

# Fire Door Installation Guideline

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 have been prepared to address specific issues associated with the installation of fire door-sets and to ensure the door-sets are fit for purpose and do not require unnecessary maintenance or repair work. These guidelines are to be read in conjunction with AS 1905.1. They provide additional information to ensure the installation does not diminish the serviceable life of the door-set.

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, thereby requiring immediate attention to ensure it is fit for purpose.

If you are not sure how to install the door you have received, please contact your door manufacturer before proceeding.

## Trimming the door to suit the door frame.

1. If the door leaf requires trimming to suit the door frame, ensure clearances as noted in AS1905.1:2015 are not exceeded. The maximum clearances are: top and sides 3mm, and bottom 10mm.
2. The stiles and rails in your fire door are not the same as non-fire rated doors. Stiles and rails are thin strips generally 10mm thick maximum. Their function is to accommodate an acceptable finish to the edge of the doorset to allow for hardware to be installed securely and to enable trimming of the door leaf.

Where there is an intumescent strip rebated into the stile and/or rails, this is a design requirement and must 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. This may affect the serviceability of the door and render 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 a custom-made door is required.

## Hinge Installation

1. Vertical edgestrips are generally made of timber and are not designed to be the sole anchor point for hinges. Hinge rebates should be prepared with a router. For doors with Greenboard edgestrips (e.g. very large doors), use a router to cut the hinge rebates, a hard-tipped router bit is recommended. The corners can be carefully squared up with a sharp chisel. Note: Greenboard is very hard. Do not apply excessive force or the door could be damaged.
2. Screws must be anchored for the entire length of the screw, not just the edge strip. Hinge screws shall be 10g x 50mm minimum. Pilot holes must be drilled into the door edge at 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.
3. If the door is manufactured with our Pandor material for the door core (max FRL -/60/30), the pilot hole 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 -/120/30), 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 pilot hole 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.

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## Door Hardware

Any hardware fitted to the Pyropanel fire door-set must be approved for use on the door-set. All Pyropanel door manufacturers maintain schedules of approved hardware and should be contacted if you are unsure if your hardware has been approved. Note that if the hardware used has not been 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 unsure, 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 with the door.
2. 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 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, taking into consideration the recommendations below with regard to drilling holes. Note that some door locks require special installation details.
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 of 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 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.

## Frame filling

All steel frames must be fully filled with a Pyropanel approved frame filling material.