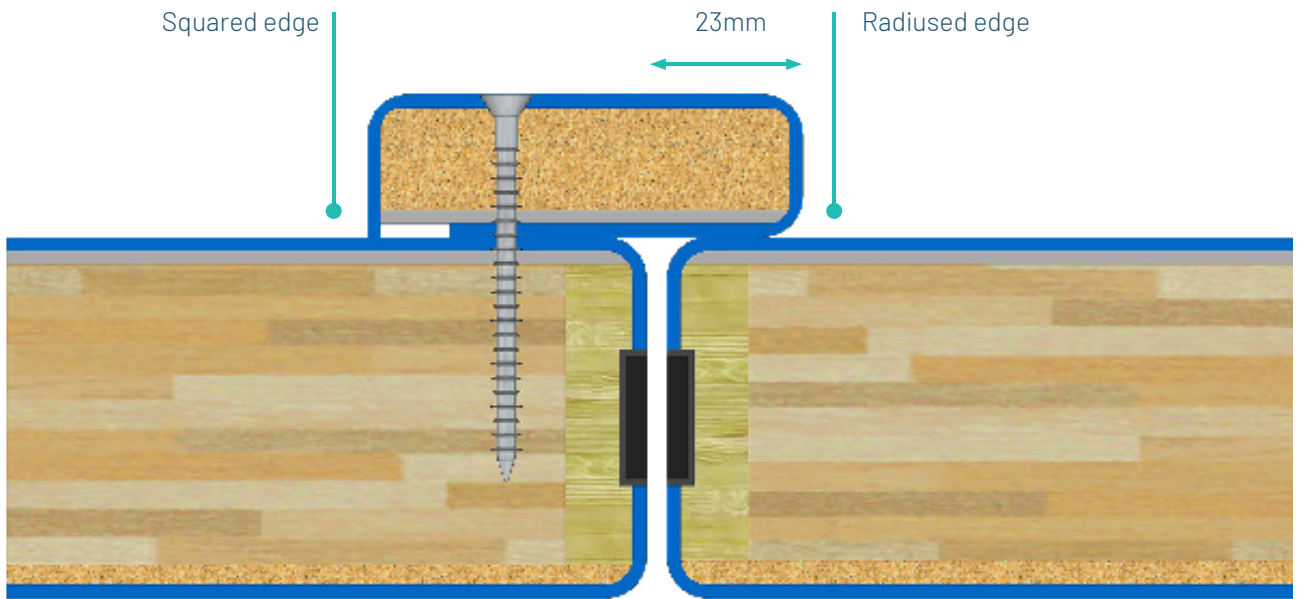
Some doors require 'Batwing Seals' to be fitted for the purpose of acoustics, or airflow restriction. Where these are required, these are noted on the door schedule, and are supplied loose for fitting on site. These seals are self-adhesive seals, that are stuck onto the frame after the installation of the doorset as illustrated.



## Astragal (Double doorsets only).

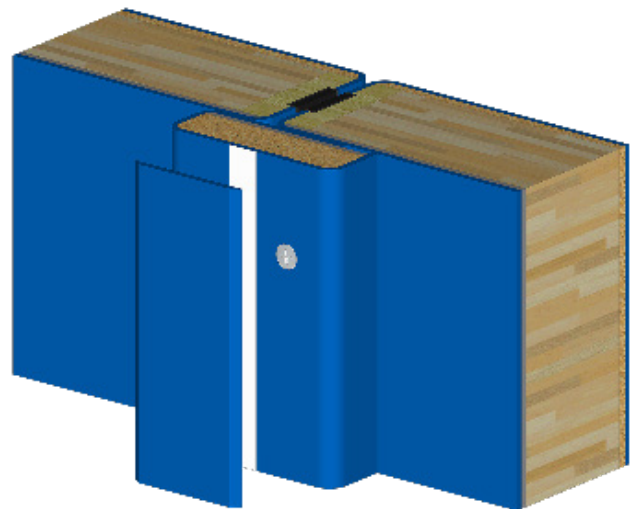
The Astragal should always be fitted to the non-hinge side (lead side) of the door. This ensures full coverage against radiation. Ensure the astragal is fitted to the slave leaf.



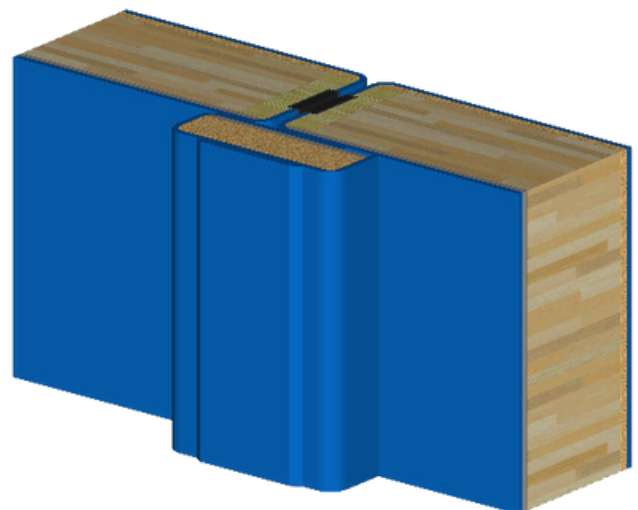


When fixing to door, make sure the astragal is fitted with the squared edge secured to the door and the radiused edge overhanging.

The astragal should have 23mm overhang from the edge of the door it is fixed to.



After fixing the astragal to the door, the fixings will be exposed. There is a bevelled cover strip supplied to cover these fixings. Remove the backing on the double-sided tape, apply a small bead of PinkGrip adhesive either side of the double-sided tape, and press firmly on to the astragal.

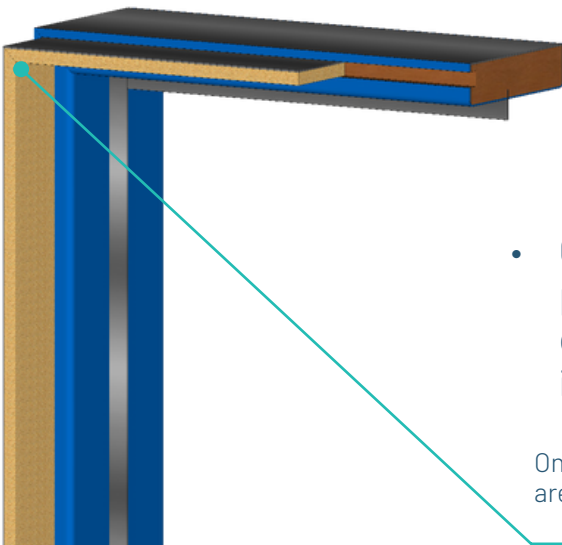
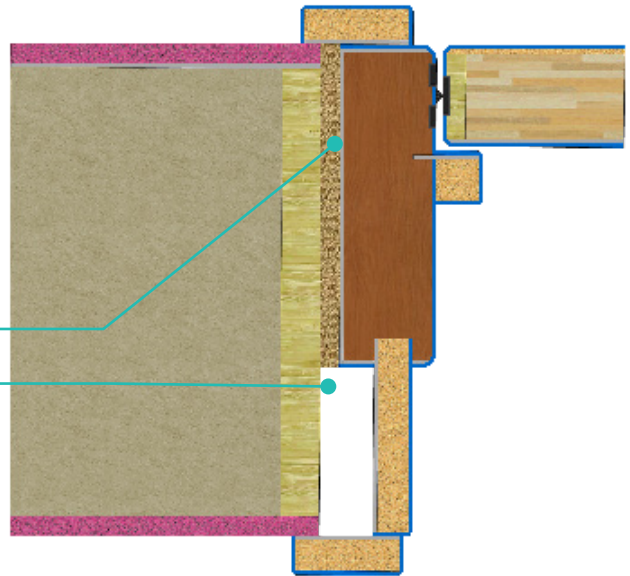


## Extension lining install.

Where openings have a deep frame reveal, extension linings will be supplied.

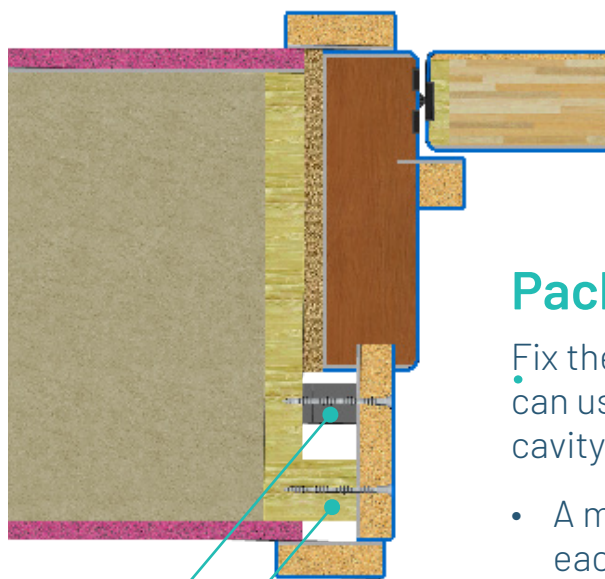
Earth wool fire stopping

Fire stopping is not required for the second half of the extension lining



- Once the main door frame has been fixed into place, and the fire stopping has been completed, insert the extension lining panels into the groove.

Once inserted, ensure that the mitres join such that there are no gaps in the lead lining between panel mitres.



Packers

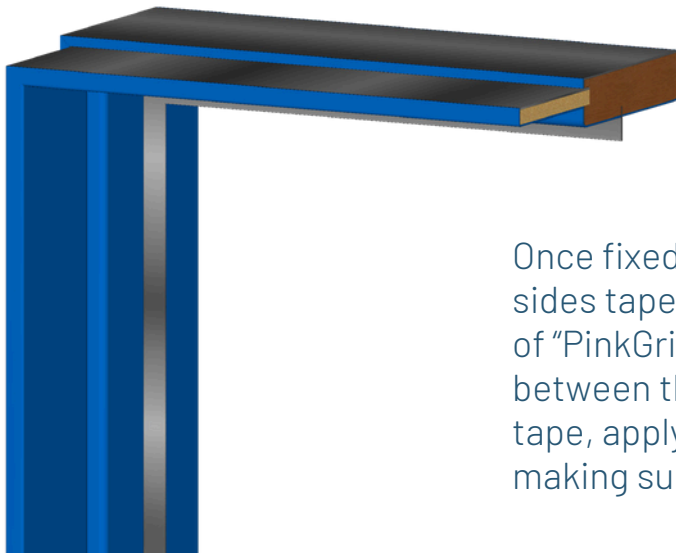
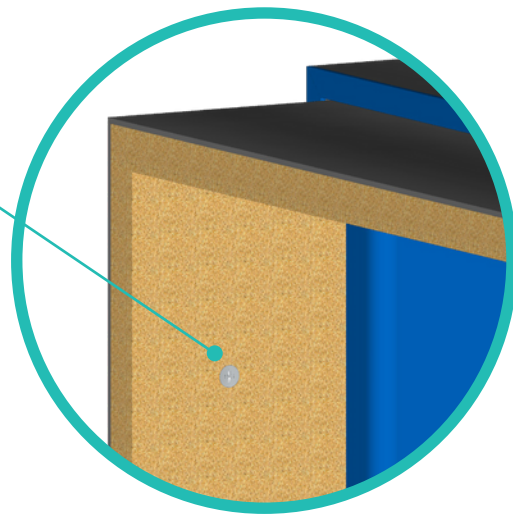
Wood stud

## Packers

Fix the extension lining to the substrate, you can use packers or a wood stud to pack out the cavity and allow secure fixing positions.

- A minimum of 5 fixing points is required on each jamb, spaced a maximum of 100mm from the top and bottom and spaced no more than 500mm apart.

Ensure fixings are flush with mdf to allow PVC covers to bond correctly.

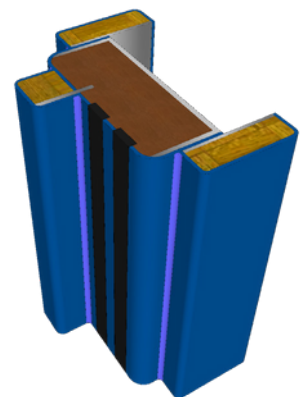


Once fixed, peel the backing off the double sided tape on the cover then apply beads of "PinkGrip" to the internal corner and between the rows of adhesive backed tape, apply the PVC to the extension lining making sure it has adhered securely.

Fit architraves over the junction between the extension lining and wall.

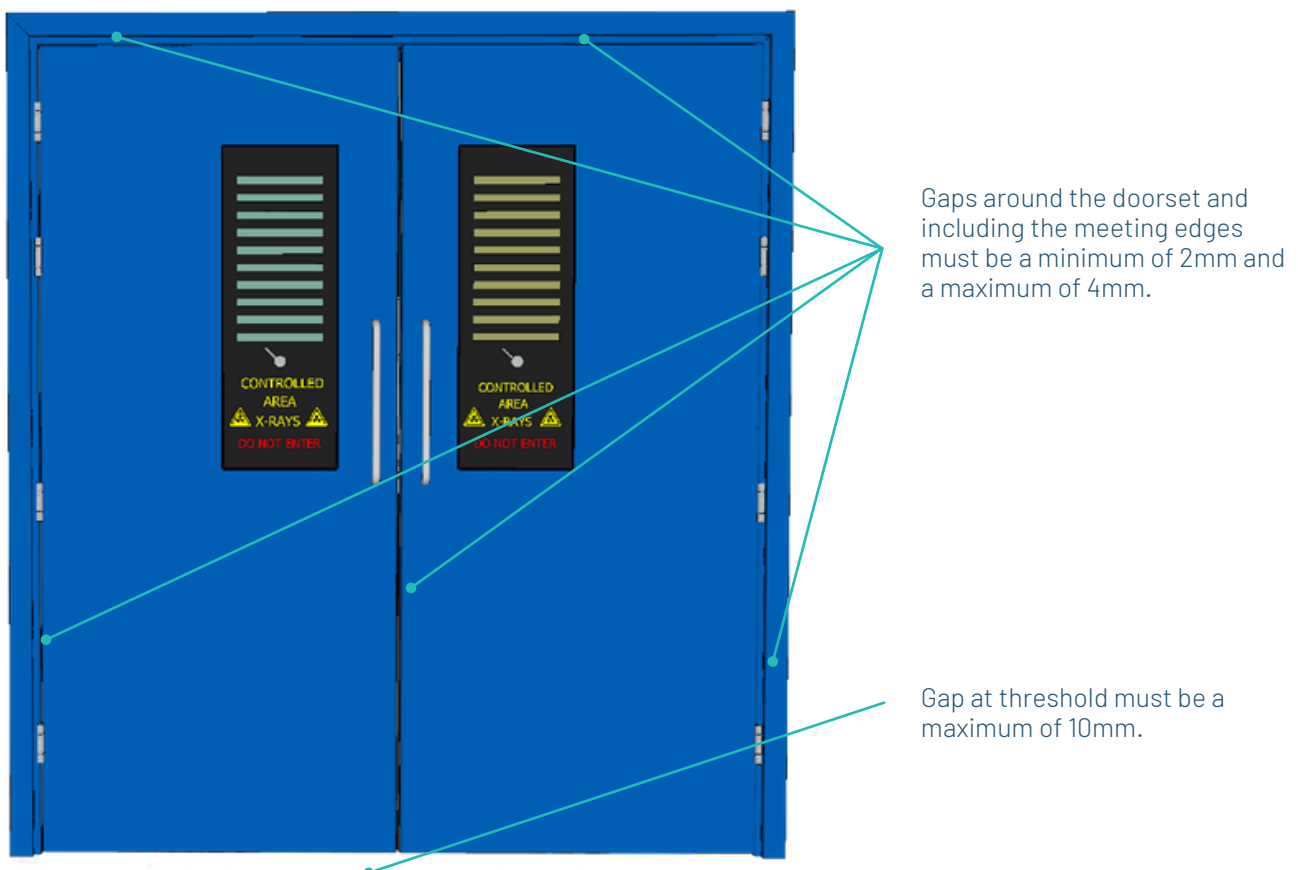
## Silicone.

Silicone to the internal corners is not essential for final finish, but some clients like to have this installed for aesthetics/infection control reasons. Where this is required, colour match silicone is available for solid colours – use clear for woodgrain finishes.



## Final checks.

- Gaps around door; between head and jambs must be a minimum of 2mm and maximum of 4mm. Gaps under the door must be a maximum of 10mm between the finished floor level and the underside of the door.
- If the door is designated as Smoke Rated (FD30s/FD60s) the gap under the door must be a maximum of 3mm without a drop seal, or up to 10mm if fitted with a drop seal.
- Ensure all intumescent is in place and undamaged.
- Remove any protective film that is present on PVC facings.
- Clean the doorset, ensuring all pencil marks, dust or debris is removed.
- Ensure the doors latch/ shut fully and DO NOT slam shut.



## Intumescent table.

	NFR	FD30	FD60	Comments
<b>Hinges</b>		✓	✓	Intumescent pads are required under both blades of the hinge (frame and door).
<b>Locks/Keeps/Other morticed ironmongery</b>		✓	✓	All locks and keeps must be fitted with the supplied intumescent jackets. Other morticed ironmongery may require intumescent protection – refer to ironmongery schedule.
<b>Frame</b>		✓	✓	All FD30/FD60 frames will have 2 x (15mm x 4mm) intumescent strips. They sit 5mm either side of the door centre line.
<b>Door Leaf</b>	✓	✓	✓	NFR doors will have a central 20mm x 4mm intumescent strip on both vertical edges of the door. FD30 & FD60 doors will have a central 20mm x 4mm intumescent strip on top of the door in addition to the vertical edges.





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