



Information Sheet No. TFD-2021-13

BUILDING IN DETAILS

Gaps around fire doors

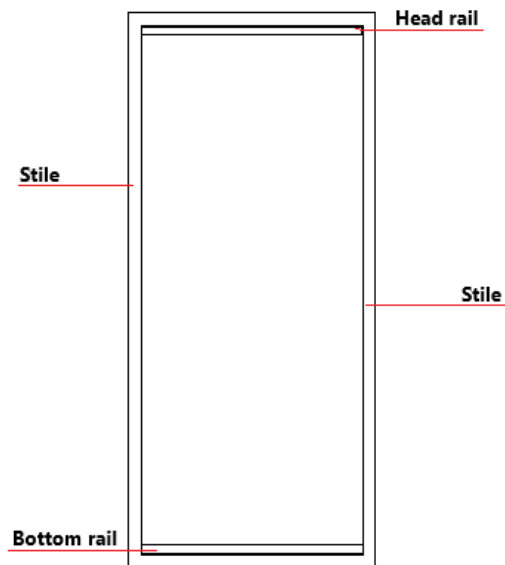
Description

Fire doors must be installed to AS1905.1 or as tested or assessed, which includes the allowable gaps around the stiles, head and base of the door. The following technical sheet describes the maximum allowable gaps and acceptable rectification methods.

Acceptable Clearances

- **Stiles and head:**
 - In the closed position, gaps between the door and frame jamb (head, hinge and lock stiles) are not to exceed 3mm.
 - Door leaf to the door seat rebate not to exceed 5mm average.
- **Bottom:**
 - Maximum allowable gap between leaf and top of finished floor level is 10mm (3-10mm is recommended.)

(Note: Up to 15mm gap is approved on some doors, contact Tasmanian Fire Doors to confirm)



Rectification of Excess Gaps

Stiles and head:

Gaps between door leaf and frame can be reduced by using the following methods:

Lorient HP4002:

- Lorient HP4002 stick on perimeter seal attached to door frame or door leaf.
- Can be used where there are excessive stile or head gaps.
- Can be used on each stile or door leaf.
- Integrated self-adhesive tape is used to apply seal to door rebate



BUILDING IN DETAILS

Rectification of excess gaps continued

Bottom:

Gaps of up to 20mm at the bottom of the door can be reduced by using the following methods:

(Note: The following methods are approved up to 2hr fire rating, contact Tasmanian Fire Doors for more information)

Raven RP114:

- Raven RP114 should just clear the floor during door opening and closing. To avoid the seal fouling on uneven or sloping surfaces the finned gasket portion should engage an approved Raven threshold plate.
- **Location:** Bottom of Fire and smoke doors.
- **Min/Max Gap:** 14mm to 20mm (without Raven threshold plate)
- **Seal sizes:** Available 820mm, 915mm & 1220mm.
- **Standard Finish:** Anodised Satin Clear or Bronze.
- **Fixing Method:** Simply cut seal to length. Zinc plated cross recess head ST screws of the appropriate size are supplied.
- **Seal Material:** Intumescent infill, S.E. flexible PVC cover strip and finned gasket.

- **Used in conjunction with approved Raven door frame seals and threshold plates.**

Lorient FDBU20:

- Lorient FDBU20 can be used to upgrade existing internal fire doors where door bottom gaps exceed the allowable 10mm as per AS/NZS1905.1. It is constructed from anodized aluminum profile, and incorporates a flame retardant smoke, draught and light excluding gasket, and integral high performance intumescent fire seal.
- **Location:** Bottom of Fire and smoke doors.
- **Min/Max Gap:** 14mm to 20mm
- **Seal Sizes:** 820mm, 915mm & 1220mm.
- **Fixing Method:** cut seal to length and attach with screws.
- **Used in conjunction with approved Lorient door frame seals and threshold plates.**

Pyropanel Greenboard:

- Can be used to reduce gaps by 10mm.

Non-combustible threshold seals:

- can be used to reduce the gap under a fire door
- Options include:
 - ◆ Raven RP28, RP29, RP77, RP82, RP95 (gaskets must be removed)
 - ◆ Lorient IS4070, IS4075, IS4010, IS4015, IS4020, IS4025, IS4110, IS4120

*For more information, Please
[contact Tasmanian Fire Doors](#)*