

# BUILDING IN DETAILS

## Fire Door Installation Guidelines

You have purchased a Pyropanel fire door manufactured under licence by our network of selected and professional manufacturers. The manufacturer who supplied your door is noted at the bottom of this installation sheet.

These guidelines and instructions have been prepared to ensure your fire door is installed in accordance with AS 1905.1, our specifications and recommendations.

These guidelines have been prepared to address specific issues associated with the installation of fire doors and to ensure the door is fit for purpose and does not require unnecessary maintenance or repair work.

These guidelines are to be read in conjunction with AS 1905.1 and also provide additional information to ensure the installation does not diminish the serviceable life of the door. Failure to install the door correctly or follow the guidelines below could result in a shorter life span of the doorset or its functionality as a fire door. Your door may become non-compliant, requiring immediate attention to ensure it is fit for purpose.

If you are not sure of the door installation protocols in this document, please contact your Pyropanel Fire door manufacturer who manufactured and supplied the door.

### Trimming door to suit the door frame.

1. If the door requires trimming to suit the door frame, ensure the clearances as noted in AS1905.1 are not exceeded. The maximum clearances are: top and sides 3mm, bottom 10mm. (Note: These clearances are for a standard fire door. In some cases a fire test or technical opinion may allow larger gaps, however particular conditions will apply in these circumstances and you should contact your door manufacturer to fully understand these conditions (if applicable).
2. The stiles and rails in your fire door are not the same as non-fire rated doors. The stiles and rails are thin strips (nominal 10mm thick). Their function is to accommodate an acceptable finish to the edge of the door and to allow for hardware to be rebated. In some door designs, there is an intumescent strip rebated into the stiles and/or rails. Where there is an intumescent strip fitted, this is a design requirement and should not be removed or modified.

Where trimming or planing of the door is necessary to fit into a door frame, ensure equal amounts are removed from each side. DO NOT trim or plane one side only. Excessive trimming or planing from one side only will

reduce the strength of the door and possibly expose the core material, and intumescent strips (if fitted); affecting the serviceability of the door and making the door non-compliant.

3. If excessive trimming of the door is required to a depth where the door stiles and rails cannot be serviceable, then please consider if a custom made door is required. Please contact your door manufacturer for guidance in this matter.

The hinge stile should have sufficient thickness to allow for the rebating of the hinge.

### Hinge Installation

1. Hinge rebates should be prepared with a router and the corners squared off with a sharp chisel.
2. The stiles are made of timber and are not designed to be the sole anchor point for hinges. Screws must be anchored for the entire length of the screw, not just the edge strip. Screws should be 10g x 50mm minimum.
3. Holes through the stiles should be pre-drilled to the correct diameter (5/32" or 4mm) and depth. If the door stiles are not pre-drilled, they will most likely split and the door will not be serviceable.

If the door is manufactured with our Pandor material for the door core (max FRL -/60/30), the pre-drilling must be to the full depth of the screw.

If the door is manufactured with our FR material for the door core (FRL from -/60/30 to FRL -/240/30) it is important to note there is a perforated steel edge immediately behind the stile, followed by a steel hinge plate located approximately 30mm in from the edge of the leaf. The depth of the pre-drilling must pass firstly through the perforated steel edge and secondly through the hinge plate. Ensure the screw penetrates through the hinge plate. If the hinge is not anchored into the hinge plate then the door may fall off its hinges.

4. Tightening of the screws. Screws should be hand tight. Over tightening the screws could pull the hinge plate sideways and crush the core material leaving a void inside the door leaf.

# BUILDING IN DETAILS

## Fire Door Installation Guidelines

### Door Hardware

Any hardware fitted to the Pyropanel fire door shall be tested and approved. All the Pyropanel door manufacturers maintain schedules of approved hardware and should be contacted if you are not sure if your hardware has been tested and approved. Note that if the hardware used has not been tested and approved, the door will be non-compliant and unable to be certified.

### Door Closer Installation

1. Different types of closers require different screw lengths. If you are not sure, please check with the door manufacturer or the door closer supplier. Door closers are supplied with an installation template to maximise functionality. Pyropanel recommends the template supplied is used to avoid any warranty issues supplied with the door.
2. Pyropanel's advice is to ensure the screw used penetrates the door leaf by at least 30mm. When doors are manufactured with FR board, there is a steel reinforcing plate located in the centre of the door leaf. The screws used **MUST** penetrate this steel plate to ensure adequate anchorage. Where screws do not penetrate this steel plate, the door closer will come loose from the door and require re-fitting with the correct screws, or the door could require replacing if the door integrity cannot be confirmed.

Some suppliers of door closers provide shorter screws which do not adequately anchor the door closer into the reinforcing plate. Please check your screw lengths supplied and if they are too short, substitute the screw for a longer one.

### Drilling holes for door furniture

1. Follow the hardware installation instructions supplied with the door furniture, considering the recommendations below with regard to drilling holes.
2. Pyropanel fire doors contain a perforated steel plate to ensure the door hardware is anchored appropriately and does not crush the core material. Do not use a spade drill bit to drill holes as they will grab and dislodge the perforated plate. The correct procedure is to use a hole saw at the correct size. The hole saw will cut through the plate without damaging it. Drill from both sides with hole saw.

### Mortice lock installation

1. Drill furniture and cylinder holes (i.e. those through the face of the leaf) prior to the mortice lock body hole. This will prevent damage to the core material.
2. Minimise core material removal when cutting holes.

### Storage and handling

1. If doors are not immediately installed, store the doors flat in a dry area to prevent warping and moisture damage.
2. Do not store doors by leaning against walls or other supports prior to hanging.
3. Warping of doors can occur if the door is not properly stored, handled or installed. Beware of adverse or excessive moisture and temperature conditions, which could affect the door performance, operation or dimensional stability.

You Door Manufacturer is: