

Fire doors in Australia need to be installed to AS/NZS1905.1 as mandated by the NCC. This means the fire door has a Fire Resistance Level (FRL) as determined in the fire test method AS 1530.4 where door sets are subject to extreme temperatures in a full scale fire test simulating a fire emergency. The door set is then given an FRL which is a nominal grading period in minutes for structural adequacy/integrity/insulation. Fire doors are not structural members of a building so therefore have for example an FRL of -/120/60 where the FRL is 0 for structural adequacy/120 minutes for integrity/60 minutes for insulation. This is represented in NZ as FRR -/120/60 or in the UK for integrity as FD120 or in Europe IE120.

Door hardware including door seals are then tested to evaluate there is no reduction in the established FRL of that fire door.

Effective combinations of smoke and acoustic seals for fire rated butt hinged doors that have been tested and/or assessed to AS 1530.4 and BS 476 Pt. 22 (similar to BS EN 1634-1). These seals meet the requirements for AUS NCC specification C3.4 Deemed-to-Satisfy for smoke doors, NZ BC Compliance Doc. C, UK Approved Document B and standard BS 5588. These systems meet the leakage rates specified in AS 6905 when the door assembly is installed to AUS NCC specification C3.4 Deemed-to-Satisfy for smoke doors. Meets leakage rates specified in BS EN 13501-2 "Sa", "Sm" classification.

These systems have been smoke leakage performance tested to:

AS 1530.7  $\leq 25\text{m}^3/\text{h}$  @ 25 Pa when exposed to  $200^\circ\text{C} > 30$  minutes in accordance with AS 6905.


EN 1634-3  $\leq 3\text{m}^3/\text{h}/\text{m}$  @ 25 Pa for ambient and  $\leq 20\text{m}^3/\text{h}$  @ 50 Pa for medium temperature in accordance with BS EN 13501-2.

A large range of product combinations may be used, refer to door bottom seals and door frame or perimeter seals sections for fire ratings of individual seals on [page 48 - 115](#).

## Threshold Plates in Sealing Systems

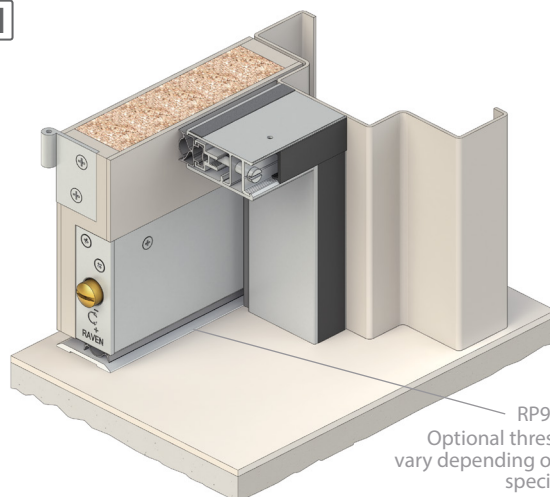
Aluminium threshold plates can be used under a fire door when the gap exceeds the specifications of the door bottom seal or to provide an optimum sealing surface for the door bottom seal.

Product selection should be made when assessing the mandated requirements listed in the AUS NCC and the Australian standard AS 1905.1: Components for the protection of openings in fire-resistant walls, Part1: Fire-resistant door sets, Section 5.5 Clearances around Door Leaves. Specifiers will determine the suitability of the information provided when selecting a Raven seal for their application.

 Refer to [page 66](#) for fire approved threshold plates.

### RP24Si RP38Si RP96

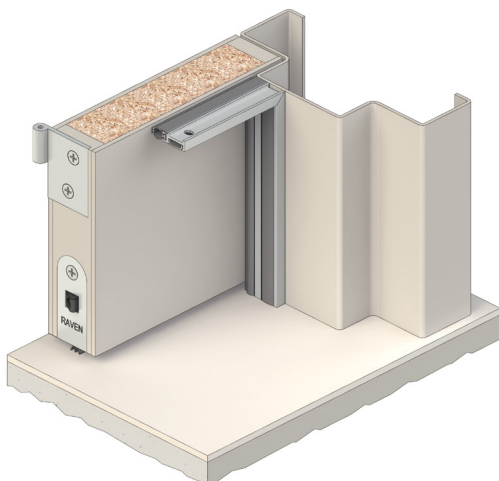
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Perimeter seal adjustment independent of fixings

### RP78Si RP8Si

M



### RP78Si RP35Si

M

