

Using This Catalogue



The Problem

For doors and windows to function, they must have gaps between their edges and the frame to allow for easy operation and to accommodate normal building movement.

However, these gaps can allow the intrusion of draughts, dust, insects, rain, noise, vermin, fire, smoke or bushfire embers. Unsealed doors and windows allows the leakage of heating and cooling which significantly increases energy costs and reduces the energy efficiency of other design elements of a building.

The Solution

The solution is to fit a Raven sealing system which seals the gaps around doors and windows against a combination of intrusions and leakages. Properly selected and installed, a complete and continuous seal can be achieved for all door and window types without impeding their normal use.

Optimum "sealing systems" can be achieved by combining the appropriate Raven door bottom seals, threshold plates, perimeter seals and meeting stile seals.

Product Selection

When choosing Raven seals, you should consider:

- What type of protection is required?
- What type of door or window do you want to seal?
- Does it provide protection without impeding normal door or window function?
- Is it compatible with other door or window hardware?
- What type of duty is required?
- Is it for an external, internal, residential or a commercial situation?
- What are the building code requirements?

Duty Levels

Raven seals have been designed to accommodate a variety of duty levels:



Light Duty

Light duty seals are generally used in residential and light traffic areas such as Class 1 – 4 Buildings.



Medium Duty

Medium duty seals are generally used in commercial and medium traffic areas such as Class 3 – 6 Buildings.

- Office spaces
- Shops
- Commercial accommodation



Heavy Duty

Heavy duty seals are generally used in heavy pedestrian and wheeled traffic areas such as Class 5 – 10 Buildings.

- Public hospitals
- Airports
- Factories
- Shopping centres

Applications

Icons have been used to help identify appropriate seals for various applications to make product selection easier. All seals are designed to meet most standards and in most cases, perform more than one function. Refer to [page 110](#) for details.



Weather



Energy, Draughts & Dust



Light



Insects and Vermin



Antimicrobial

Raven gaskets and cover strips contain antimicrobial compounds. Independently tested against E. Coli, Strep and MRSA.



Ambient (cold) Smoke

Temperatures up to 70°C.



Medium Temperature Smoke

Temperatures of 200°C for 30 minutes (smoke doors).



Fire & Hot Smoke

Fully developed fires exceeding 600°C (intumescent seals).



Fire (approved)



BAL - LOW

Bushfire Attack Level in accordance with AS 3959.



Up to BAL - 40

Bushfire Attack Level in accordance with AS 3959.



Up to BAL - FZ (flame zone)

Bushfire Attack Level in accordance with AS 3959.



Noise – Acoustic



Access and Mobility

Materials Specifications

Many seals consist of two parts; the aluminium extrusion and a flexible seal insert. Some seals also incorporate a cover strip to conceal fasteners.

Aluminium extrusions are alloy 6060 T5 or T6, anodised satin clear (silver) or medium bronze unless otherwise specified. Architectural perimeter seal extrusions are anodised 15µm and threshold plates are anodised 25µm for maximum durability.

Dependent on function, seal inserts can be:

- **Nylon brush filaments**
- **Polypropylene pile**
- **Rigid or flexible PVC** - Raven proprietary PVC, flexible and rigid extrusions have UV inhibitors, are self-extinguishing where indicated and have a service temperature of -5°C to 70°C.
- **Silicon rubber** - Raven proprietary silicon rubber has UV inhibitors and withstands very high temperatures conforming to NCC Spec. C3.4, "Smoke Doors 200°C for 30 minutes". They are self-extinguishing with a flammability index of 1 where indicated with a service temperature of -60°C to 230°C.
- **Solid and sponge EPDM** - Raven proprietary EPDM extrusions are designed to withstand the rigours of compression, heat, cold, water, ozone, UV light, abrasion and ageing. With exceptional memory meaning they will resume their original shape even after long periods of compression, they are classified to self-extinguishing / burn rate SAE J 369, ISO 3795 where indicated and have a service temperature of -40°C to 70°C.
- **TPE (Thermo-Plastic Elastomer)** Raven proprietary TPE has similar performance characteristics of EPDM. Raven TPE has added UV inhibitors and a flammability index <5 where indicated. TPE has a service temperature of -40°C to 100°C.

Fixing

The majority of Raven seals are fastened using supplied zinc plated, self-tapping, cross recess head screws of the appropriate size and colour. Fixing holes are usually pre-drilled and many are slotted to allow for accurate fitment and compensation for building movement.

Painted Finishes

Raven Polyester Enamel (P.E. Paint) finish can be colour matched to virtually any colour sample for aluminium and rigid PVC extrusions. P.E. Paint is a two pack polyester enamel colour match finish which outperforms most finishes including powder coating in the critical areas of colour choice, durability, flexibility and hardness. P.E. Paint is available at an extra cost and requires an additional lead time.

Storage & Maintenance

Raven seals should be stored flat in a clean and dry area away from excessive heat.

Annual or periodic inspection, adjustment and cleaning is suggested for all styles of door and window seals. For fire and smoke sealing applications, refer to [page 110](#) for standards and authorities.

Specifying Raven Seals

To avoid product substitution it is important to quote the brand name "Raven", the product model number, finish, preferred system configuration and reference to the Raven material specification, standards and guarantee, refer to [page 117](#).

NATSPEC Product Partner

To further assist in creating a Raven product specification, Raven is a product partner with NATSPEC providing clear and easy to use specification templates. www.natspec.com.au

Green Specification

Raven Products Pty Ltd is verified and listed with the internationally respected organisation Ecospecifier Global.

The Raven verified product listing will assist specifiers when selecting environmentally helpful and sustainable products and obtaining green building credits. www.ecospecifier.com.au

CAD

Detailed drawings and specifications of all Raven seals are available to registered users from the Architectural Door and Window Seal link at www.raven.com.au.

Please note: illustrations in this catalogue may not be to scale. Slight variations in extrusions may occur but these minor differences are nominal.

The latest information about Raven, including a PDF version of this catalogue is available from the Raven website www.raven.com.au.

Product Information

Raven seals are available in stock lengths and standard door set sizes. Some rigid perimeter seals are pre-cut to suit standard door sizes (mm):

- Single – 1 x 1000 & 2 x 2100
- Double – 3 x 2100
- Long single – 1 x 1000 & 2 x 2750
- Long double – 1 x 2000 & 2 x 2750

Ordering

In Australia, the Raven Architectural ranges of seals shown in this catalogue are available to order from specialist, Architectural Door Hardware distributors that are located in each state.

Raven architectural distributors can assist you with product sizes, finishes, pricing and delivery information in your area.

When ordering, quote how many units, the brand "Raven", model number, description, unit length and the standard finish as detailed in the catalogue, e.g. Six only "Raven RP38 door bottom seals, 920mm, clear anodised".

Important: For rigid perimeter seals, always try to order in door set sizes or the shortest seal length available. Long rigid lengths if ordered in small quantities, whilst well packaged, are more prone to bending during transit.

All fasteners and fitting instructions are enclosed with each product. Raven seals are suitably packaged and protected with recyclable materials.

Special Order Paint finishes

P.E. Paint is available at an extra cost and requires additional lead time. Conditions apply. Please quote the brand, colour number and finish description.

Returns and Allowances

No product returns are accepted without prior written permission. Conditions apply.