

singapore private lim Catal

International Product Catalogue **118**

Weather and Energy Fire and Smoke Noise - Acoustic Light Insects - Vermin

raven.com.au







Raven Products Pty. Ltd.

Head Office and Factory 18 - 22 Aldershot Road Lonsdale, South Australia 5160 Australia

PO Box 67 Lonsdale, South Australia 5160 Australia

T +61 8 8384 5455

Sales Enquiries T 1800 888 123 Free call anywhere in Australia Private limited E sales@raven.com.au

Technical Advice

E tech.advice@raven.com.au

raven.com.au

Accredited





nternational Door and Window laboratories Pty Ltd is NATA accredited for weather testing and smoke testing of doors and windows.

Associated Members / Certified with

















General

-

Weather and Energy

A loode haven	•••••••••••••••••••••••••••••••••••••••
International Research and Develop	oment 4
Using This Catalogue	6
Standards / Authorities	130
Quick Product Reference	132
Product Index	136
Building Code Regulations	9
Butt Hinged Doors - Timber and Aluminium	10
Pivot Doors - Timber and Aluminium	
Sliding Doors	
Garage Doors - Panel-lift and Roll-up	12
Folding Doors	

3

About Raven



Health and Aged

Care



Fire and Smoke



Noise - Acoustic



Door Bottom Seals Threshold Plates

Butt Hinged Doors	
Pivot Doors	

Building Code Regulations	. 19
Introduction and Reference Standards	.20
Smoke Door Sealing Systems - Solid Core Doors	.21
Smoke Door Sealing Systems - Performance Solutions	.24
Smoke Sealing Systems - Fire Rated (Labelled) Doors	.26
Bushfire - Sealing Systems - Ember Attack	.28
Building Code Regulations	31
Selecting an Acoustic Sealing System	.32
Rw30 - 33 Standard Solid Core Timber Doors	.34
Rw34 - 40 Proprietary Brand Acoustic Doors	.40
Rw41 - 50+ Proprietary Brand Acoustic Doors	.43
Bulkhead, Interconnecting, Sliding, Pivot Doors	.46

Automatic Door Bottom Seals	 49
Door Bottom Sweep Seals	 58
Threshold Plate Seals	 66
Threshold Plates	 70

C	000r Frame / Perimeter Seals82	
	Astragals (Meeting Stile Seals)98	
	Joinery Seals - Silicon and TPE104	
	Self-adhesive Seals107	
	Intumescent Fire Seals108	
	Brush Strip Seals - Nylon Filament	

Cor	nplementary Products	124
R	eplacement Components	128
	Premium Cavity Slider Systems	137
	Tactiles, Stair Treads and Edging	



Door Frame / Perimeter Seals



Other Products

singapore private limited

Celebrating Over 70 Years

Established in 1950, Raven Products is an Australian family owned and operated company that pioneered the door and window seal industry in Australasia. Raven has grown to become one of the most trusted brands in the building hardware industry providing innovative, quality tested and certified door and window sealing systems for architects, designers, engineers and builders.

The Raven brand is synonymous with quality, value and service which is why Raven is the brand that is consistently relied on and recommended here in Australia and overseas.

Raven offer a tested and certified range of door and window sealing systems for the containment of energy and the exclusion of noise, fire, smoke, vermin, insects and bushfire embers.

As a world leader in its field with products distributed across the globe, Raven's founding principals have always remained true - to provide the best products at the best price supported by the best service.



Genera

Service and Advice You Can Trust

When architects, engineers and builders are faced with door and window sealing challenges in design, compliance or function, they turn to Raven.

With a long list of patents and design registrations, Raven has developed much of the technology and led many of the advances in weather, acoustic, fire and smoke sealing systems. This is why you can rely on Raven for the best advice – after all, this is how many of our innovative products were born.

We have a team of specialists on-hand to provide expert advice to assist with developing the most suitable and cost effective solutions to even the most challenging problems. With over 70 years in manufacturing and supporting the building industry, Raven remains at the forefront; Raven understands its complexities, challenges and creative requirements.

For informative and professional support, please telephone 1800 888 123 or email our technical assistance team at: tech.advice@raven.com.au.

Solutions on Your Doorstep

With modern despatch centres in Australia and Asia, we can deliver tailored sealing systems around the corner or across the globe. Raven's advanced ISO 9001 quality management production systems can build and deliver colour matched products weeks ahead of other manufacturers.

Our network of distributors and transport systems can deliver anywhere in the world from desert mining sites in outback Australia, mid ocean oil and gas rigs, Antarctic research stations to the bustling cities of London, Dubai or Shanghai.

So when you call on Raven to deliver the ideal sealing system – you can be sure that's exactly what we will do.

Our Name is Your Guarantee

We will never put our name to a product until we are fully satisfied that it is not just easy to fit and highly durable, but it can withstand the appropriate extremes and complies with the latest building code regulations and standards.

Our name and 70+ year reputation is your guarantee of reliability and quality.

Quality Control That Sets New Standards

Our commitment to quality extends from research, development and testing through to manufacture, delivery, ease of application, durability and after sales service regardless of the project size or complexity.

With a professional team of engineers, designers and international certified testing facilities; Raven is the brand that architects, designers, engineers and builders can rely on.

Every Raven seal is rigorously assessed and tested to meet the most demanding Australian and international standards, including life cycle performance from the prototype phase and construction through to batch testing of the final manufactured product. Raven maintains control over every aspect of its range carefully selecting materials and suppliers to ensure a superior end product. We also take our environmental responsibility just as seriously, operating to environmental ISO 14001 standards.

Raven's focus on innovation has provided sealing solutions for the building industry for decades. Our commitment to our products has meant the development of:

SGS

- NATA accredited laboratory testing facilities to Australian and international standards
- ISO 9001 Quality Management System accreditation
- Operates to ISO 45001 OHS Management
- Operates to ISO 14001 EMS
- Global GreenTag verified
- Australian design awards
- A library of patents and design registrations

OLOBAL GREENTAG VERIFIED Correction Eco-Preferred trust brands"

IAS-ANZ



RAVEN

DI

singapore private limited

International Research and Development

Our enduring commitment to innovation and quality keeps Raven at the industry forefront, by providing effective performance driven sealing systems that meet or exceed our clients' expectations.

Raven's international research, product development and testing facilities means we are constantly developing new and innovative ways to respond to the rapid advances in the building industry. Our specialist research and development engineers work tirelessly to meet the ongoing needs of the building industry often pre-empting new challenges and providing innovative products to suit. All Raven products are designed to comply with international building regulations and requirements. Continuous monitoring and accreditation to international quality standard ISO 9001 underscores the company's determination to deliver products that are proven to be the best.

Actively identifying advances in the industry, Raven is at the forefront, developing the technology and the products to suit. We see our role not just to design and manufacture a quality product but also to assist architects, engineers and builders to help improve building design and safety while reducing construction costs where possible.

Internationally Accredited Testing

General

Compliance and Certification

Designed to meet or exceed Australian, New Zealand and European standards and building codes, Raven offer a tested and certified range of door and window sealing systems for the containment of energy the exclusion of noise, weather, insects, vermin, fire, smoke and bushfire embers.

Don't put your project at risk with products that only claim Deemedto-Satisfy. This means they may not have undergone the same rigorous laboratory testing and certification processes as Raven.

With in-house NATA accredited testing facilities, Raven's design and engineering team can quickly develop new and innovative ways to respond to the advances in the building industry here and around the world. Our array of patents and numerous design awards stand as testament to this commitment.

You can rest easy in the knowledge that Raven will provide you with the most tested and compliant systems available on every project.

Internationally Accredited Testing

Raven door and window seals are tested and certified by internationally recognised accredited laboratories, including but not limited to, IDWL, CSIRO, BRANZ, Warringtonfire, and UL. Seals undergo weather, acoustic, fire and smoke testing to verify their conformance to national and international codes and regulations.

Weather testing is performed in a NATA accredited laboratory that sees door and window assemblies pelted with rain and wind pressures up to 300km per hour - that's cyclonic conditions! Weather tests on door and window assemblies are conducted in accordance with AS 2047 and AS/NZS 4420 series Standards.

A state-of-the-art acoustic laboratory tests Raven sealed door sets to EN ISO 10140 series Standards wit<mark>h ra</mark>tings to ISO 717-1.

Fire tests are performed by internationally recognised fire laboratories to Australian and international standards AS 1530.4, EN 1634-1, BS 476 Pt. 20 & 22 and UL 10C.

NATA accredited laboratories test Raven seals on solid core smoke doors and fire rated door assemblies to ambient and medium temperature smoke at 200 degrees Celsius in accordance with AS 1530.7 and EN 1634-3 series Standards.









Using This Catalogue



The Problem

Genera

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 sealing systems, 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

Icons have been used to assist specifiers and builders to select the right duty level to meet the expected duty cycle for each building class.

Light Duty

Generally used in residential and light traffic areas such as Class 1 – 4 Buildings.

Medium Duty

Generally used in commercial and medium traffic areas such as Class 3 – 6 Buildings.

- Office spaces
- Shops
- Commercial accommodation

Heavy Duty

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 130 for details.

	Weather
	Energy, Draughts and Dust
Ť	Light
Ŕ	Insects and Vermin
ANT/ CROBIT	Antimicrobial Raven gaskets and cover strips contain antimicrobial compounds. Independently tested against E. Coli, Strep and MRSA.
c	Ambient (Cold) Smoke Temperatures up to 70°C.
M200°C	Medium Temperature Smoke (NCC Spec. C3.4) Temperatures of 200°C for 30 minutes (smoke doors).
Г н	Fire and Hot Smoke Fully developed fires exceeding 600°C (intumescent seals).
ð	Fire (Approved) In accordance with AS/NZS 1905.1.
BAL	BAL - LOW Bushfire Attack Level in accordance with AS 3959.
BAL ≤29	Up to BAL - 29 Bushfire Attack Level in accordance with AS 3959.
BAL ≤40	Up to BAL - 40 Bushfire Attack Level in accordance with AS 3959.
BAL ≤FZ	Up to BAL - FZ (Flame Zone) Bushfire Attack Level in accordance with AS 3959.
())	Noise – Acoustic
E	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.

6

Using This Catalogue

Aluminium Finishes*



*While great care has been taken to ensure the accuracy of the colours above, they may not match the actual product finishes due to variations in digital displays and print production.

Dependent on function, seal inserts can be:

- Nylon brush filaments Raven nylon brush has UV inhibitors, is self-extinguishing and conforms to NCC Spec. C3.4, "Smoke Doors 200°C for 30 minutes". Flammability index of 1 where indicated.
- Polypropylene pile has UV inhibitors.
- **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 selfextinguishing 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 selfextinguishing / 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 the aluminium extrusion component. 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 130 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 137.

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 natspec.com.au.

Green Specification

Raven Products is verified and listed with the internationally respected organisation Global GreenTag Intl. Pty Ltd, formerly EcoSpecifier.

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

CAD

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

The Raven Architectural ranges of seals shown in this catalogue are available to order from specialist, Architectural Door Hardware distributors that are located in many countries.

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.

re private limited

Weather and Energy

NCC Class 1 - Class 10 Buildings (residential, public buildings, shop fronts, apartments, hotels, factories and hospitals)

Weather and energy door and window seals are designed to prevent draughts, rain water infiltration and energy loss through external doors. Raven produce a variety of seals to suit even the most severe weather conditions that can also significantly improve the thermal efficiency of a building by preventing energy loss up to 50%.

In addition, Raven door bottom and perimeter seals can also be used in conjunction with threshold plates and astragal seals to prevent the ingress of dust, insects and rodents and wind-blown embers in bushfire prone areas.

Raven have a large range of weather – energy sealing systems tested and certified to meet building code regulations as well as meeting the applicable Bushfire Attack Level (BAL) requirements in bushfire prone areas.

Building Code Regulations



National Construction Code (NCC) Requirements

Commercial

Class 2 to Class 9 buildings

J3.4 Windows and doors

- (a) A door, openable *window* or the like must be sealed—
 (i) when forming part of the *envelope*; or
 (ii) in *climate zones* 4, 5, 6, 7 or 8.
- (b) The requirements of (a) do not apply to— (i) a *window* complying with AS 2047; or
 - (ii) a fire door or smoke door; or
 - (iii) a roller shutter door, roller shutter grille or other security door or device installed only for out-of-hours security.
- (c) A seal to restrict air infiltration-
 - (i) for the bottom edge of a door, must be a draft protection device; and
 - (ii) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal or the like.
- (d) An entrance to a building, if leading to a *conditioned space* must have an airlock, *self-closing* door, *rapid roller door*, revolving door or the like, other than—
 - (i) where the conditioned space has a floor area of not more than 50 m²; or
 - (ii) where a café, restaurant, open front shop or the like has—
 (A) a 3 m deep un-conditioned zone between the main entrance, including an open front, and the *conditioned space*; and
 - (B) at all other entrances to the café, restaurant, open front shop or the like, *self-closing* doors.
- (e) A loading dock entrance, if leading to a *conditioned space*, must be fitted with a *rapid roller door* or the like.

Residential

Class 1 and Class 10 buildings

3.12.3.3 External windows and doors

 (a) An external door, internal door between a Class 1 building and an unconditioned Class 10a building, openable window and other such opening must be sealed when serving—

 (i) a conditioned space; or

(ii) a habitable room in climate zones 4, 5, 6, 7 and 8.

- (b) A seal to restrict air infiltration-
 - (i) for the bottom edge of a door, must be a draft protection device; and
 - (ii) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compressible strip, fibrous seal or the like.
- (c) A window complying with the maximum air infiltration rates specified in AS 2047 need not comply with (b)(ii).

Ember Attack - BAL Ratings

Where door sets are being specified in Bush Fire Prone areas, door seals, weather stripping and draught excluders are required to meet AS 3959 to comply with the NCC. The BAL rating is determined by the site location and the attributing factors for bushfire attack to which AS 3959 gives guidance. Attention needs to be paid to specifying to the correct BAL rating as determined by AS 3959. Refer to the selection table on page 29.

limited



Related Building Codes

There are several standards, which refer to seal properties and testing for weather - energy:

AUS / NZ

Requirements are noted in the Australian National Construction Code (NCC) and New Zealand NZ BC Compliance Doc. H.

UK / EU

Requirements are noted in the British Building Regulations Approved Document L1 & L2.

USA

Requirements are noted in the Building Code and the Residential Code IBC 2000.

For further details, refer to Standards / Authorities on page 130.

Weather and Energy - Sealing Systems 🛛 🚓 📄 🚿 🏺

Butt Hinged Doors



Timber Butt Hinged Doors

Effective combinations of seals for weather proofing butt hinged timber doors, inward or outward opening.

Illustrations show inward opening door configurations.

Commercial Aluminium Shop Front Doors

An effective weather - energy sealing system with disabled access for commercial shop fronts.



Weather and Energy

RAVEN

Weather and Energy - Sealing Systems A Construction of the sealing Systems A Construction o Systems A Construction o Systems A Construction of the

Timber and Aluminium Pivot Doors

Single and double acting doors present one of the more difficult sealing problems. When a centre pivot hung door is opened, it must be considered that the leaf is travelling in two directions at once. That is to say, if a door is opened out, then that portion between the pivot and the jamb will be opening inwards. The same applies to the head of the door which means compression seals are not always practical. Sweep seals are the most effective solution in the form of brush strip strips or fins and bulb profiles made from PVC, TPE or silicon rubber to suit.





Note: Vertical stile pile weather stripping supplied by fabricator.

Weather and Energy - Sealing Systems 🛛 🚓 🕘 🚿

RAVEN

Sliding Doors and Garage Doors

Sliding Doors

Sliding doors present many different sealing problems due to various types and configurations, from residential to industrial.

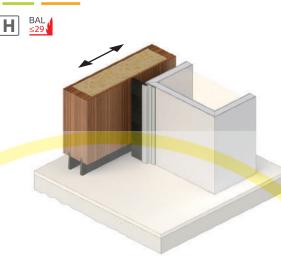
Effective seals for these applications are brush strip seals, sweep seals and threshold plates.

Garage Doors

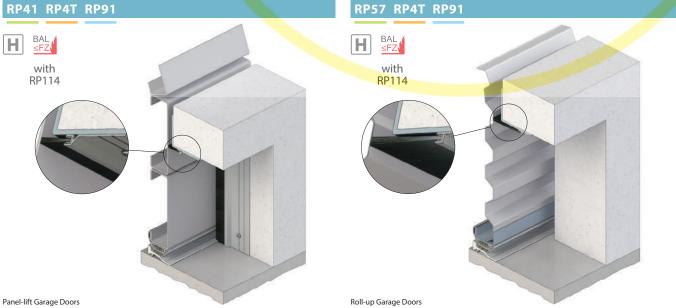
Panel-lift and roll-up garage doors present many different sealing problems due to various types and configurations, from residential to industrial.

Effective seals for these applications are brush strip seals, sweep seals and threshold plates.

RP2a RP52F



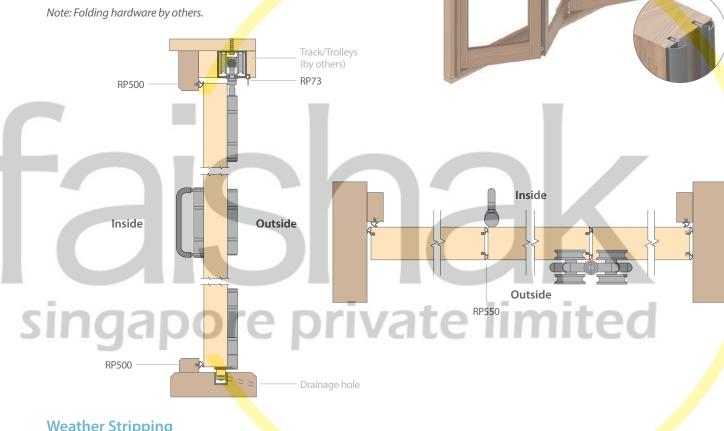




Weather and Energy - Sealing Systems 🛛 🚗 🕘 RAVEN BAL ≤40 **Folding Doors**

Folding door systems have become very popular for residential and commercial applications where building space and lifestyle considerations need to be maximised. These door systems allow indoor and outdoor living space to seamlessly blend together when the weather or mood permits. However, when the weather turns bad the chosen door system needs to keep the weather out while maintaining the climate within. To do this effectively, Raven offers a joinery range of premium quality silicon and TPE weather stripping profiles that are designed to meet all sealing and regulatory performance requirements for weather, energy, noise and ember attack in bushfire prone areas.

Displayed systems have been tested to AS 2047 requirements.



Weather Stripping

RP500 Silicon Series refer to page 104 RP600 TPE Series refer to page 105

RP500 / RP600	RP510 / RP610	RP520 / RP620	RP530 / RP630
			6 6
RP540 / RP640	RP550	RP650	RP560 / RP660

Η

0

Health and Aged Care

6

NCC Class 3, Class 8, Class 9 Buildings (hospitals, medical centres, nursing homes, clean rooms, laboratories, child care centres and schools)

Raven sealing systems for use in health and aged care applications are required to perform multiple functions such as the exclusion of weather, vermin, noise and the containment of smoke and fire. Raven seals can also help control the movement within a building of airborne pathogens.

Raven sealing systems' easy wipe down designs have gaskets and polymer cover strips that contain a nanotech antimicrobial additive. These unique features, together with regular cleaning practices offer the best protection against surface bacteria around sealed doorways.



Im

Most sealing applications but particularly in hospitals, medical and aged care facilities must meet strict building codes and standards. In some instances a Deemed-to-Satisfy requirement is stated. Raven sealing systems far exceed this requirement.

Architects and building engineers are demanding higher levels of performance in a building where engineered and tested systems are required. Raven offer the largest range of engineered and certified sealing systems in the industry making Raven the brand of choice in Australia and around the world.

Health and Aged Care - Sealing Systems 🛛 🕋 📣 🔅

RAVEN

Butt Hinged Doors



Health and Aged Care - Sealing Systems



Pivot Doors



Notes

Faishak singapore private limited



RAVEN



Smoke Door Sealing Systems

NCC Class 2 to Class 9 Buildings (hospitals, aged care facilities, hotels, high rise apartments and shopping centres)

In the event of a fire emergency, life and safety is the most critical requirement for the occupants of a building. Ambient (cold) and Medium temperature smoke that is generated by a fire must be contained quickly in order to provide safe areas within a building.

Smoke compartmentation is a mandated requirement of the Australian NCC and most building codes and regulatory authorities overseas. Smoke sealing, "Smoke Doors" (solid core doors) helps provide a physical barrier that impedes the spread of toxic fumes and smoke from one room to another. Smoke sealed doors also helps protect egress routes allowing occupants a safe passage when exiting the building during a fire alarm emergency.

Raven pioneered smoke door sealing systems, their design effectively reduces smoke leakage around the door margins of smoke doors including applications that require fire rated door assemblies. Raven sealing systems comprise perimeter seals, meeting stile seals and door bottom seals. All are tested and certified to the applicable Australian and international standards.

In Australia, smoke doors and the use of fire rated doors are required to be smoke sealed to limit the leakage of ambient (cold) smoke and medium temperature smoke up to 200 degrees Celsius for 30 minutes. Refer NCC Sect. C3. Spec. C3.4. In addition to the Deemed-to-Satisfy requirements, Raven has tested and certified its smoke sealing systems to AS 1530.7 and EN 1634-3.

Smoke Door Sealing Systems 🍃 🚒 🕠

Building Code Regulations



Class 2 to Class 9 buildings

3.2 Construction Deemed-to-Satisfy

A smoke door of one or two leaves satisfies Clause 3.1 if it is constructed as follows:

- (a) The leaves are side-hung to swing-
 - (i) in the direction of egress; or
 - (ii) in both directions.
- (b) The leaves are solid-core and at least 35 mm thick, or are capable of resisting smoke at 200°C for 30 minutes.
- (c) The leaves are fitted with smoke seals.
- (d) (i) The leaves are normally in the closed position; or
 - (ii) (A) The leaves are closed *automatically* with the *automatic* closing operation initiated by smoke detectors, installed in accordance with the relevant provisions of AS 1670.1, located on each side of the doorway not more than 1.5 m horizontal distance from the doorway; and
 - (B) in the event of power failure to the door, the leaves failsafe in the closed position.
- (e) The leaves return to the fully closed position after each manual opening.
- (f) Any glazing incorporated in the door complies with AS 1288.
- (g) If a glazed panel is capable of being mistaken for an unobstructed exit, the presence of the glass must be identified by an opaque mid-height band, mid-rail, crash-bar or other

opaque construction.

AUS National Construction Code (NCC) Spec. C3.4 NZ Building Code Compliance Document

Clauses C1, C2, C3, C4 Fire Safety

Smoke control door

A door set with close fitting single or multi-leaves which are impermeable to the passage of smoke, fitted with smoke seals and installed within a smoke separation. The door, in the event of smoke, if not already closed, will close automatically and be held closed.

6.19.2 Door sets which are required to be:

(a) Fire doors, shall comply with Paragraph C8.1 of Appendix C.

(b) Smoke control doors shall, except as required by Paragraph 6.19.4, comply with Paragraph C8.1 of Appendix C. Smoke seals shall be fitted at the head and all vertical edges in the gaps between the door leaf or leaves and the frame, and between leaves in multi-leaf door sets.

Clause 6.19.6 Door sets shall be clearly marked to show their FRR and where required to show their smoke stopping capability.

Comment: A door marked -/60/30 Sm would be a fire door with an integrity of 60 minutes, and an insulation of 30 minutes, which may be used as a smoke control door. A door marked -/-/- Sm would be a smoke control door only, with no FRR.

UK / EU Building Regulations

Within Approved Document B, certain door sets within a building are identified as where smoke control door sets are required; tested to BS 476 Section 31.1 or EN 1634-3 1983 Method for measuring smoke penetration through door sets and shutter assemblies. Those door sets identified as smoke control doors designated by an S after the fire rating, i.e., FD30S, FD60S etc., should have a leakage rate not exceeding 3 m³/m/h from the head and jambs when tested at 25 Pa pressure.



Related Building Codes

There are several standards, which refer to seal properties and testing for fire and smoke:

AUS / NZ

Requirements are noted in the Australian National Construction Code (NCC) and New Zealand NZ BC Compliance Doc. C.

UK / EU

Requirements are noted in the British Building Regulations Approved Document B.

USA

Requirements are noted in the Building Code and the Residential Code IBC 2000.

For further details, refer to Standards / Authorities on page 130.

Smoke Door Sealing Systems 🍃 🚒 🕠







Smoke Doors

Selecting the correct sealing system

Smoke seals are designed to contain smoke within a room or corridor and can be a combination of mechanical, compression and sweep seals.

Ambient (Cold) Smoke

Smoke that has come down to ambient temperature after drifting from the fire can be a life threatening concoction. The majority of Raven door seals contain cold smoke and therefore can be used to upgrade existing doors. Seals are normally tested to AS 1530.7 and EN 1634-3 (BS 426 Sect. 31.1). Smoke leakage rates from these standards of up to 3 m³/m/h of the door perimeter gap at 25 pascals excluding the threshold, is normally required. Raven seals easily exceed this criteria.

M200°C Medium Temp. Smoke (200°C for 30 minutes)

Smoke doors require seals to withstand greater temperatures (200 degrees Celsius for 30 minutes) to conform to the NCC specification C3.4 requirement for "Smoke Doors". Medium temperature smoke seals are required where the smoke is closer to the source of the fire and consequently at a higher temperature.

Sealing components are generally made from extruded silicon or tested high temperature PVC's and TPE's, and in the case of brush strip seals, nylon with a high temperature resistant barrier fin.

H Fire & Hot Smoke Intumescent Seals

For fire engineered solutions (referred to as "performance solutions" in the NCC), fire engineers may require hot smoke seals. Intumescent seals are used for this purpose to seal against hot gases above 200°C.

Refer to page 108 for intumescent seals.



Raven smoke seals are tested in accordance with AS/NZS 1530.7 & BS EN 1634-3. The seals are required to meet accepted smoke leakage rates at various pressure differentials.

Tested systems to AS 1530.7 meeting the smoke leakage rates specified in AS 6905 Pt. 2.4 parts (a) & (b) meet the requirements of NCC specification C3.4 Deemed-to-Satisfy, i.e. smoke door assemblies having been exposed for 30 minutes or greater at 200°C, with leakage rates of up to 25 m³/h at 25 Pa for single doors and 40 m³/h for pairs of doors. Leakage rates are corrected to standard reference conditions. These leakage rates or better are commonly specified in fire engineered solutions. Raven have many tested solutions on proprietary doors to meet these requirements.

In the UK and EU Sa and Sm ratings to BS EN 13501-2 may be required. These ratings require tested smoke door assemblies to have met the leakage rates of up to 3 m³/m/h of the door perimeter gap at 25 Pa for ambient temperatures "Sa". For medium temperature 20 m³/h for single doors and 30 m³/h for pairs of doors at a pressure differential of 50 Pa at 200°C "Sm". Tests are conducted to EN 1634-3.

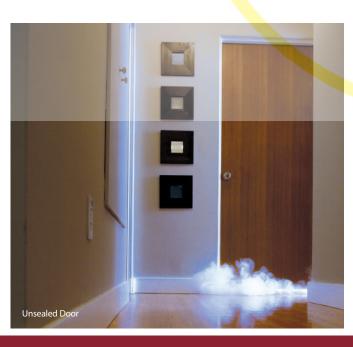
Threshold Plates in Sealing Systems

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

te limited

Refer to page 70 for fire approved threshold plates.

RP115 shown. Optional threshold will vary depending on system specifications.



Smoke Door Sealing Systems 🏾 🌮 🚛 📣

Tested and Certified on Solid Core Doors

Effective combinations of smoke and acoustic seals tested on solid core doors that meet the requirements for AUS NCC specification C3.4 Deemed-to-Satisfy for smoke doors, UK Approved Document B and NZ Building Code Compliance Document C/AS1 Pt. 6.19.2 (b). These systems meet the leakage rates specified in AS 6905 when the

door assembly is installed to AUS NCC specification C3.4 Deemedto-Satisfy for smoke doors. Meets leakage rates specified in BS EN 13501-2 "Sa", "Sm" classification.

Single Doors

These systems have been smoke leakage performance tested to:

AS 1530.7 \leq 25m³/h @ 25 Pa when exposed to 200°C > 30 minutes in accordance with AS 6905.

EN 1634-3 \leq 3m³/h/m @ 25 Pa for ambient and \leq 20m³/h @ 50 Pa for medium temperature in accordance with BS EN 13501-2.



RP10Si RP8Si

h

M

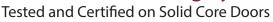
Smoke Door Sealing Systems Prested and Certified on Solid Core Doors



RAVEN



Smoke Door Sealing Systems 🍃 🌧





RAVEN

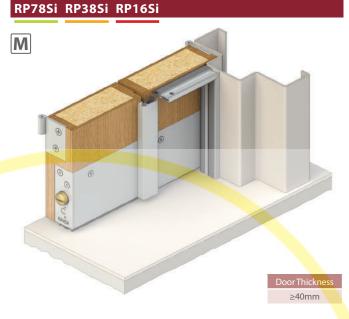
Effective combinations of smoke and acoustic seals tested on solid core doors that meet the requirements for AUS NCC specification C3.4 Deemed-to-Satisfy for smoke doors, UK Approved Document B and NZ Building Code Compliance Document C/AS1 Pt. 6.19.2 (b). These systems meet the leakage rates specified in AS 6905 when the door assembly is installed to AUS NCC specification C3.4 Deemedto-Satisfy for smoke doors. Meets leakage rates specified in BS EN 13501-2 "Sa", "Sm" classification.

Pairs of Doors

These systems have been smoke leakage performance tested to:

AS 1530.7 \leq 40m³/h @ 25 Pa when exposed to 200°C > 30 minutes in accordance with AS 6905.

EN 1634-3 \leq 3m³/h/m @ 25 Pa for ambient and \leq 30m³/h @ 50 Pa for medium temperature in accordance with BS EN 13501-2.





Fire and Smoke

Smoke Door Sealing Systems 🏾 🌮 🚛 📣



These systems may be used where the source of exposure could be from either side of the door opening and can be used where a fire engineered solution may be required. Effective combinations of smoke and acoustic seals tested on solid core doors that meet the requirements for AUS NCC specification C3.4 Deemed-to-Satisfy for smoke doors, UK Approved Document B and NZ Building Code Compliance Document C/AS1 Pt. 6.19.2 (b). Tested to AS 1530.7 and EN 1634-3. All systems open towards positive pressure (fire side).

Smoke Leakage Rates

AS1530.7 \leq 25m³/h @ 25 Pa for single doors and \leq 40m³/h @ 25 Pa for double doors when exposed to 200°C for 30 minutes in accordance with AS6905.

EN1634-3 Sa; \leq 3m³/h/m @ 25 Pa excluding the threshold for ambient. For Sm; \leq 20m³/h @ 50 Pa for single doors and \leq 30m³/h @ ambient and 200°C in accordance with BS EN 13501-2.

Test	Exposure	Leakage rate correction	Leakage rate Q (m³/h) at a pressure differential of;		
		conection	10 Pa	25 Pa	50 Pa
	Ambient	*SRC	7.8	13.2	19.3
01	Medium 200°C	*SRC	4.4	8.1	15.6
	Medium 200°C > 30 min	*SRC	5.4	10.9	18.3
	Ambient	*SRC	2.5	4.4	6.8
02	Medium 200°C	*SRC	< 2.0	< 2.0	4.2
	Medium 200°C > 30 min	*SRC	4.7	7.9	10.3
	Ambient	*SRC	0.6	1.2	1.9
03	Medium 200°C	*SRC	<2.0	<2.0	2.6
	Medium 200°C > 30 min	*SRC	5.1	12.0	19.7
	Ambient	*SRC	8.0	<u>13.6</u>	20.0
04	Medium 200°C	*SRC	4.1	9.9	13.1
	Medium 200°C > 30 min	*SRC	4.6	9.7	13.5

*Standard Reference Conditions

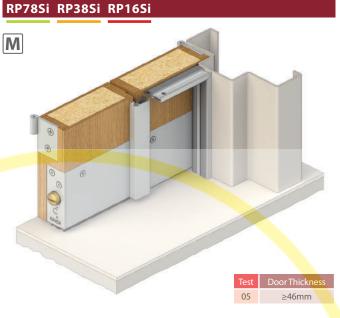


Smoke Door Sealing Systems Pire Engineered - Performance Solutions



RAVEN

Test	Exposure	Leakage rate correction	Leakage rate Q (m³/h) at a pressure differential of;		
		Conection	10 Pa	25 Pa	50 Pa
	Ambient	*SRC	4.9	8.9	13.5
05	Medium 200°C	*SRC	<2.0	3.1	5.2
	Medium 200°C > 30 min	*SRC	<2.0	2.3	3.7
	Ambient	*SRC	3.3	6.2	9.3
06	Medium 200°C	*SRC	<2.0	3.5	4.7
	Medium 200°C > 30 min	*SRC	<2.0	5.1	9.5
	Ambient	*SRC	3.5	6.2	9.5
07	Medium 200°C	*SRC	2.9	3.5	8.2
	Medium 200°C > 30 min	*SRC	4.6	7.9	11.5
	Ambient	*SRC	5.8	9.8	15.1
08	Medium 200°C	*SRC	3.0	5.1	12.2
	Medium 200°C > 30 min	*SRC	3.3	5.8	11.4
	Ambient	*SRC	3.5	8.1	14.2
09	Medium 200°C	*SRC	3.3	7.9	11.2
	Medium 200°C > 30 min	*SRC	6.6	12.2	18.0



*Standard Reference Conditions



Smoke Sealing Systems 🛛 🔊 💑 👌

Fire Rated (Labelled) Doors

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 25m³/h @ 25 Pa when exposed to 200°C > 30 minutes in accordance with AS 6905.

EN 1634-3 \leq 3m³/h/m @ 25 Pa for ambient and \leq 20m³/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 pages 48 - 123.

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.

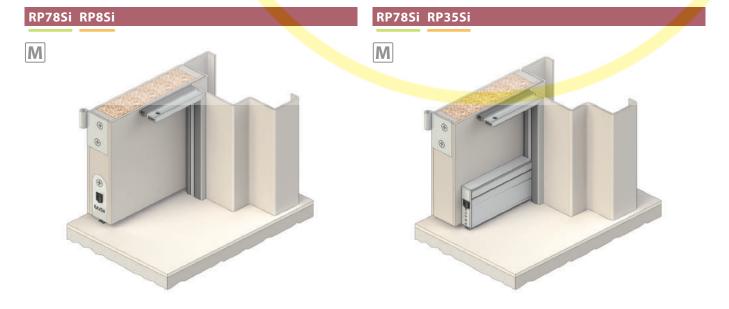
Product selection should be made when assessing the mandated requirements listed in the AUS NCC and the Australian standard AS 1905.1: Components for the protection of openings in fireresistant walls, Part1: Fire-resistant door sets, Section 5.5 Clearances around Door Leaves. Specifiers will determine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

Refer to page 70 for fire approved threshold plates.

nt RP24Si RP38Si RP96

vary depending on system specifications.

Perimeter seal adjustment independent of fixings



Smoke Sealing Systems Price Rated (Labelled) Doors



Bushfire - Sealing Systems

Bushfire Prone Areas - Ember Attack



RAVEN

Due to bushfires in Canberra in 2003 and the tragedy of the Victorian bushfires in 2009, the Australian Standard "Construction of Buildings in Bushfire Prone Areas" AS 3959 was revised. The changes provide better guidance to the construction of buildings to AS 3959 with the purpose of providing greater ability to withstand a bushfire attack. Bushfire Attack Levels (BAL) were defined and means to assessing a building site to these levels. Construction requirements are now laid out to define the requirements for different elements of a building to the BAL.

Throughout the catalogue BAL icons are used to show what Bushfire Attack Level the product is suitable for. Shown here are a range of sealing systems that may be used in accordance with AS 3959 to meet these requirements. RP78Si RP4FZ

Butt Hinged Entry Doors



RP78Si RP51Si RP16Si RP82 RP600 RP51Si BAL ≤40 Η M gapore private Double Outward Opening Doors Folding Doors **RP75 RP75 RP41 RP75 RP114 RP91** BAL ≤FZ BAL ≤FZ н

Fire and Smoke

Panel-lift Garage Doors

Sliding Garage Doors

Bushfire - Sealing Systems Bushfire Prone Areas - Ember Attack



The table below can assist product selection in meeting the design requirements of the latest Australian Bushfire Standard AS 3959. Raven seals being multi-purpose can be used for all new and retrofit work.

BAL ≤FZ

Product selection should be made when assessing the mandated requirements listed in the AUS NCC and the Australian Bushfire Standard AS 3959. Specifiers will determine the suitability of the information provided when selecting a Raven seal for their purposes.

Australian Bushfire	Side Hung (Ember Attack)	Garage Doors (Ember Attack)
Standard AS 3959	Raven Perimeter Seal and Door	Roller and Sectional Overhead
BAL (Bushfire Attack Level)	Bottom Seal	© Raven Products
BAL - LOW	All Raven Seals that display the BAL Low icon.	Raven nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RPRP57, RP58, RP74, RP74F, RP75 at door head and sides where required.Door bottom seal RP114 or RP51Si (if bottom seal not supplied with door)Option: Threshold plate RP91Refer to page
BAL - 12.5, 19, 29	All Raven Seals that display the BAL < 29 icon. BAL <29	 Raven nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RP RP57, RP58, RP74, RP74F, RP75 at door head and sides where required. Door bottom seal RP114 or RP51Si (if bottom seal not supplied with door)
		Option: Threshold plate RP91 Refer to page
BAL-40	All Raven Seals that display the BAL \leq 40 icon.	Raven nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RP RP74, RP74F, RP75 at door head and sides where required.
	BAL	Door bottom seal RP114 (if bottom seal not supplied with do
	BAL SAU	Threshold plate RP91 Refer to page
BAL - FZ	All Raven Seals that display the	Raven nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RP
BAL FZ icon.		RP74F, RP75 at door head and sides where required. Door bottom seal RP114 (if bottom seal not supplied with do
		Threshold plate RP91 Refer to page



RAVEN

singapore private limit

Noise - Acoustic

NCC Class 2 to Class 9 Buildings (high rise apartments, hospitals, hotels, schools, theatres, conference rooms and offices)

Reducing the amount of sound that passes through a door set is a common application for Raven door seals. Sealing door gaps is of prime importance when helping to reduce the amount of sound entering or leaving a room or building. Unlike air, where the amount flowing through a gap changes in proportion to the gap size, sound waves move through these gaps with little loss. Consequently, small gaps around a doorway can let through nearly as much sound as an open door. Because of this, any small clearances not sealed can reduce the effectiveness of a solid core door or acoustically engineered door or partition.

Raven acoustic seals provide an excellent barrier to airborne sound and help ensure that the acoustic attenuation provided by an acoustically sealed door assembly can in many cases be equivalent to the wall or partition into which it is installed.

Raven acoustic seals help isolate buildings from external noise, such as the noise generated from roads, railways and airports. They also help isolate rooms from airborne noise generated within a building. For example; plant and machinery, theatres, cinemas, crèches, dental and doctors' surgeries, stairwells, passages, interconnecting hotel rooms and adjoining apartments.

Noise - Acoustic Building Code Regulations

In Australia, the NCC Part F5.5 Deemed-to-Satisfy provisions states that Class 2 buildings; typically apartments and multi-residential, and class 3 buildings; hotels and motels, have entry doors with a minimum sound insulation rating of R_W 30. The UK Building Approved Document E states a minimum R_W 29 is required.

Raven acoustic seals are used in airports, hotels, offices, hospitals, homes and anywhere noise infiltration occurs through doors. Their effectiveness is best illustrated by the repeated use of Raven seals by architects, acoustic engineers, door fabricators, and project builders.

Raven, the industry leader in door sealing systems, pioneered baseline acoustic testing, utilising "off the shelf" doors and ironmongery to give specifiers proven, cost effective solutions to the growing problem of noise in living and workplace environments.

Acoustic door manufacturers increasingly incorporate Raven door sealing systems with acoustically engineered doors to achieve and maintain the highest R_w ratings up to R_w52.

Improving R_W Ratings

It should be considered that the R_W rating of a door set is only as good as the sum of its parts, i.e. the R_W value of the door set, fitted with Raven acoustic seals and the wall in which the door assembly is fitted. The use of soft absorbent furnishings within a room will also help absorb unwanted noise. All these measures will improve the acoustic attenuation of the room.

Typically, when Raven acoustic seals are fitted to timber solid core doors the R_W rating of the door assembly is increased from around R_W 16 up to R_W 32. When the assembly is placed into an R_W 55 wall, the overall rating of the door assembly and wall combination drops as a ratio to area. The larger the wall area the less the combined R_W rating will drop.

AUS National Construction Code (NCC) Part F5

Class 2 to Class 9 buildings

F5.5 Sound insulation rating of walls

- (a) A wall in a Class 2 or 3 building must—
 - (i) have an R_w + C_{tr} (airborne) not less than 50, if it separates soleoccupancy units; and
 - (ii) have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification: and
 - (iii) comply with F5.3(b) if it separates—
 - (A) a bathroom, *sanitary compartment*, laundry or kitchen in one *sole-occupancy unit* from a *habitable room* (other than a kitchen) in an adjoining unit; or
 - (B) a *sole-occupancy unit* from a plant room or lift *shaft*.

(b) A door may be incorporated in a wall in a Class 2 or 3 building that separates a *sole-occupancy unit* from a stairway, *public corridor*, public lobby or the like, provided the door assembly has an R_w not less than 30.

Acoustic Standards, Test Methods and Ratings

The test methods used to establish the sound attenuation ability of a door set is AS 1191, ISO 140 series and recently EN ISO 10140 series standards. Test data from any one of these test methods can be used in EN ISO 717-1 which provides a single number rating across a spectrum of frequencies for the sound attenuation performance of the building element. Typically Rw is used for door sets that cover frequencies from 100Hz to 3150Hz.



Related Building Codes

There are several standards, which refer to seal properties and testing for noise - acoustic:

AUS / NZ

Requirements are noted in the Australian National Construction Code (NCC) and New Zealand NZ BC Compliance Doc. G.

UK / EU

Requirements are noted in the British Building Regulations Approved Document E.

USA

Requirements are noted in the Building Code and the Residential Code IBC 2000.

For further details, refer to Standards / Authorities on page 130.

Noise - Acoustic - Sealing Systems

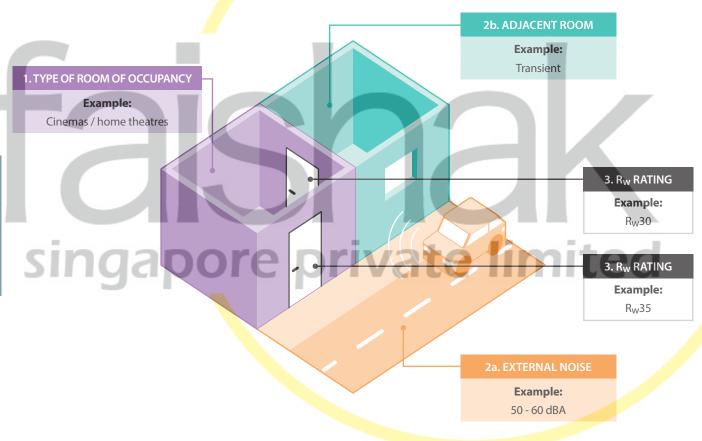


Selecting an Acoustic Sealing System

Make the right selection

This selection guide is to aid architects, engineers and builders in making the right choice of door and Raven sealing system to suit the room. The selection of the Rw rating of the door sealing system is based on achieving the design sound level (LAeq) in the room as recommended in AS/NZS 2107:2016.

- 1. Select the TYPE OF ROOM OF OCCUPANCY from the table opposite.
- **2.** Find at the top of the table, the level of either:
 - 2a. EXTERNAL NOISE, OR
 - **2b. ADJACENT ROOM**
- **3.** Both of these criteria will then find the required $\mathbf{R}_{\mathbf{W}}$ rating for the door sealing system.
- **4.** Select a sealing system with the same or next highest $\mathbf{R}_{\mathbf{W}}$ rating.



Glossary

LAeq is the A-weighted equivalent continuous sound level in decibels measured over a stated period of time.
 Decibels are a unit used to measure the intensity of a sound by comparing it with a given level on a logarithmic scale.
 A-weighted decibels are an expression of the relative loudness of sounds in air as perceived by the human ear.
 R_w The R_w is a single number quantity in decibels of an assembly's ability to resist airborne sound transfer at the frequencies of 100Hz to 3150Hz. The higher the R_w rating the more sound energy is stopped by the Raven sealed door set.

Noise - Acoustic - Sealing Systems





RAVEN

	2a. EXTERNAL NOISE		
1. TYPE OF ROOM OF OCCUPANCY	40 - 50 dBA e.g. Quiet residential area with distant traffic noise / rainfall / creeks	50 - 60 dBA e.g. Urban area with traffic noise / distant train noise / quiet restaurants	60 - 70 dBA e.g. Urban area with significant traffic noise / retail activity / busy restaurants / industrial noise
	2b. ADJACENT ROOM		
	40 - 50 dBA	50 - 60 dBA	60 - 70 dBA
	Transient	Occupied	Occupied / Unoccupied
	e.g. Corridors	e.g. Offices / Classrooms	e.g. Music / Factories
	3. REQUIRED RW RATING OF DOOR SEALING SYSTEM		
CarparksControl roomsFactories	R _w 22	R _w 25	R _w 28
 Bars and lounges Corridors and lobbies Food courts Service areas / utility rooms Shopping malls / supermarkets Stores 	R _w 25	R _w 28	R _w 30
 Airports Apartments¹ Art studios Boarding house rooms¹ Cafés Guest house rooms¹ Gyms Hotel rooms / motel rooms¹ Intensive care wards Laboratories Libraries Computer rooms Living areas¹ Meeting rooms Offices Recovery rooms Auditoriums Bedrooms / sleeping areas¹ Board rooms Cinemas / home theatres Classrooms Consulting rooms Convention centres Court rooms Delivery suites Drama studios 	R _w 30	R _w 30 R _w 35	R _w 35
Executive offices Places of worship Procedure rooms			
 Drama studios² Film or television studios² Music practice / studio rooms² Music recording studios² Sound stages² Voice over booth² 	R _w 35+	R _w 40	R _w 43 - 45

¹ To be used with this guide for external door sealing solutions only. Refer NCC Part F5.5 (b) on page 31.

² Rating of acoustic door to be acoustically designed by a suitably qualified acoustic engineer.

It must be noted that this table does not calculate the end design sound level (LAeq,t), but only the minimum required Rw rating of a door set.

It must also be noted that this table is a guide only and is not to take precedence over local building codes or standards. Consultation with an acoustic engineer should be considered when specifying solutions for noise problems.

Noise - Acoustic - Sealing Systems 📣 🌮 🔜 Rw30 - 33 Standard Solid Core Timber Doors



RAVEN

Doors tested were standard solid core timber doors.

For more info visit raven.com.au/acoustics-catalogue.





RP10/RP10Si RP99Si RP10Si RP8Si M 💋 🐼 Η e private limited Door Thickness STC Rw 002 35mm 30 30 064 40mm 30 30 RP78Si RP35Si RP78Si RP8Si M 200°C M 💋 🐝



Noise - Acoustic - Sealing Systems 🛛 📣 🌮 🔜



Rw30 - 33 Standard Solid Core Timber Doors



Noise - Acoustic - Sealing Systems 📣 🌮 🔜 Rw30 - 33 Standard Solid Core Timber Doors





Noise - Acoustic - Sealing Systems 📣 🌮 🛄 Rw30 - 33 Standard Solid Core Timber Doors





Noise - Acoustic - Sealing Systems 📣 🌮 🔜 Rw30 - 33 Standard Solid Core Timber Doors



RAVEN



Noise - Acoustic - Sealing Systems 📣 🌮 🔜 Rw30 - 33 Standard Solid Core Timber Doors



RAVEN



Noise - Acoustic - Sealing Systems 🛛 📣 🌮 🔄



RAVEN

Rw34 - 40 Proprietary Brand Acoustic Doors

Doors tested were proprietary brand acoustic doors.

For more info visit raven.com.au/acoustics-catalogue.









*STC Estimation

Test Door Thickness STC Rw 36 36 056 35mm

Noise - Acoustic - Sealing Systems 🛛 👘 🖉 📑



Rw34 - 40 Proprietary Brand Acoustic Doors



Noise - Acoustic - Sealing Systems 🙌 🌮 🔜 Rw34 - 40 Proprietary Brand Acoustic Doors



RAVEN



Noise - Acoustic - Sealing Systems 🛛 👘 🕐 🔄

Rw41 - 50+ Proprietary Brand Acoustic Doors

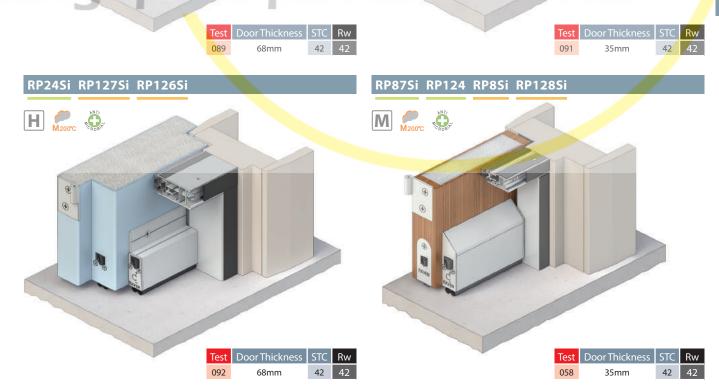
Doors tested were proprietary brand acoustic doors.

For more info visit raven.com.au/acoustics-catalogue.









Noise - Acoustic - Sealing Systems 🙌 🌮 🔜 Rw41 - 50+ Proprietary Brand Acoustic Doors







Noise - Acoustic - Sealing Systems 🛛 📣 🌮 🔜



RAVEN

Rw41 - 50+ Proprietary Brand Acoustic Doors



Noise - Acoustic - Sealing Systems 🛛 📣 🌮 🔄

RAVEN

Bulkhead, Interconnecting, Sliding, Pivot

Doors tested were standard solid core timber doors and proprietary brand acoustic doors.

For more info visit raven.com.au/acoustics-catalogue.







Test Door Thickness STC Rw 30 048 30 45mm

31 31

Test Door Thickness STC Rw

45mm

Noise - Acoustic - Sealing Systems 🛛 👘 🕐 🔄

Bulkhead, Interconnecting, Sliding, Pivot



RAVEN

singapore private limited

+

Door Bottom Seals

Seals designed to fill the gap between the bottom of a door and the floor underneath, are referred to as door bottom seals. Common forms comprise sweep seals that have an aluminium holder with a flexible strip of rubber or brush strip mounted to the door bottom. They are designed to sweep across the floor or engage a raised threshold plate so they clear the floor as the door opens.

Automatic door bottom seals are mechanically spring loaded seals that lift clear of the floor as the door opens and seal tight when the door is closed. Automatic door bottom seals can be face mounted and some models can be fully concealed. They operate over uneven floor surfaces and like sweep seals can be used with Raven threshold plates that offer added protection against rain infiltration where doorways may be exposed to more severe weather conditions.

Most Raven door bottom seals are easily adjusted after installation without removing the door. This ensures an optimum seal is achieved and maximum performance is maintained in the event of minor building movement.

RAVEN



M 🕘 👸 🕯

A cam activated, lifting action, automatic door bottom seal. It is quick and easy to install without cutting or removing the door and uses concealed fasteners. This DIY product has been granted an Australian Design Award. Ideal for residential and light commercial applications such as motels and retirement villages.

Can be used in conjunction with Raven threshold plates.

Location: Bottom of single inward opening butt hinged doors.

Min/Max Gap: 3mm to 16mm.

Finish: Satin clear (silver), bronze, bright gold or black (920mm only) anodised aluminium (15µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied. Fixing holes are pre-slotted.

Seal: RP303. Black EPDM or TPE.

Sizes: 920mm and 1220mm maximum (between door stops).

Approvals

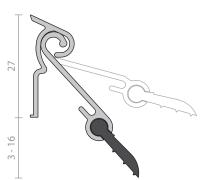
BAL ≤40

Fire Gasket flammability index < 5 when tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented.



RP6Si

A concealed, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. It is acoustically designed, featuring silicon gaskets for medium temperature smoke and fire door applications. Operated automatically by pressure against the door jamb on its adjustable strike. RP6Si can also be fitted into the bottom rail of a metal door by the fabricator. Has a level adjustment to achieve an optimum seal.

Location: Fully morticed into a 13mm x 25mm groove into the bottom of single and double butt hinged timber and metal doors.

Min/Max Gap: 3mm to 12mm.

Finish: Satin clear (silver) or bronze anodised aluminium (15µm).

Fixing: Concealed screw fix with colour matched stainless steel escutcheon plates and screws supplied.

Seal: RP306Si. Grey silicon rubber (SE).

Sizes: 1220mm, 1070mm, 920mm, 820mm, 600mm, 380mm to 295mm (min). Seals cut back to exact size.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/60 and FD240. Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Registered Design.

limited

6



RAVEN

RP8Si

A concealed, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. It is acoustically designed, featuring silicon gaskets for medium temperature smoke and fire door applications. Operated automatically by pressure against the door jamb on its adjustable strike. RP8Si can also be fitted into the bottom rail of a metal door by the fabricator. Has a level adjustment to achieve an optimum seal.

Location: Fully morticed into a 15mm x 34mm groove into the bottom (or top) of single and double butt hinged timber and metal doors.

Min/Max Gap: 3mm to 13mm.

Finish: Satin clear (silver), bronze or black anodised aluminium (15µm).

Fixing: Concealed screw fix with colour matched stainless steel escutcheon plates and screws supplied.

Seal: RP308Si. Grey silicon rubber (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 820mm, 600mm, 380mm to 295mm(min). Seals cut back to exact size.

Approvals

ANSI/BHMA A156.22

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

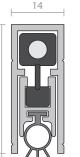
FRL & FRR-/240/60 and FD240. Gasket flammability index 1 when tested to AS1530.2

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa","Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented



34

 $\widetilde{\mathbb{C}}$



Intumescent fire and hot smoke seal for fire engineered solutions.

certifire CF 5710

U

RP35Si

M

An adjustable, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. It is acoustically designed, featuring silicon gaskets for medium temperature smoke and fire door applications. Operated automatically by pressure against the door jamb or stop on its adjustable strike.

Location: Face mounted or semimorticed into the bottom of solid core single and double butt hinged doors. The RP35Si can also be face mounted to the bottom of metal doors.

Min/Max Gap: 3mm to 13mm.

Finish: Satin clear (silver), bronze or black anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws, colour matched escutcheon plates and cover strip supplied. Fixing holes are pre-slotted.

Seal: RP308Si. Grey or black silicon rubber (SE).

Sizes: 1220mm, 1070mm, 920mm, 820mm, 600mm, 380mm, 300mm, 200mm to 150mm (min). Seals cut back to exact size.

Approvals ANSI/BHMA A156.22

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/60 and FD240. Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4. Durability Tested to over 1,000,000 operating cycles without failure.

Patented, Registered Design.

limited

•

1

Սլ R37913 certifire CF 5710

RAVFN

0



A heavy duty, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. It is self levelling and reversible for left and right handed operation. Acoustically designed, it features an EPDM foam gasket for acoustic door applications and doubles as a kick plate when semimorticed. Operated automatically by pressure against the door jamb or stop on its adjustable brass strike.

Location: Face mounted or semimorticed into bottom of single and double butt hinged doors. For semi-mortice minimum door thickness of 50mm for rebated meeting stiles and 40mm for plain meeting stiles is required. The RP38 can also be face mounted to the bottom of metal doors.

Min/Max Gap: 3mm to 13mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Colour matched escutcheon plates and zinc plated, cross recess head S.T. screws supplied.

RP38Si



Seal: RP338. Black EPDM sponge (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 610mm, 450mm to 300mm(min). Seals cut back to exact size.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire & Smoke AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30 and FD240.

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented.

A heavy duty, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. It is self levelling and reversible for left and right handed operation. Acoustically designed, it features a silicon gasket for medium temperature smoke and fire door applications. Doubles as a kick plate when semi-morticed. Operated automatically by pressure against the door jamb or stop on its adjustable brass strike.

Location: Face mounted or semimorticed into bottom of single and double butt hinged doors. For semimortice minimum door thickness of 50mm for rebated meeting stiles and 40mm for plain meeting stiles is required. Can be face mounted to the bottom of metal doors.

Min/Max Gap: 3mm to 13mm.

Finish: Satin clear (silver), bronze or black anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Colour matched escutcheon plates and zinc plated, cross recess head S.T. screws supplied.

Seal: RP338Si. Grey or black silicon rubber (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 610mm, 450mm to 300mm (min). Seals cut back to exact size.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). FRL & FRR-/240/60 and FD240.

Gasket flammability index 1 when

tested to AS1530.2. Smoke NCC Spec. C3.4. AS1530.7 &

BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4. Durability Tested to over 1,000,000 operating cycles without failure.

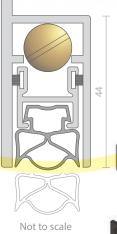
Patented, Registered Design.



10

ŝ

certifire CF 5710



23

3

20

 $\widetilde{\mathbb{C}}$

Ð

1

limited



escutcheon plates and zinc plated, cross recess head S.T. screws supplied. Seal: RP338. Black EPDM sponge (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 610mm, 450mm to 300mm (min). Seals cut back to exact size.



"RAVFN

RP99Si

A heavy duty, adjustable, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. Acoustically designed, with a silicon gasket for medium temperature smoke applications. Operated automatically by pressure on the door jamb or stop by its adjustable strike. Includes aluminium cover for concealed fixing for face mounted installation.

Location: Face mounted, semimorticed or fully morticed into single and double solid core butt hinged doors. Can be fitted into the bottom rail of metal doors by the fabricator. Minimum door thickness of 40mm for semi and fully morticed installations. For double door fully morticed installations, plain meeting stiles required.

Min/Max Gap: 3mm to 19mm.

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws supplied. Colour matched escutcheon plates and face mount aluminium angle included.

RP126Si

Seal: RP347Si. Black silicon rubber (SE). Sizes: 1220mm, 1070mm, 920mm,

820mm, 720mm, 600mm, 380mm to 295mm(min). Seals cut back to exact size. Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). FRL & FRR-/240/60 and FD240. 🖑 Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS FN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented.

certifire CF 5710

R37913

Not to scale

20

20

0

An adjustable, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. Acoustically designed, featuring extruded silicon gaskets for medium temperature smoke applications. RP126Si is operated automatically by pressure on the door jamb or stop by its adjustable strike. It is self levelling. Location: Face mounted or semimorticed into the bottom of single and double solid core butt hinged doors. Minimum door thickness of 35mm recommended for semi-morticed installations with plain meeting stiles. Minimum door thickness of 40mm recommended for semi-morticed installation with rebated meeting

stiles. Can also be face mounted to the

anodised aluminium (15µm) or paint

Fixing: Screw fix. Colour matched escutcheon plates and zinc plated, cross recess head S.T. screws supplied. Seal: RP3126Si. Black silicon rubber (SE). Sizes: 1500mm, 1220mm, 1070mm,

920mm, 820mm, 600mm to 305mm (min). Seals cut back to exact size.

Min/Max Gap: 3mm to 14mm. Finish: Satin clear (silver) or black

bottom of metal doors.

at extra cost.

Approvals ANSI/BHMA A156.22

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS EN 1634-1.

FRL & FRR-/240/30. 🖑

Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented, Registered Design.



14

te limited

0

a

RP127Si

🖪 ᆜ 👸 🚿 🔅 🌮 紀 👌 👫 📣 👃

An adjustable, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. Acoustically designed, featuring extruded silicon gaskets for medium temperature smoke applications. It is operated automatically by pressure on the door jamb by its adjustable strike. It is self levelling.

Location: Fully morticed into the bottom of single and double solid core butt hinged doors (minimum door thickness of 40mm). For double doors, plain meeting stiles are required. Can also be fitted into the bottom rail of a metal door by the fabricator.

Min/Max Gap: 3mm to 14mm.

Finish: Satin clear (silver) or black anodised aluminium (15µm).

Fixing: Screw fix. Colour matched escutcheon plates and zinc plated, cross recess head S.T. screws supplied.

Seal: RP3126Si. Black silicon rubber (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 820mm, 600mm to 305mm (min). Seals cut back to exact size.

RP128Si

An adjustable, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. Acoustically designed, featuring extruded silicon gaskets for medium temperature smoke applications, the RP128Si is operated automatically by pressure on the door stop by its adjustable strike. Utilising an aesthetic extruded aluminium cover for concealed fixing. It is self levelling.

Location: Face mounted to the bottom of single and double solid core butt hinged doors. RP128Si can also be face mounted to the bottom of metal doors.

Min/Max Gap: 3mm to 14mm. Finish: Satin clear (silver), black anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws supplied. Colour matched escutcheon plates and face mount aluminium angle included.

Seal: RP3126Si. Black silicon rubber (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 820mm, 600mm to 305mm (min). Seals cut back to exact size.

Approvals

ANSI/BHMA A156.22

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS FN 1634-1

FRL & FRR-/240/30. Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented, Registered Design.



UL

R37913

65

9

80

4

20

0

٢

imited

0

0

M200°C 💓 BAL ≤FZI 📣 Ė. Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

ANSI/BHMA A156.22

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

FRL & FRR-/240/30. Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented, Registered Design.



Certifire CF 5710



Notes

sind





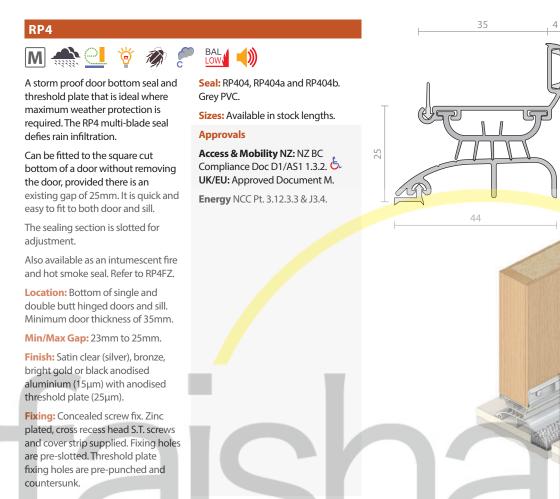
D'Arenberg Cube, South Australia

Set among the vines in the heart of McLaren Vale's wine region sits the d'Arenberg Cube. The glass-encased multi-purpose building is arguably one of the most iconic tourism destinations in Australia, receiving an award for best architectural design in the 2018 Australian Good Design Awards. The d'Arenberg Cube has succeeded to capture attention and increase visitors to the area.

Inside the five-storey building is a new cellar door, bars, private function rooms, a restaurant and a museum on the ground floor. Each level of the d'Arenberg Cube has a spectacular view of the surrounding wine region.

To meet the building's various sealing requirements and to compliment the prestigious nature of the project, Raven was specified due to its trusted reputation and its high quality products. Raven provides the industry's most extensive range of NCC compliant; NATA tested and certified Door & Window Sealing Systems. Raven is also independently certified to international quality management standard ISO9001 ensuring you receive the best products, at the best price, backed by the best service every time.

'RAVEN



RP4FZ

М

A storm proof door bottom seal and threshold plate that is ideal where maximum weather protection is required. The RP4FZ multi-blade seal defies rain infiltration. Can be fitted to the square cut bottom of a door without removing the door, provided there is an existing gap of 25mm.

With an intumescent fire seal providing protection to the bottom of the door in bushfire prone areas up to BAL FZ in accordance with AS3959.

Location: Bottom of single and double butt hinged doors and sill. Minimum door thickness of 35mm.

Min/Max Gap: 23mm to 25mm.

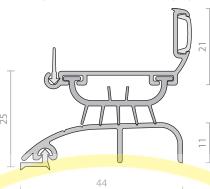
Finish: Satin clear (silver) or bronze anodised aluminium (15µm) with anodised threshold plate (25µm).

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted. Threshold plate fixing holes are pre-punched and countersunk.

Seal: Intumescent infill, grey flexible PVC (SE) cover strip and RP304Si finned silicon rubber gasket.

Sizes: Available in stock lengths.

Access & Mobility NZ: NZ BC Compliance Doc D1/ASI1.3.2. UK/EU: Approved Document M.



Approvals

Energy NCC Pt. 3.12.3.3 & J3.4.

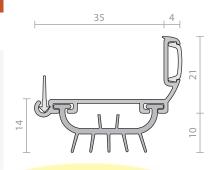
RAVEN





Approvals

Energy NCC Pt. 3.12.3.3 & J3.4.





A weather seal, RP4T easily fits to the bottom of a door. It can be used in combination with threshold plates where even greater protection is required.

RP4T is particularly suitable for rollup doors. Its fixings are concealed and its multi-blade seal defies rain infiltration.

Also available as an intumescent fire and hot smoke seal. Refer to RP114 for this feature.

Location: Roll-up doors. Single and double butt hinged doors or bulkhead applications. Minimum door thickness of 35mm.

Min/Max Gap: User determined.

Finish: Satin clear (silver), bronze or black anodised aluminium (15μm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted.

Seal: RP404 and RP404b. Grey PVC

Sizes: Available in stock lengths.

RP5

Μ

A flexible EPDM weather strip sweep seal that fits to the bottom of doors. It is ideal for screen doors and sash windows to prevent insects from entering up the face of the glass. It is quick and easy to install to the door bottom, being fitted without removing the door. It is also ideal for garage tilt-up doors.

Can be used in conjunction with Raven RP13 and RP82 threshold plates.

Location: Bottom of doors, sash windows or around stiles of tilt up doors.

Min/Max Gap: Up to 15mm (user determined).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Seal: RP303. Black EPDM.

Sizes: Available in stock lengths.

Approvals

BAL

Fire Gasket flammability index < 5 when tested to AS1530.2. Energy NCC Pt. 3.12.3.3 & J3.4. RP7

te limited



Approvals

Energy NCC Pt. 3.12.3.3 & J3.4.

RAVEN

RP17b

L ᆜ 🏺 🛷 🥍

Co-extrusion (Adhesive backed).

A co-extruded PVC sweep seal that fits to the stiles or bottom of doors. These extremely flexible seals can be quick and easily installed without removing the door. Ideal for sliding and security screen doors.

Can be used in conjunction with Raven RP13 and RP82 threshold plates.

Location: Bottom of or around sliding or outward opening butt hinged doors.

Min/Max Gap: Up to 19mm (user determined).

Fixing: Self adhesive or can be screw fixed.

Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White and grey or brown rigid and flexible PVC.

Sizes: Available in stock lengths.

RP26

Η.

A heavy duty sweep seal for door bottoms of outward opening doors. Slotted fixing holes allow for adjustment all concealed behind a push in cover strip.

The RP26 is ideal for use in conjunction with Raven threshold plates.

Location: Bottom of single and double, outward opening, butt hinged doors, tilt up doors or can be used as an astragal seal.

Min/Max Gap: 5mm to 20mm (user determined).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted.

Seal: RP326. Black EPDM.

Sizes: Available in stock lengths.

Approvals

BAL

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. UK/EU: Approved Document B.

BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). FRL & FRR-/120/30 and FD120. 👋

Energy NCC Pt. 3.12.3.3 & J3.4.

Late limited

6

37

RP29

12

© Raven Products 202

&RAVFN

RP30, RP31



The RP30 and RP31 are heavy duty sweep/compression seals. The RP30 is fitted into a concealed, machined groove that should be deep enough to allow packing for adjustment. Forms a weather seal when used with Raven RP13 or RP82 threshold plates.

The RP31 has greater compression than the RP30 and the design does not allow adjustment so it should not be installed in situations where adjustability is required. Forms a weather seal when used with Raven RP82 or RP115 threshold plates.

Location: Bottom of doors, meeting stiles or user determined bumper strip.

Min/Max Gap:

RP30 3mm to 8mm (user determined). RP31 12mm to 17mm (user determined).

Finish:

RP30 Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

RP31 Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

RP51Si

A heavy duty silicon rubber sweep seal for the bottom of outward opening doors. RP51Si has slotted fixing holes for adjustment with a push-in cover strip for concealed fixing.

The RP51Si is ideal for use in conjunction with Raven threshold plates.

Location: Bottom of single and double, outward opening, butt hinged doors, tilt up doors or can be used as an astragal seal.

Min/Max Gap: 5mm to 20mm (user determined).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted.

Seal: RP351Si. Grey silicon rubber (SE).

Sizes: Available in stock lengths.

Approvals

Fire & Smoke AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN

Fixing: Concealed screw fix. Zinc

RP30 RP330. Black EPDM.

RP31 RP331. Black EPDM.

Sizes: Available in stock lengths.

Energy NCC Pt. 3.12.3.3 & J3.4.

supplied.

Approvals

Seal:

plated, cross recess head S.T. screws

1634-1). FRL & FRR-/120/30 and FD120. 🖑

Gasket flammability index 1 when tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.

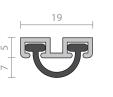


limited

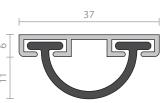
RP115



RP31



RP30



Door Bottom Seal



H 🜨 📒 🏺 🚿

A heavy duty storm proof weather seal ideal for residential and commercial applications where maximum weather protection is required. The RP54 (Daniels Patent) is a door bottom seal and threshold plate combination suitable for inward opening butt hinged doors.

Can be used in conjunction with Raven door frame or perimeter seals.

Location: Bottom of single and double inward opening butt hinged timber doors. Minimum door thickness of 35mm.

Min/Max Gap: 22mm to 25mm.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw and nail fix. Zinc plated, cross recess head S.T. screws and zinc plated nails supplied.

Seal: RP354. Black EPDM. RP404a. Grey flexible PVC.

Sizes: Available in stock lengths.

RP	81	
(FII)		

A heavy duty EPDM sweep seal for door bottoms of outward opening doors with large gaps up to 120mm. Ideal for industrial sliding doors and gates. This seal has slotted holes for adjustment with a push-in cover strip for concealment of fasteners.

BAL

The RP81 is ideal for use in conjunction with Raven threshold plates RP82 and RP29.

Location: Bottom of single and double outward opening doors or industrial sliding doors and gates.

Min/Max Gap: Up to 120mm (seal can be slit to suit on site).

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

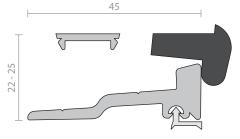
Seal: RP381. Black EPDM.

Sizes: Available in stock lengths.

BAL

Approvals
Access & Mobility NZ: NZ BC

Compliance Doc. D1/AS1 1.3.2. **Energy** NCC Pt. 3.12.3.3 & J3.4.



1

0

Approvals Energy NCC Pt. 3.12.3.3 & J3.4.

22 Up to 120



Approvals

Access & Mobility NZ: NZ BC

UK/EU: Approved Document M.

Energy NCC Pt. 3.12.3.3 & J3.4.

operating cycles without failure.

Registered Design.

Durability Tested to over 1,000,000

&RAVFN



A BAL ≤29 M

A weather proof door bottom seal, that is used by OEM joiners in situations where maximum weather protection is required. The multiblade seal defies rain infiltration.

RP86 is fitted to the square cut bottom of a door, provided there is a gap of 19-20mm prior to installation (flat sill). It is quick and easy to fit to both door and sill.

RP86 can be fitted by builders, but is primarily designed for volume joinery fabrication.

Location: Bottom of single and double butt hinged timber doors.

Min/Max Gap: Flat sills: 19mm to 20mm. Rebated sills: 14mm to 15mm.

Finish: Satin clear (silver) or bronze anodised threshold plate (25µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied. Threshold plate fixing holes are prepunched and countersunk.

Seal: RP486. Black and grey rigid and flexible UV stabilised PVC.



RP89

A rigid and flexible co-polymer weather and energy seal. RP89 suits leading proprietary brand, hollow channel aluminium door suites. Concealed in the bottom of aluminium butt hinged doors or the bottom and head of pivot doors, RP89's unique design accommodates OEM and retrofit applications.

When used in conjunction with a Raven threshold plate an excellent weather and energy seal is achieved.

Location: Bottom or top of 40-45mm hollow channel aluminium doors. Suits butt hinged and pivot hinged systems. Sliding doors (user determined).

Min/Max Gap: 6mm to 9mm.

Note: A Raven threshold plate is recommended to clear floor surface.

Fixing: Snap fit design with end support lugs and screws supplied.

Seal: Black rigid and grey flexible UV stabilised co-polymer.

Sizes: 1000mm.

Approvals Energy NCC Pt. 3.12.3.3 & J3.4.

BAL

Durability Tested to over 500,000 operating cycles without failure.

Registered Design.



Support Lug RP116

1

RAVEN

RP123

M 🜨 🕘 🤴 🚿

RP123 is a co-polymer, door bottom weather seal with a concealed fix aluminium threshold plate. RP123 easily fits to the bottom of a door where maximum weather protection is required.

Quick and easy to install to both door and sill. RP123 is fitted to the square cut bottom of a door provided there is a gap of 19 - 20mm for a flat sill or 12 - 13mm for a rebated sill prior to installation.

Location: Bottom of single and double butt hinged doors with rebated or flat sills. Minimum door thickness of 35mm.

Min/Max Gap: Flat sill: 19mm to 20mm. Rebated sill: 12mm to 13mm.

Finish: Satin clear (silver) or bronze anodised aluminium (25µm) threshold plate.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-punched. Threshold plate can be screwed or fastened with builders adhesive for a concealed fix.

BAL ()

Seal: Light grey rigid PVC body with dark grey flexible PVC seal or, brown rigid PVC body with black flexible PVC seal.

Sizes: 1750mm, 926mm, 826mm.

Approvals

Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2.

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 500,000 operating cycles without failure.

Patented, Registered Design.

RP129F

smoke barrier.

A heavy duty medium temperature smoke door bottom seal. The seal is achieved by a pair of nylon brush strips with a medium temperature

The seal can be checked out or drilled to accommodate the pivot, thereby providing a continuous seal.

Can be used in conjunction with RP130Si, other Raven perimeter seals and threshold plates.

Location: Bottom of double butt hinged or centre pivot double acting doors. Suitable for hard, flat surfaces.

Min/Max Gap: 15mm to 18mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Seal: RP52F. Black fine and dense nylon filaments, UV stabilised medium temperature smoke barrier fin and galvanised steel spine.

Sizes: Available in stock lengths.

Approvals

BAL

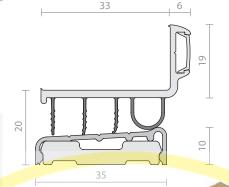
Fire Brush Strip flammability index when tested to AS1530.2.

Smoke NCC Spec. C3.4. NZ BC Compliance Doc. C/AS1 6.19.2(b). AS1530.7 & BS EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented, Registered Design.



Pate Finited

3

R





RAVEN

singapore private limited

Threshold Plate Seals

Threshold plate seals incorporate a seal bulb in the threshold plate itself and as such the addition of a door bottom seal may not be required. Threshold plates offer a simple and effective sealing solution for the door bottom of outward opening doors.

Threshold plate seals are ideal for use with door frame perimeter seals and astragal seals which create a continuous seal or Bulk head seal around the doorway which offers maximum sealing protection.

Threshold plate seals can also accommodate a panic type exit device or panic bolt (by others) while giving added security at the bottom of the door.

Threshold Plate Seals

RP97Si



A threshold plate seal best suited for outward opening butt hinged doors. When used in conjunction with RP93Si and RP16Si an excellent smoke and acoustic system is achieved. For acoustic applications the void under the RP97Si should be filled with sound foam or other suitable material (by others). Conforms to NCC Pt. D2.15 Thresholds (a), (b), (c).

The RP67 drip strip should be considered for above the doorway if there is no eave.

Ideal for use in conjunction with the RP93Si perimeter seal and Raven astragals.

Location: Door sills abutting outward opening butt hinged doors. Not recommended for pedestrian entry doors.

Min/Max Gap: Compression 0mm to 2mm.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Zinc plated, cross recess head CSK S.T. screws supplied.

Seal: RP393Si. Black silicon rubber (SE).

RP109Si

The RP109Si is a weather proof threshold plate seal suited to outward opening butt hinged doors. It is ideal for use with a panic type exit device (by others).

For acoustic applications the void under the threshold should be filled with sound foam or other suitable material (by others).

The RP67 drip strip should be considered for above the doorway if there is no eave.

Ideal for use in conjunction with the RP93Si perimeter seal and Raven astragals.

Location: Door sill of outward opening doors (butt hinges recommended).

Min/Max Gap: Compression 0mm to 2mm.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Zinc plated, cross recess head CSK S.T. screws supplied.

Seal: RP393Si. Black silicon rubber (SE).

Sizes: Available in stock lengths. Specify longer length then doorway to allow for neat installation around door frame.

Approvals

Access & Mobility AUS/NZ: NCC Pt. D2.15 thresholds (a), (b), (c). NZ BC Compliance Doc. D1/AS1 1.3.2. 5.

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire & Smoke AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B.

BS EN 1634-1. FRL & FRR-/240/30 and FD30. Gasket flammability index 1 when

tested to AS1530.2. BAL SEZ when used with a BAL rated door

bottom seal in accordance with AS3959.

Energy NCC Pt. 3.12.3.3 & J3.4.



150

Not to scale

r proof Sizes: Available in stock lengths.

Approvals Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire & Smoke AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: BS EN 1634-1.

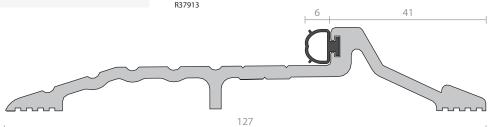
FRL & FRR-/240/30 and FD30. Gasket flammability index 1 when tested to AS1530.2.

BAL ≤FZ when used with a BAL rated door bottom seal in accordance with AS 3959.

Energy NCC Pt. 3.12.3.3 & J3.4.



Panic bolt (by others)



Threshold Plate Seals



Threshold Plate Seals



The RP117Si is a weather proof threshold plate seal suited to outward opening butt hinged doors. It is ideal for use with a panic type exit device (by others).

For acoustic applications the void under the threshold should be filled with sound foam or other suitable material (by others).

The RP67 drip strip should be considered for above the doorway if there is no eave.

Ideal for use in conjunction with the Raven RP118Si perimeter seal and Raven astragals.

Location: Door sill of outward opening doors. (butt hinges recommended).

Min/Max Gap: Compression 0mm to 2mm.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Zinc plated, cross recess head CSK S.T. screws supplied.

Seal: RP308Si. Grey silicon rubber (SE). Sizes: Available in stock lengths.

singa

Approvals

Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire & Smoke AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS EN 1634-1.

FRL & FRR-/240/30 and FD30. Gasket flammability index 1 when tested to AS1530.2.

^{BAL} ≤FZ when used with a BAL rated door bottom seal in accordance with AS 3959.

Energy NCC Pt. 3.12.3.3 & J3.4.

Panic bolt (by others)





Raven Meets The Challenge

00

The South Australian Health and Medical Research Institute (SAHMRI) is South Australia's first independent, flagship health and medical research institute and the pioneer of the state's new Health and Biomedical Precinct.

Raven, the industry leader of door and window sealing systems, were sought to meet the sealing challenges of this iconic building which will house 600 local, interstate and international researchers.

Raven seals were required to perform across multiple levels from the exclusion of weather through to acoustic attenuation and the containment of energy. Raven's tested and certified sealing systems were chosen due to the high level of compliance and certification requirements along with Raven's flexibility to meet the building's bespoke requirements.

Raven developed a perimeter seal for the SAHMRI project which included smooth sealing bulbs for easy cleaning and fully adjustable fixing components that ensures an optimum seal at all times.



EARSH ENVIL

Threshold Plates

Threshold plates are hard anodised, aluminium extrusions that are fitted to the sill under doors; they provide a clean delineation between adjacent floor surfaces. A weather barrier in themselves, threshold plates provide an optimum sealing surface for door bottom seals. Being hard wearing, threshold plates offer an elevated sealing surface which, in the case of door bottom sweep seals, prevents contact or excessive resistance over carpeted or uneven floors.

Raven threshold plates have been designed to withstand the day to day rigours of heavy pedestrian and wheeled traffic encountered in commercial buildings. Their low profile designs do not impede wheeled traffic nor do they present a tripping hazard for pedestrian traffic.

Where disabled access is a requirement, ensure that the threshold plate is suitable for wheeled access and that it conforms to the relevant building code or standard. To assist with selection, a wheelchair icon

RAVEN



A medium duty threshold plate with integral sill gasket for use in conjunction with Raven door bottom seals.

Location: Door sill.

Finish: Satin clear (silver) or bronze anodised aluminium (25µm).

Fixing: Screw fix. Zinc plated, cross recess head CSK S.T. screws supplied. Fixing holes are pre-punched and countersunk.

Seal: RP404a. Grey flexible PVC.

Sizes: Available in stock lengths.

Approvals

ANSI/BHMA A156.21

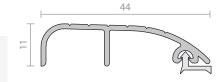
Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) &

App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30. 🖑

^{BAL} ≤FZ door bottom seal in accordance with AS <mark>39</mark>59.



RP13

H 😽 🛃

A low profile threshold plate that is ideal for use in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration.

Location: Door sill.

Finish: Satin clear (silver) or bronze anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: Available in stock lengths.

Approvals ANSI/BHMA A156.21

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30. 谢

^{BAL} ≤FZ door bottom seal in accordance with AS 3959.



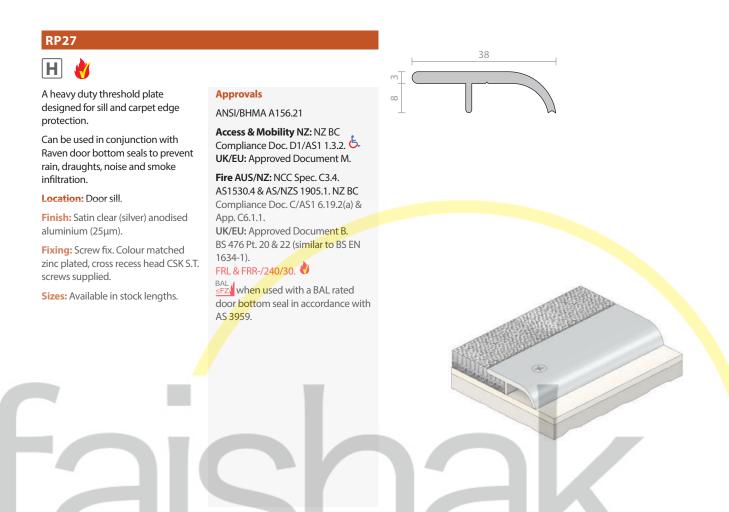
Timited





Sizes: Available in stock lengths.

© Raven Products 2023



RP28

H

RP28 is a wide, heavy duty threshold plate with a ribbed profile and integral sill gaskets. They are ideal for use with pivot hinge doors.

Can be used in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration.

Location: Door sill.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix. Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Seal: RP404a. Grey flexible PVC.

Sizes: Available in stock lengths.

Approvals ANSI/BHMA A156.21

Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN

1634-1).

FRL & FRR-/240/30 and FD120.

^{BAL} ≤F21 when used with a BAL rated door bottom seal in accordance with AS 3959.









RAVEN

Not to scale



н 👌 🕹

A heavy duty threshold ramp with a ribbed design which can be positioned back to back to form a two way threshold ramp conforming to NCC Pt. D2.15 Thresholds (b).

Can be used in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration. Suitable for use with most floor pivots.

Ideal for commercial shop fronts providing a neat ramp detail between carpets or tiles at door ways.

Can also be used to provide a ramped frame for internal door mats.

Location: Door sill.

Finish: Satin clear (silver), bronze or black anodised aluminium (25µm).

Fixing: Screw fix. Zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: Available in stock lengths. Specify longer length than doorway to allow for neat installation around door frame.

Approvals

ANSI/BHMA A156.21

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30.

BAL ≤FZY when used with a BAL rated door bottom seal in accordance with AS 3959.



H 🖑 (

A low profile threshold plate that is ideal for use in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration.

Location: Door sill.

Finish: Satin clear (silver) or bronze anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: Available in stock lengths.

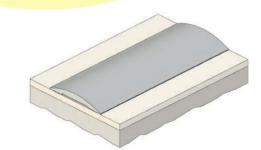
Approvals ANSI/BHMA A156.21

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN

1634-1). FRL & FRR-/240/30. 💞

^{BAL} ≤FZ door bottom seal in accordance with AS 3959.



limited



RP91



A heavy duty threshold plate with integral sill gasket that can be used in conjunction with Raven door bottom seals on roll-up and tilt up doors.

RP91 has an upstand to prevent water penetration and a ramped section to shed water away.

Location: Door sill.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix. Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Seal: RP404a. Grey flexible PVC.

Sizes: Available in stock lengths.

Approvals

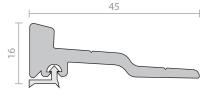
ANSI/BHMA A156.21

Access & Mobility NZ: NZ BC Compliance Doc. D1 Pt. 1.3.2.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B.

Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). FRL & FRR-/240/30.

BAL ≤FZ when used with a BAL rated door bottom seal in accordance with AS 3959.



RP95

H

A low profile threshold plate that can be used in conjunction with Raven door bottom seals to prevent rain, draught, noise and smoke infiltration.

Location: Door sill.

Finish: Satin clear (silver), bronze or black anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: Available in stock lengths.

Approvals ANSI/BHMA A156.21

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

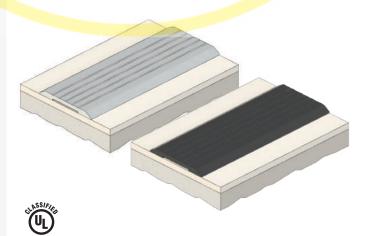
Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30 and FD240. 🖑

AC 3959.





r Bottom Seal

RAVFN



н A heavy duty threshold ramp with a ribbed design which can be positioned back to back to form a two way threshold ramp conforming

to NCC Pt. D2.15 Thresholds (b). Can be used in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration. Suitable for use with most floor pivots.

Ideal for commercial shop fronts providing a neat ramp detail between carpets or tiles at door ways.

Can also be used to provide a ramped frame for internal door mats.

Location: Door sill.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix. Zinc plated, cross recess head CSK S.T. screws supplied. Can be fastened with builders adhesive for concealed fixing.

Sizes: Available in stock lengths. Specify longer length than doorway to allow for neat installation around door frame.

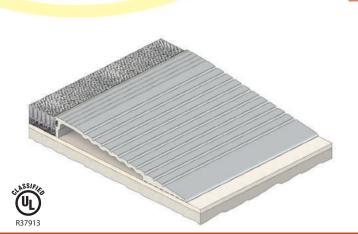
Approvals ANSI/BHMA A156.21

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30. 🖑

BAL ≤FZ when used with a BAL rated door bottom seal in accordance with AS 3959.





ottom Seals

 Finish: Satin clear (silver), bronze or black anodised aluminium (25μm).

 Fixing: Screw fix or builders adhesive for concealed fixing (user

determined). Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: Available in stock lengths.

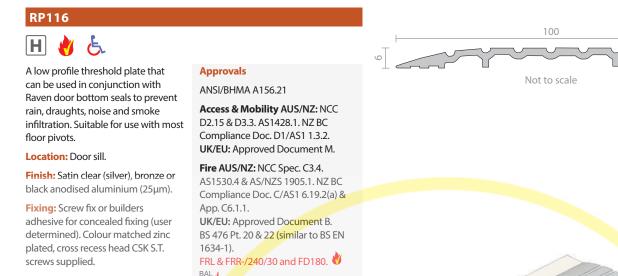
Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30 and FD180.

BAL SEZ when used with a BAL rated door bottom seal in accordance with AS 3959.

&RAVFN



Sizes: Available in stock lengths.

SAL when used with a BAL rated door bottom seal in accordance with AS 3959.

RP137

A low profile, extra wide heavy duty threshold plate that can be used in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration. Ideal for larger

Location: Door sill.

Finish: Satin clear (silver) anodised aluminium (25µm).

style commercial door frames.

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: 3000mm, 2000mm, 1750mm, 1000mm.

Approvals ANSI/BHMA A156.21

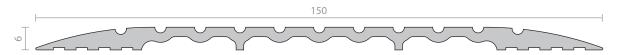
Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B.

BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). FRL & FRR-/240/30 and FD180.

set when used with a BAL rated door bottom seal in accordance with AS 3959.





RP138



A heavy duty threshold ramp that can be used as a border for internal floor matting or be positioned back to back to form a two way threshold ramp conforming to NCC Pt. D2.15 Thresholds (b).

Ideal for larger style commercial door frames.

RP138 has been designed to accommodate a concealed screw fix through the door jambs.

Location: Door sill.

Finish: Satin clear (silver) anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Colour matched zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: 3000mm, 2500mm, 2000mm, 1250mm, 1000mm.

Approvals

ANSI/BHMA A156.21

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN

BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). FRL & FRR-/240/30 and FD180.

sal ≤FZ when used with a BAL rated

door bottom seal in accordance with AS 3959.





A low profile threshold plate that can be used in conjunction with Raven door bottom seals to prevent rain, draughts, noise and smoke infiltration. Suitable for use with most

Location: Door sill.

floor pivots.

Finish: Satin clear (silver) or black anodised aluminium (25µm).

Fixing: Screw fix or builders adhesive for concealed fixing (user determined). Zinc plated, cross recess head CSK S.T. screws supplied.

Sizes: Available in stock lengths.

Approvals

Access & Mobility AUS/NZ: NCC D2.15 & D3.3. AS1428.1. NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Approved Document M.

Fire AUS/NZ: NCC Spec. C3.4. AS 1530.4 & AS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) &

App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN

1634-1). FRL & FRR-/180/30 and FD180.

FRL & FRR-/180/30 and FD180.

^{BAL} ≤FZ door bottom seal in accordance with AS 3959. 101

One Central Park, Sydney

Raven was proud to be a part of the \$2 billion vertical urban village project, One Central Park in Sydney. This internationally acclaimed, twin residential apartment tower project received a 5-star Green Star rating, due to its sustainable design initiatives. One initiative was the specification and installation of Raven, Global GreenTag verified smoke, acoustic and energy conserving door sealing systems.

Requirements

priv

To enhance the energy-saving initiatives while suiting the mixeduse nature of the project, Raven specifications included energy, fire, and smoke door sealing systems that offered a high acoustic performance. The door sealing systems chosen had to be discreet while integrating harmoniously with the prestigious nature of the project. These were key features required by the architectural team while meeting all mandated NCC requirements.

Benefits

One of Raven's sealing systems comprised of the RP78Si perimeter seal, combined with a concealed RP8Si automatic door bottom seal. This sealing system provided a complete seal around the perimeter of the door without impeding its normal operation. This proven system offered specifiers and builders an NATA certified test solution for apartment room entry doors throughout.

singapore private limited

Door Frame / Perimeter Seals

In this catalogue, seals designed for the gap between the door and the frame (up and down the jamb and across the head of the door) are termed door frame seals or perimeter seals.

These are generally compression seals. Some are mounted on the door stop or directly onto a plain frame of the door, thereby providing a door stop seal. Some seals can be fitted to the door or neatly rebated into the frame itself.

Many Raven perimeter seals have some degree of adjustability and can be adjusted after installation without removing the door or window. This ensures an optimum seal is achieved and maximum performance is maintained in the event of minor building movement.

&RAVFN



on plain or rebated door frames. Multi-fin design for improved noise and energy sealing. The minimum deflection design creates maximum sealing efficiency. RP10 can be mitred or butt jointed for a neat finish. Adjustable by large concealed fixing slots for a precision fit. RP10 has a tamper resistant, rigid PVC cover strip (SE). Can be used on all four sides of the door to form a bulk head seal.

Note: If fixing to rebated frames of single doors, specify a long backset door latch.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 10mm.

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Seal: RP410. Black flexible PVC. Black rigid flexible PVC (SE) cover strip.

Sizes: Available in door set sizes or stock lengths.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30 and FD240.

Energy NCC Pt. 3.12.3.3 & J3.4.

Registered Design.



RAVFN

RP10Si

An effective acoustic and smoke door

stop frame seal which is guick and

easy to install on plain or rebated

door frames. Multi-fin design for

The minimum deflection design creates maximum sealing efficiency.

for a neat finish. Adjustable by large

concealed fixing slots for a precision

fit, RP10Si has a tamper resistant,

rigid PVC cover strip (SE). Can be

Note: If fixing to rebated frames of

single doors, specify a long backset

Location: Head and jambs of single

Finish: Satin clear (silver), bronze or

black anodised aluminium (15µm) or

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied. Seal: RP310Si. Black or light grey

Sizes: Available in door set sizes or

and double butt hinged doors.

Min/Max Gap: 0mm to 10mm.

form a bulk head seal.

paint at extra cost.

silicon rubber (SE).

stock lengths.

RP12

М

door latch.

used on all four sides of the door to



ANSI/BHMA A156.22.

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

BS 476 Pt. 20 & 22 (similar to BS EN

FRL & FRR-/240/60 and FD240. 👋 Gasket flammability index 1 when

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa","Sm".

Approvals

improved noise and energy sealing. to BS EN ISO 717-1.

RP10Si can be mitred or butt jointed UK/EU: Approved Document B.

1634-1).

tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.

Registered Design.



Energy NCC Pt. 3.12.3.3 & J3.4.

Approvals

The RP12 has a woven pile weather strip with unique Quiet-fins for noise protection. Ideal for sliding doors and designed to limit noise leakage and control dust and air movement. The RP12 is quick and easy to install to the door or frame.

BAL

Can be used in conjunction with a double row of RP2 seals fitted into grooves in the door bottom edge or face mount RP74 to achieve a complete sealing system.

Location: Head and jambs of door frames.

Min/Max Gap: 6mm to 8mm (prior to installation).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted to allow the seals to be fitted accurately and adjustment to be made for building movement.

Seal: Black polypropylene pile with felt weather fins.

Sizes: Available in stock lengths.



20

1

 (\mathbf{r})

9

Uı

R3791

certifire CF 5710

&RAVFN



Fixing: Screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied.

Seal: RP338. Black closed cell sponge EPDM (SE).

© Raven Products 2023

extra cost.

H



certifire

CF 5710

Timber door with

steel insert (by others)

Sizes: Available in stock lengths.

RAVEN



An effective acoustic and medium

temperature smoke seal, the RP44Si

has two extruded silicon bulb gaskets

and can be mitred or butt jointed for

a neat finish. Can be installed on door

stops with sufficient depth and broad

Location: Head and jambs of single

and double, broad butt hinged doors

Min/Max Gap: 8mm to 10mm (allow 13mm to 14mm for installation, refer

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at

Fixing: Screw fix. Zinc plated, cross

Seal: RP308Si. Grey silicon rubber (SE). Sizes: Available in stock lengths.

recess head S.T. screws supplied.

butt hinges should be specified.

Note: Check backset door latch

or bulkhead applications.

to product dimensions).

reauirements.

extra cost.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Smoke AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc C/AS1 6.19.2(b). UK/EU: Approved Document B. Gasket flammability index 1 when tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.



A heavy duty seal designed to replace the conventional door stop. The RP47Si is ideal for medium temperature smoke / fire door applications and has excellent acoustic qualities for heavy traffic areas. With concealed fixings and adjustable fastener slots to achieve an optimum seal, a space for low voltage cable management can be found behind a tamper proof cover strip. RP47Si can be mitred or butt jointed for a neat installation. Can be used on all four sides of the door to form a bulk head seal.

Note: If fixing to rebated frames of single doors, specify a long backset door latch.

Location: Head and jambs of single and double butt hinged doors or bulk head applications.

Min/Max Gap: 0mm to 17mm.

Finish: Satin clear (silver), black anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, Tek self drilling screws (metal) supplied.

© Raven Products 2023

C M200°C W Sell: RP347Si. Black silicon rubber

Sizes: Available in door set sizes or stock lengths.

Approvals

(SE).

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc C/AS1 6.19.2 & App C6.1.1. UK/EU: Approved Document B.

BS EN 1634-1. FRL & FRR-/240/30. V To be used on

door frames with a 25mm stop. Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.





0

٢

RAVEN



Location: Perimeter of internal

timber doors or frame.

Min/Max Gap: 3mm to 4mm.

Fixing: Adhesive fix into a 10mm x 4mm groove.

Seal: Bronze rigid PVC holder with black polypropylene pile with felt weather fins.

Sizes: Available in stock lengths.

te limited



&RAVFN



Can be used in conjunction with the Raven RP8Si, RP16Si, RP35Si, RP38Si, RP99Si, RP126Si, RP127Si or RP128Si automatic door bottom seals.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 6mm.

Finish: Satin clear (silver), bronze, or black anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws, self drilling screws (metal) and cover strip supplied.

Seal: RP394Si. Grey, light grey or black silicon rubber (SE).

Sizes: Available in door set sizes or stock lengths.

BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/60 and FD240. 🕙 Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.



certifire CF 5710

1

RAVFN

RP78HSi



This medium temperature smoke seal is designed for clean room and health care facilities. RP78HSi has an easy wipe clean design where the smooth sealing gasket also contains an antimicrobial additive for maximum protection against surface bacteria.

For installation on door stops. Its aluminium carrier is sturdy and slotted for adjustment with concealed fixings. It is quick and easy to install around the jamb and head and can be fitted without removing the door. The RP78Si can be mitred or butt jointed for a neat finish.

Can be used in conjunction with the Raven RP8Si, RP16Si, RP35Si, RP38Si, RP99Si, RP126Si, RP127Si or RP128Si automatic door bottom seals.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 6mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws, self drilling screws (metal) and cover strip supplied.

Seal: RP394HSi. Grey or light grey silicon rubber (SE).

Sizes: Available in door set sizes.

Approvals

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30 and FD240. 🖑 Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa","Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

certifire CF 5710

RP84Si

This medium temperature smoke seal is designed specifically for clean room and health care facilities. RP84Si has an easy clean smooth bulb which also contains an antimicrobial additive for maximum protection against surface bacteria. RP84Si significantly reduces sound transmission and helps prevent the movement of airborne contaminates allowing for controlled air ventilation.

The RP84Si is ideal for use in conjunction with Raven door bottom seals and astragals.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 7mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied.

Seal: RP384Si. Black silicon rubber (SE).

Sizes: Available in door set sizes or stock lengths.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire

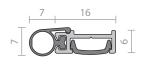
FRL & FRR-/240/30 and FD240. Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.



certifire CF 5710



0



limited

RAVEN



'RAVFN

RP87HSi

Designed for clean room and health care facilities, the RP87HSi has an easy wipe clean design where the smooth silicon sealing gasket also contains an antimicrobial additive for maximum protection against surface bacteria.

RP87HSi is an effective door stop seal for noise, light and medium temperature smoke. It can be butt jointed for a neatly finished continuous seal, replacing the conventional doorstop on metal or timber framed doors. With tamper proof concealed fixings, the RP87HSi utilises independently adjustable screws to achieve up to 6mm sealing adjustment for maximum noise control. The silicon seal only requires normal door closing force.

Note: If fixing to rebated frames of single doors, specify a long backset door latch.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 6mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

RP93Si

М

A weather and acoustic seal suitable for plain or rebated frames. RP93Si is quick and easy to install (mitre joint only) to the head and jambs without removing the door. Slotted for installation adjustment, the soft silicon bulb accommodates a tighter seal and, with a tamper proof cover strip, provides a fit and forget feature.

Note: If fixing to rebated frames of single doors, specify a long backset door latch. The tamper proof aluminium cover strip is not recommended for removal once installed. Refer to RP10Si or RP78Si for this feature

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 6mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost (cover strip only). Fixing: Screw fix. Zinc plated, cross

recess head S.T. screws and cover strip supplied.

Seal: RP393Si. Black silicon rubber (SE).

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied.

Seal: RP384Si. Black silicon rubber (SE).

Sizes: Available in door set sizes.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. FRL & FRR-/240/30 and FD240. 👋 Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

certifire CF 5710

Sizes: Available in door set sizes or stock lengths. **Approvals**

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

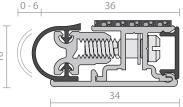
UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/30 and FD240. 💐 Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.





0

(1)



limited

Perimeter Seals





A weather and acoustic seal, suitable for rebated frames. RP94Si is quick and easy to install, either mitred or butt jointed to the head and jambs without removing the door. Slotted for installation adjustment, the soft silicon bulb accommodates a tighter seal and with a tamper proof cover strip, provides a fit and forget feature.

Can be used in conjunction with Raven door bottom seals, astragals and threshold plates.

Note: The tamper proof aluminium cover strip is not recommended for removal once installed. Refer to RP78Si or RP10Si for this feature.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 6mm.

Finish: Satin clear (silver), bronze or black anodised aluminium (15µm) or paint at extra cost (cover strip only).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied.

Seal: RP394Si. Grey or black silicon rubber (SE).

RP118Si

Sizes: Available in door set sizes or stock lengths.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN

1634-1). FRL & FRR-/240/30 and FD240.

tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.



(1)

0

٢

UL

R37913

Certifire CF 5710



A smoke, weather and acoustic door frame seal suitable for outward opening butt hinged doors. Designed to accommodate a latch engagement for suitable panic exit devices at the head of the door. The RP118Si used in conjunction with the RP117Si threshold plate seal provides a bulkhead seal around the door with a top and bottom latch engagement.

Quick and easy to install with a mitre joint without removing the door, the RP118Si is slotted for adjustment and has concealed fixings.

Location: Head and jambs of single and double butt hinged doors.

Min/Max Gap: 0mm to 10mm.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied.

Seal: RP308Si. Grey silicon rubber (SE).

Sizes: Available in stock lengths.

Approvai

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Smoke AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B.

Gasket flammability index 1 when tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.



Certifire CF 5710 Perimeter Seals

RAVFN

RP100, RP120, RP150

Delta Seal™

applications.

RP100, RP120 and RP150 are coextruded PVC acoustic and smoke seals. Discreetly located in the protected corners of rebated timber or steel door and window frames. RP120 is suitable for new and retrofit

Can be used in conjunction with Raven door bottom seals and astragals and threshold plates.

Location: Around rebated frames of single and double butt hinged doors and windows.

Min/Max Gap: 3mm to 5.5mm.

Fixing: Aggressive self adhesive backing tape on both sides of the carrier.

Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal:

RP120 Black, brown or white coextruded rigid and flexible flame retardant PVC.

RP100, RP150 Black co-extruded rigid and flexible flame retardant PVC.

RP124

М

The RP124 is the Delta Seal Plus™, a rigid and flexible co-polymer acoustic smoke seal with multiple fins and quick and easy self adhesive installation. The RP124 is located in the protected corners of rebated timber or steel frame doors and is suitable for new and retrofit applications.

Can be used in conjunction with Raven door bottom seals and astragals and threshold plates.

Location: Around rebated frames of single and double butt hinged doors.

Min/Max Gap: 3mm to 5.5mm.

Fixing: Aggressive self adhesive backing tape on both sides of the carrier.

Perimeter Seals

Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black co-extruded rigid and flexible flame retardant PVC.

Sizes: Available in door set sizes.

BAL ≤FZ M200°C Sizes: Available in door set sizes. 7.2m pack (6 x 1.2m).

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4.

AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22).

FRL & FRR-/240/30 and FD240.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa","Sm"

Energy NCC Pt. 3.12.3.3 & J3.4.



RP100

RP120

RP150

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5.

UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/120/30 and FD120. 🖑

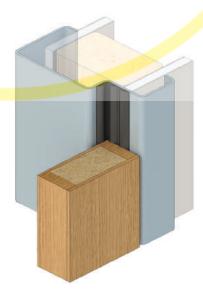
Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Registered Design.



te limited





certifire



M 🚓 ᆜ 🤴 🛷 🏉 📶 📣

Approvals

Fire Flammability rating \leq 5 when tested to AS1530.2.

λI

1

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Location: Door edges or door and window frames (user determined).

Note: The seal only requires normal

A flame retardant TPE rubber

compression seal ideal for smoke

to permanent set (memory), is UV

resistant and has an increased life

covered foam strips.

door closing forces.

cycle compared to traditional plastic

doors. The RP670 has a high resistance

Min/Max Gap: Compression 1mm to 3mm.

Fixing: Push in locking fit into a 2.7mm x 6mm deep kerf groove.

Seal: Black TPE.

Sizes: Available in door set sizes or stock lengths.

singapore private limited

RP700 Series



Finish: Brown or black.

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured.

Sizes: 6m reel, 50m reel.

re private limited

RP720

M 🚓 ᆜ 🧳 🛷 🥐 🎎

A self adhesive silicon compression acoustic smoke seal, that is discreetly located in the protected corners of rebated metal, PVC or timber door and window frames. Suitable for new and retrofit applications.

Location: Metal, PVC or timber door and window frames where dimensions suit.

Min/Max Gap: 3mm to 4mm.

Finish: Brown or black.

Fixing: Self adhesive. *Note: Contact surface must be clean, smooth and if painted, well cured.*

Sizes: 6m reel, 50m reel.

Approvals

BS 7386

Weather AUS/NZ: NCC various sections. AS2047, AS4055, AS4420 Pt. 0 to 5 & AS/NZS 1170. UK/EU: Approved Document L1 & L2. Tests above are similar to BS 5368 &

Energy NCC Pt. 3.12.3.3 & J3.4.





Astragals Meeting Stile Seals



Astragal is a term used for the seal that seals the central join between two swinging doors, the join being known as the 'meeting stile'. A number of extra problems have to be faced when sealing a meeting stile. These include whether or not the seal will interfere with the centre latch, door closers, flush bolts and bottom seals.

 \simeq

RP16Si

 Image: Head of the second s

Its proven design is effective in sealing the meeting stiles of plain or rebated double doors. Its aluminium trim neatly conceals the sealing portion of the seal and provides a secure weatherproof rebate stop. If necessary, its aluminium fixing leg can be checked out to allow for locks and latches.

For maximum acoustic performance, specify two seals, i.e. one for each door leaf. (Minimum door thickness subject to centre latch and dimensions of morticed door bottom seals).

RP16Si is used where one door leaf is active. For smoke door magnetic hold open applications such as hospital corridors, sequence select door closers are required.

Location: Meeting stiles of double butt hinged doors.

Min/Max Gap: 2.5mm to 8mm.

Finish: Satin clear (silver), bronze, black anodised aluminium (15µm) or paint at extra cost.

)))

Fixing: Screw fix. Zinc plated, cross recess head CSK S.T. screws supplied. Can be rebated or surface mounted. Fixing holes are pre-drilled Seal: RP316Si. Grey or black silicon

rubber (SE).

Sizes: Available in stock lengths.

Approvals ANSI/BHMA A156.22

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Certifire

3

RP37

H BAL ≤29

A simple heavy duty 'T' section to provide security for meeting stiles. Location: Meeting stiles of doors.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head CSK S.T. screws supplied. Fixing holes are pre-drilled.

Sizes: Available in stock lengths.



rivate limited

© Raven Products 2023

Astragals Meeting Stile Seals



An astragal seal designed for plain or rebated meeting stiles of timber double doors where a centre latch bolt may be required or, where both doors are active. The unique quiet fin of the RP71 is effective in acoustic and weather applications. Two RP71 seals are installed on to the one door stile which allows space for a latch between the two seals.

The legs of the seals can be checked out to accommodate the latch bolt front plate providing a continuous seal.

Note: Minimum door thickness subject to centre latch and dimensions of morticed door bottom seals.

Location: Meeting stiles of double butt hinged and centre pivot double acting doors.

Min/Max Gap: 3mm to 4mm.

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Colour matched zinc plated, cross recess head CSK S.T. screws supplied. Fixing holes are pre-drilled and countersunk.

RP71Si



Seal: Black polypropylene pile with felt weather fins.

4 3

Sizes: Available in stock lengths.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Energy NCC Pt. 3.12.3.3 & J3.4.



astragal seal designed for plain or rebated meeting stiles of timber double doors where a centre latch bolt may be required or, where both doors are active. The seal is achieved by a pair of silicon fins. Two RP71Si seals are installed on to the one door stile which allows space for a latch between the two seals.

The legs of the seals can be checked out to accommodate the latch bolt front plate providing a continuous seal.

Note: Minimum door thickness subject to centre latch and dimensions of morticed door bottom seals.

Location: Meeting stiles of double butt hinged and centre pivot double acting doors.

Min/Max Gap: 3mm to 5mm.

Finish: Satin clear (silver), bronze, black anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Colour matched zinc plated, cross recess head CSK S.T. screws supplied. Fixing holes are pre-drilled and countersunk.

rubber (SE). Sizes: Available in stock lengths.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.



(7)

certifire CF 5710

Astragals Meeting Stile Seals for Frameless Glass

Approvals

Energy NCC Pt. 3.12.3.3 & J3.4.

RP42, RP103, RP104



Clear polycarbonate astragal and perimeter seals specifically designed for frameless glass doors. The woven pile sealing strip is combined with a weather fin to form and effective weather and energy seal.

Use in conjunction with Raven brush strip door bottom seals RP2b, RP74 and threshold plates.

Location:

RP42 Meeting stiles of 15mm thick frameless glass doors.

RP103 Meeting stiles of 10mm thick frameless glass doors.

RP104 Meeting stiles of 12mm thick frameless glass doors.

Min/Max Gap: 7mm to 8mm (prior to installation).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Clear high impact UV stabilised polycarbonate body with black polypropylene pile with felt weather fins.

Sizes: 3000mm.

RP79, RP79Si, RP79H, RP88

Aluminium astragal seals designed for frameless glass doors. The woven pile sealing strip in RP79 and RP88 is combined with a weather fin to form

combined with a weather fin to form an effective weather and energy seal. RP79Si utilises silicon rubber fins for medium temperature smoke door applications.

Use in conjunction with Raven brush strip door bottom seals RP2b, RP74 and threshold plates.

Location:

RP79, RP79Si, RP79H Meeting stiles of 12mm thick frameless glass doors. **RP88** Meeting stiles of 10mm thick frameless glass doors.

Min/Max Gap:

RP79, RP795i, RP88 8mm to 9mm (prior to installation). RP79H 8mm to 12mm (prior to installation).

Finish:

Perimeter Seals

RP79, RP79H, RP88 Satin clear (silver) anodised aluminium (15μm). **RP79Si** Black anodised aluminium (15μm). Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal:

RP79, RP88 Black polypropylene pile with felt weather fins. **RP79Si** RP371Si. Grey or black silicon rubber (SE).

RP79H RP640. Black TPE.

Sizes: Available in stock lengths.

Approvals

Energy NCC Pt. 3.12.3.3 & J3.4.

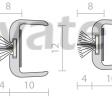


Fire Gasket flammability index **1** when tested to AS1530.2.

Smoke NCC Spec. C3.4 for smoke doors.

doors.

Fire Gasket flammability index \leq 5 when tested to AS1530.2. Smoke NCC Spec. C3.4 for smoke



RP88

RP79

RP79Si



RP79H





RP103



RP42

LО

8

Astragals Meeting Stile Seals for Glass Sliding Doors



operated, frameless glass & metal frame doors.

Min/Max Gap: 15mm to 28mm (prior to installation).

Fixing: Self adhesive.

Seal: Clear rigid and flexible co-polymer seal.

Sizes: Available in stock lengths.

Magnetic Astragals



Magnetic Meeting Stile Seals

RP39 10 16 BAL ≤29 Μ A refrigeration type vinyl magnetic **Approvals** 17 strip in an anodised aluminium Energy NCC Pt. 3.12.3.3 & J3.4. housing. RP39 provides an astragal for timber and metal doors. The magnetic strip has sufficient closing strength that latches may not be required. For perimeter seal applications, refer to page 86. Note: As an astragal seal, RP39 is best suited to infrequent use and door closer hold open applications. Location: Head, jambs and stiles of single and double butt hinged doors, sliding doors or bulkhead applications. Butt hinges recommended. Min/Max Gap: 4mm to 8mm (meeting stiles). Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost. Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied. Fixing holes are slotted. Seal: Black PVC. Sizes: Available in stock lengths. Outward opening application RP65 BAL н limited A refrigeration type vinyl magnetic Approvals strip in an anodised aluminium Energy NCC Pt. 3.12.3.3 & J3.4 channel which is morticed into the stiles of pivot, sliding or butt hinged double doors, to form an effective astragal. The magnetic strip is locked in place to prevent creeping and has sufficient strength that latches may not be required (centre latching can not be used). Can be used in conjunction with Raven door bottom and perimeter seals. Note: RP65 is best suited to infrequent use and door closer hold open applications. Location: Meeting stiles of double swinging and sliding timber doors. Min/Max Gap: 5mm to 7mm. (Swing doors). Finish: Satin clear (silver) anodised aluminium (15µm). Fixing: Push-in locking fit into a 16.5mm x 12mm deep groove and optional adhesive. Minimum door thickness of 40mm required. Seal: Black PVC with magnetic strip. Sizes: Available in stock lengths.

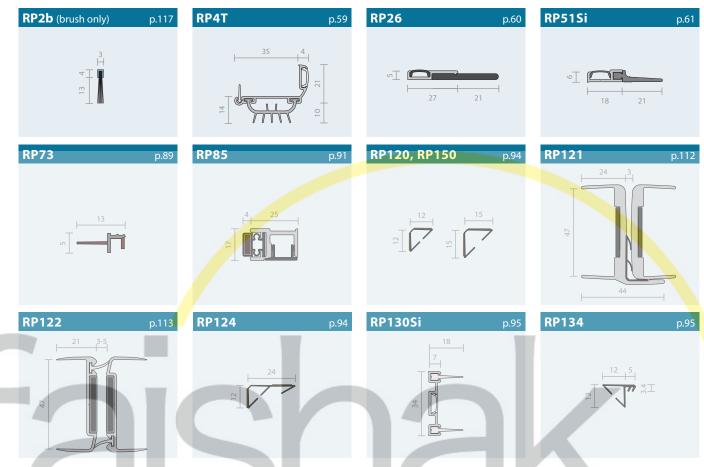
Outward opening application

Perimeter Seals

Astragals

Meeting Stile Seals

Multi-use Products



singapore priv

Adelaide Botanic High School

Adelaide Botanic High School showcases the best of public education, launching an innovative facility providing 1250 students from inner-city suburbs with greater access to high quality secondary learning.

The school is unique in the fact that it's the first truly vertical school in South Australia.

Requirements

Key considerations include acoustic performance, as well as fire and smoke sealing systems with products selected to fit harmoniously with the design elements carefully selected by the architectural team. To meet the building's various sealing requirements and to compliment the prestigious nature of the project, Raven was specified due to its trusted reputation and its high quality products.

Solution

Raven provides the industry's most extensive range of NCC compliant; NATA tested and certified Door & Window Sealing Systems. Raven is also independently certified to international quality management standard ISO9001 ensuring that we supply projects with the highest grade quality products backed with industry leading technical service.

Silicon Weather Stripping - RP500 Series



Fitted into wooden kerf grooves, Raven silicon weather stripping can be used in all door and window joinery systems that require a premium quality, low closing force compression seal. Raven silicon weather stripping can also be used in aluminium and PVC proprietary systems where channel dimensions and clearances suit.

By the virtual elimination of compression set distortion (-60°C to +200°C), Raven silicon weather stripping increases life cycle sealing performance over traditional, plastic covered foam strips that may become hard and brittle. Raven silicon weather stripping has exceptional abrasion qualities that include improved resistance to UV, biological and chemical deterioration. When fitted correctly, Raven silicon weather stripping will not shrink and for ease of maintenance, can be removed and reused. This feature is well appreciated by painters and maintenance people.

Importantly, Raven silicon weather stripping offers improvements in air and rain infiltration performance, particularly where lower closing forces are required to meet new building regulations for energy efficiency and acoustic performance or where access and mobility is important. *Note: For Bushfire Ember Attack refer Raven product selection table on* page 29.



Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Weather AUS/NZ: NCC various sections. AS2047, AS4055, AS4420 Pt. 0 to 5 & AS/NZS 1170.

UK/EU: Approved Document L1 & L2. Tests above are similar to BS 5368 & BS 7386.

Energy NCC Pt. 3.12.3.3 & J3.4.

RP510

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 2mm.

Finish: White, brown or black.

Fixing: Push-in locking fit into a 3.5mm x 5mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Acoustic, Weather & Energy.

RP530

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 2mm.

Finish: White, brown or black.

Fixing: Push-in locking fit into a 4mm x 6mm deep kerf groove.

Sizes: 50m, 24m.

Approvals: Acoustic, Weather & Energy.

RP550

Perimeter Seals

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push-in locking fit into a 2.7mm x 6mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Weather & Energy.

RP500

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push-in locking fit into a 3mm x 6mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Acoustic, Weather & Energy.

RP520

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push-in locking fit into a 3.5mm x 5mm deep kerf groove.

Sizes: 100m, 24m. Approvals: Acoustic, Weather & Energy.

RP540

Location: Proprietary aluminium or PVC door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: Black.

Fixing: Slide fit into aluminium or rigid PVC groove where dimensions suit. (Channel not supplied).

Sizes: 100m, 24m.

Approvals: Energy.

RP560

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push-in locking fit into a 2.7mm x 6mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Weather & Energy.

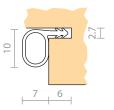


6





Recommended groove dimensions. Channel not supplied.





Optional fitting detail





TPE Weather Stripping - RP600 Series

Joinery Seals for Doors and Windows

Fitted into wooden kerfs, Raven TPE weather stripping can be used in all door and window joinery systems that require a high quality, low closing force compression seal. Raven TPE weather stripping can also be used in aluminium and PVC proprietary systems where channel dimensions and clearances suit.

Raven TPE weather stripping increases life cycle sealing performance over traditional, plastic covered foam strips that may become hard and brittle. Raven TPE weather stripping also has exceptional abrasion qualities that include improved resistance to UV, biological and chemical deterioration. When fitted correctly, Raven TPE weather stripping will not shrink and has a compliant flammability rating \leq 5 for use in bushfire prone areas. For ease of maintenance, Raven TPE weather strip can be removed and reused. This feature is well appreciated by painters and maintenance people.

Importantly, Raven TPE weather stripping offers improvements in air and rain infiltration performance, particularly where lower closing forces are required to meet new building regulations for energy efficiency and acoustic performance or where access and mobility is important. Note: For Bushfire Ember Attack refer Raven product selection table on page 29.



Approvals

Fire Flammability index \leq 5 when tested to AS1530.2.

Weather AUS/NZ: NCC various sections. AS2047, AS4055, AS4420 Pt. 0 to 5 & AS/NZS 1170.

UK/EU: Approved Document L1 & L2. Tests above are similar to BS 5368 & BS 7386.

Energy NCC Pt. 3.12.3.3 & J3.4.

RP610

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 2mm.

Finish: White, brown or black.

Fixing: Push in locking fit into a 3.5mm x 5mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Fire, Weather & Energy

RP630

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 2mm.

Finish: White, brown or black.

Fixing: Push in locking fit into a 4mm x 6mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Fire & Energy.

RP650

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push in locking fit into a 2.7mm x 6mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Fire & Energy.

RP600

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push in locking fit into a 3mm x 6mm deep kerf aroove.

Sizes: 100m, 24m.

Approvals: Fire, Weather & Energy.

RP620

Optional fitting detail

6

9

6

6

LS

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push in locking fit into a 3.5mm x 5mm deep kerf groove.

Sizes: 100m, 24m.

Approvals: Fire, Weather & Energy

RP640

Location: Proprietary aluminium or PVC door and window frame groove where dimensions suit.

Compression: 1mm to 3mm.

Finish: Black.

Fixing: Slide fit into aluminium or rigid PVC groove where dimensions suit. (Channel not supplied).

Sizes: 100m, 24m.

Approvals: Fire & Energy.

RP660

Location: Aluminium, PVC or timber door and window frame grooves where dimensions suit.

Compression: 1mm to 3mm.

Finish: White, brown or black.

Fixing: Push in locking fit into a 2.7mm x 6mm deep kerf groove.

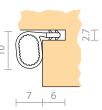
Sizes: 100m, 24m.

Approvals: Fire, Weather & Energy.

6

Optional fitting detail

Recommended groove dimensions. Channel not supplied.



^oerimeter Seals



TPE Weather Stripping - RP600 Series

Joinery Seals for Doors and Windows

RAVEN



Approvals

Fire Flammability index \leq 5 when tested to AS1530.2.

Weather AUS/NZ: NCC various sections. AS2047, AS4055, AS4420 Pt. 0 to 5 & AS/NZS 1170.

UK/EU: Approved Document L1 & L2. Tests above are similar to BS 5368 & BS 7386.

Energy NCC Pt. 3.12.3.3 & J3.4.

RP680

Location: Proprietary aluminium or PVC door and window frame groove where dimensions suit.

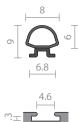
Compression: 1mm to 3mm.

Finish: Black.

Fixing: Slide fit into aluminium or rigid PVC groove where dimensions suit. (Channel not supplied).

Sizes: 100m, 24m.

Approvals: Fire & Energy.





Recommended groove dimensions. Channel not supplied.



Ritz-Carlton – Elizabeth Quay, WA

Raven Products was proud to supply our architectural range of products to the Ritz Carlton project located on the Swan River at Elizabeth Quay. The \$500 million project is a prestigious example of urban architecture where design meets location.

The two six-star towers combine 205 five-star hotel rooms, 379 residential apartments, communal areas and event facilities while the ground floor features retail, dining, and entertainment spaces as well as on-site parking.

Requirements

Key requirements for the project included Raven fire and smoke sealing systems that offer high acoustic performance. The Raven systems chosen needed to harmoniously integrate within the Architectural design elements.

Benefits

Additionally, Raven's black anodised RP127Si Automatic seals were also selected, as they offer a balance of contemporary design with heavy duty performance to satisfy the clients' high expectations of 'fit for purpose' solutions. This is an important consideration for specifiers where heavy pedestrian and wheeled traffic is to be experienced through doorways.

106

Self-adhesive Seals



The seals below are superior quality, self-adhesive weather-strip seals for doors and windows. Quick and easy to install, they are DIY products which work well in eliminating draughts, rattles and cushioning applications.

RP14

Location: Perimeter of doors and windows.

Min/Max Gap: 3mm to 5mm (user determined).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White or grey open cell urethane foam.

Sizes: 5m coil.

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP14b

Location: Perimeter of doors and windows.

Min/Max Gap: 8mm to 11mm (user determined).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White open cell urethane foam.

Sizes: 2.5m coil.

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP48

Location: Perimeter of doors and windows. Min/Max Gap: 3mm to 5mm (user determined).

BAL

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White, brown or grey EPDM closed cell sponge. Sizes: 5m coil pack (2 x 2.5m), jumbo reel (2 x 50m).

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP59



Location: Perimeter of doors and windows.

Min/Max Gap: 2mm to 4mm (user determined).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White, brown or grey EPDM closed cell sponge.

Sizes: 5m coil pack (2 x 2.5m), jumbo reel (2 x 50m).

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP14a



Location: Perimeter of doors and windows. Min/Max Gap: 3mm to 5mm (user determined).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White or grey open cell urethane foam.

Sizes: 5m coil.

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP61



Location: Perimeter of doors and windows. Min/Max Gap: 3mm to 5mm (user determined).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Grey polypropylene.

Sizes: 5m coil.

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP55

Location: Perimeter of doors and windows. Min/Max Gap: 3mm to 6mm (user determined)

BAI

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White, brown or grey EPDM closed cell sponge. Sizes: 6m coil pack (2 x 3m), jumbo reel (2 x 50m). Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

RP108



Min/Max Gap: 6mm to 8mm (user determined).

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: White or grey EPDM closed cell sponge.

Sizes: 2m coil pack.

Approvals: Energy NCC Pt. 3.12.3.3 & J3.4.

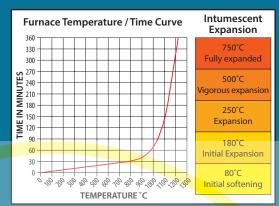


Perimeter Seals



Raven has a large range of intumescent fire seals to suit the OEM and retrofit aftermarket. Intumescent seals are predominantly used in door assemblies manufactured by fire door fabricators where they incorporate Raven intumescent seals into the fire door set prior to leaving the factory.

Used in fire door assemblies of timber, steel or composite construction, Raven intumescent seals expand rapidly to many times their original size upon contact with fire or hot gasses above 200°C. Once the intumescent activates it concentrates pressure in confined spaces, exfoliates slowly to protect itself and has good insulation properties. When correctly positioned in the door leaf or door frame margin, the intumescent prevents the passage of flames and superheated gasses from travelling from one compartment to another.



Unlike sodium silicate based intumescent used by some manufacturers, Raven's unique formulation is unaffected by water, making it ideal for applications in damp or humid environments. Raven intumescent is clean, non-toxic and displays outstanding durability and reliability. When specifying intumescent seals, their primary function is to upgrade fire resistance and maintain the integrity of a fire rated door assembly. Intumescent fire seals are also used in fire engineered solutions by fire engineers.

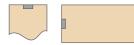
Important: In occupant life and safety situations such as "Smoke Door" applications, refer to Raven Smoke Sealing Systems for smoke doors and fire rated doors. Raven certified smoke sealing systems are necessary to help protect occupants within rooms from life threatening smoke in a fire emergency. Raven smoke sealing systems are tested for ambient and medium temperature smoke up to 200°C on smoke doors and fire rated doors. In almost all building fires the ignition point of a fire is a long way from the building occupants, however, toxic ambient and medium temperature smoke can move quickly from the primary source. Refer mandated building codes, i.e. Australian NCC Specification C3.4.

Note: Expansion rates may vary between products. The shown graph is a guide only.

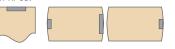
Intumescent fire seals should be fitted as shown in the following typical examples. Note: In meeting stiles where seals are opposite each other, always fit an intumescent pile/fin smoke seal opposite a plain intumescent seal.

30 Minute - Fire Rated FRL-/30/- and FD30

Single door RP1004, RP76 or RP76Si, UK/EU RP1504 Seals.



Pair of doors with rounded meeting stiles RP1004, RP76 or RP76Si, UK/EU RP1504 & RP2004, RP3004 or RP63.



Pair of doors with square meeting stiles RP1004, RP76 or RP76Si, UK/EU RP1504, RP2004, RP3004 or RP63 Seals



Pair or single doors with RP1004, RP76 or RP76Si seals UK/EU RP1504 seals. Fitted to head & jambs.



Pair of doors with rebated meeting stiles RP1004, RP76 or RP76Si, UK/EU RP1504 Seals.



Pair or single doors with RP1004SA, RP2004SA or RP3004SA Seals. Fitted to head & jambs.

60 Minute - Fire Rated FRL-/60/- and FD60

Single door RP2004, RP3004 or RP63 for UK/EU 3004 seals.



Pair of doors with rounded meeting stiles RP2004, RP3004 or RP63 for UK/EU 3004 seals.



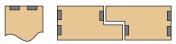
Pair of doors with square meeting stiles RP2004, RP3004 or RP63 for UK/EU 3004 seals.

Γ

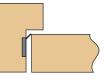


Pair or single doors with RP2004, RP3004 or RP63 seals fitted to head & jambs for UK RP3004.

Pair of doors with rebated meeting stiles RP1004, UK/EU RP1504 seals.



Pair or single doors with RP1004SA, RP2004SA or RP3004SA Seals. Fitted to head & jambs.



Intumescent Fire Seals 👌 🌮 🔤

RP1004, RP1504, RP2004, RP2504, RP3004

BAL ≤FZ

An intumescent fire seal enclosed in a rigid PVC casing for use on fire resisting doors and door frames. Available in a range of sizes, these intumescent seals are set into a morticed groove using an adhesive backing tape.

Location: Morticed into the door frame and around stiles and head.

Finish: Brown or white rigid PVC holder with intumescent infill.

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Sizes: 2100mm.

Approvals

Fire & Smoke AUS/NZ: NCC Spec. C3.4 for fire doors. AS1530.4 & AS/ NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22, BS EN 1634-1.

RP1004



FRL & FRR-/30/- and FD30.

RP1504



FRI & FRR-/30/- and FD30.

RP2004



FRL & FRR-/60/- and FD60.



RP3004



RP1004S, RP2004S

An intumescent fire seal enclosed in a rigid PVC casing set into a morticed groove for use on fire resisting doors and door frames. Incorporating a polypropylene pile smoke seal and fin barrier.

Location: Morticed into the door frame and around stiles and head.

Min/Max Gap: 3mm to 4mm.

Finish: Brown or white rigid PVC holder with intumescent infill.

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Polypropylene pile and fin.

Sizes: 2100mm.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire & Smoke AUS/NZ: NCC Spec. C3.4 for fire doors. AS1530.4 & AS/ NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS

476 Pt. 20 & 22 (similar to BS EN 1634-1). Energy NCC Pt. 3.12.3.3 & J3.4.

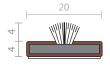
RP1004S

BAL



FRL & FRR-/120/30 and FD120.

RP2004S



FRL & FRR-/120/30 and FD120.

RP1004F, RP2004F



An intumescent fire seal enclosed in a PVC casing for use on fire resisting doors and door frames. Set into a morticed groove using an adhesive backing tape, the RP1004F and RP2004F are ideal to upgrade perimeter door frame margins that exceed the 3mm gap of compliance on proprietary fire doors. Supplied coiled to minimise wastage when cutting to exact size.

Location: Morticed into the door frame and around stiles and head.

Finish: Brown or white flexible PVC holder with intumescent infill.

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and *if painted, well cured. Self adhesive* seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Sizes: **RP1004F** 150m coil. RP2004F 100m coil.

Approvals

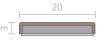
Fire & Smoke AUS/NZ: NCC Spec. C3.4 for fire doors. AS1530.4 & AS/ NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

RP1004F



FRL & FRR-/60/- and FD60.

RP2004F



FRL & FRR-/120/30 and FD120.

RP1004SA, RP2004SA, RP3004SA

An intumescent fire seal enclosed in a rigid PVC casing set into a morticed groove for use on fire resisting doors and door frames. Incorporating a PVC

Location: Morticed into the door frame and around stiles and head.

seals will not adhere to oiled or alkyd

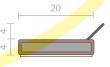
UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

C3.4 for fire doors. AS1530.4 & AS/ NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22, BS EN 1634-1. Energy NCC Pt. 3.12.3.3 & J3.4.



FRL & FRR-/120/30 and FD120.

RP2004SA



FRL & FRR-/120/30 and FD120.

RP3004SA



H

smoke seal.

Min/Max Gap: 1mm to 4mm.

Finish: Brown or white rigid PVC holder with intumescent infill.

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive finishes or to easy clean wash and wear paint surfaces.

Seal: PVC fin seal.

Sizes: 2100mm.

Approvals

Acoustic AUS/NZ: NCC Spec. F5.5.

Fire & Smoke AUS/NZ: NCC Spec.

Intumescent Fire Seals 👌 💰 🔤

RP8FZ

Μ

RP8FZ is a concealed automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. Acoustically designed the seal has a silicon gasket with an intumescent insert for maximum fire protection at the door bottom.

Ideal for Fire Engineered applications. Suitable for fire rated doors, solid core timber doors and hollow bottom rail metal doors.

RP8FZ operates automatically by pressure against the door jamb on its adjustable strike. The seal has a level adjustment to achieve an optimum seal.

Location: Fully Morticed into a 15mm x 34mm groove into the bottom of single and double butt hinged timber or metal doors.

Min/Max Gap: 3mm to 13mm.

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Concealed screw fix with colour matched stainless steel escutcheon plates and screws supplied.

Seal: RP308Si. Grey silicon rubber (SE). Sizes: 1070mm, 920mm, 820mm to 600mm(min). Seals cut back to exact size.

RP53

BAL H An intumescent seal in a PVC holder which is ideal for upgrading proprietary door perimeter gaps

AS1905.1. When exposed to heat, the seal expands to fill in the gap.

where the clearance exceeds the

maximum 3mm as specified by

Use in conjunction with Raven Si rated door bottom smoke seals or brush strip seals for pivot doors.

Location: Door or frame stiles and head.

Min/Max Gap: 2mm to 6mm.

Finish: Brown, grey or white flexible PVC holder with intumescent infill. Can be painted.

Fixing: Self adhesive. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Sizes: 3000mm, 2100mm.



ANSI/BHMA A156.22

Acoustic AUS/NZ: NCC Spec. F5.5. UK/EU: Approved Document E. Rated to BS EN ISO 717-1.

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/240/60 and FD240. 🖑 Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa","Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Fire & Smoke AUS/NZ: NCC Spec.

C3.4 for fire doors. AS1530.4 & AS/

FRL & FRR-/120/30 and FD120. UK/EU: Approved Document B.

BS 476 Pt. 20 & 22 (similar to BS EN

C/AS1 6.19.2(a) & App. C6.1.1.

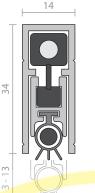
NZS 1905.1. NZ BC Compliance Doc.

Insects/Vermin AS4674, 2.1.5(iv), 2.1.7.

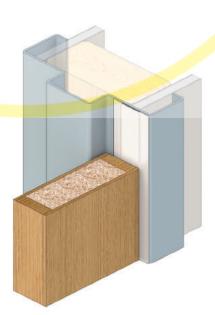
Patented.

Approvals

1634-1).



ivate limited





Intumescent Fire Seals 👌 💞 🚟



A combined intumescent medium temperature smoke and fire seal which is heat activated. It is unobtrusively set into a machined groove around the perimeter of timber frames and door edges. The RP63 can be checked out in the latch area to allow for the continuation of the fin.

An effective medium temperature smoke seal is achieved with a pair of silicon fins between the door and frame.

Location: Morticed into the door frame and around stiles and head.

Min/Max Gap: 3mm to 4mm.

Finish: Satin clear (silver) anodised aluminium (15µm). Trim available in antique white.

Fixing: Adhesive fix into a 30mm x 7mm groove.

Seal: RP371Si. Grey silicon rubber (SE) with intumescent infill.

Sizes: 2400mm, 2100mm.

Approvals

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22). 30

FRL & FRR-/180/30 and FD180.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

RP76, RP76Si

Combined intumescent smoke and fire seals which are heat activated. It is unobtrusively set into a machined groove (10x6mm) around the perimeter of timber frame or door edges. Dependent on application, fire ratings of one to four hours have been certified by fire door manufacturers using RP76 and RP76Si intumescent fire and smoke seals.

RP76 utilises a woven pile polypropylene ambient (cold) smoke seal.

RP76Si utilises a pair of silicon fins to achieve a medium temperature smoke seal.

Location: Morticed into the door frame and around stiles and head.

Min/Max Gap: RP76 3mm to 4mm.

RP76Si 4mm to 5mm. **Finish:** Cranberry red rigid PVC holder with intumescent infill.

Fixing: Self adhesive into a 10mm x 6mm groove. Note: Contact surface must be clean, smooth and if painted, well cured.

Seal: BP76 Poly

BAL

RP76 Polypropylene pile ambient temperature smoke seal. RP76Si RP371Si. Grey silicon rubber (SE) medium temperature smoke seal. RP76

RP76Si

Sizes: 2100mm.

Approvals

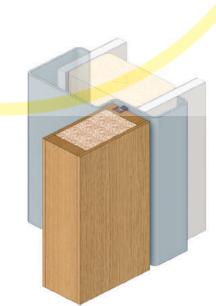
Fire & Smoke AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22). FRL & FRR-/240/60 and FD240.

Energy NCC Pt. 3.12.3.3 & J3.4.



Fire Gasket flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".







"RAVFN

RP114



RP114 is a door bottom intumescent fire and hot smoke seal that is designed to salvage non-compliant fire doors where clearances exceed 10mm under fire doors as per AS/ NZS 1905.1.

The simple retrofit design avoids costly door replacement and the need to remove the door during installation.

RP114 is approved for use on leading proprietary fire doors.

Note: 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. This will enhance the other icon sealing functions.

Location: Bottom of fire and smoke doors. Minimum door thickness of 35mm. For garage doors, use two seals.

Min/Max Gap: 14mm to 20mm (without threshold plate).

Finish: Satin clear (silver) or bronze anodised aluminium (15 µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Seal: Intumescent infill, grey flexible PVC (SE) cover strip and RP304Si finned silicon rubber gasket.

Sizes: 1220mm, 920mm, 820mm.

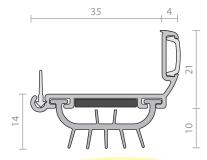
Approvals

Fire AUS/NZ: NCC Spec. C3.4 for fire doors. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

UK/EU: Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22).

FRL & FRR-/240/60 and FD240.

Energy NCC Pt. 3.12.3.3 & J3.4.



44

RP121

BAL An effective fire, smoke and acoustic

seal designed for single action fire doors. The RP121 is a twin section bullnose T bar aluminium astragal seal with an intumescent infill and smoke seal.

Location: Meeting stiles of pairs of 47mm nominal thickness single action fire doors.

Min/Max Gap: 13mm to 16mm (prior to installation).

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Screw fix. Zinc plated, cross recess head CSK S.T. screws supplied.

Seal: Concealed intumescent infill and RP124 smoke seal.

Sizes: Available in stock lengths.

Approvals

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

imited

Intumescent Fire Seals 🛛 🕹 🎼

RAVEN



An effective fire, smoke and acoustic seal designed for double action fire doors. With concealed fixings, the RP122 is a twin section aluminium bullnose astragal seal with an intumescent infill and silicon fin smoke seal.

Location: Meeting stiles of pairs of 47mm nominal thickness double action fire doors.

Min/Max Gap: 14mm to 16mm (prior to installation).

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Concealed screw fix. Zinc plated, cross recess head CSK S.T. screws supplied. Self adhesive intumescent infill.

Seal: RP3122Si. Light grey silicon rubber (SE) medium temperature smoke seal. Light grey rigid PVC case with intumescent infill.

Sizes: Available in stock lengths.

Approvals

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

FRL & FRR-/120/30 and FD120.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.



RP160 is an intumescent fire and smoke seal. Its heat activating intumescent expands at a lower temperature, offering improved smoke and fire sealing performance over traditional batwing fin type seals.

RP160 offers certified smoke and fire sealing protection from ambient (cold) through medium to hot smoke and toxic fumes exceeding 200°C. Discreetly located in the protected corners of rebated timber or steel door frames, RP160 is suitable for new and retrofit applications.

RP160 thin profile and fin placement design allows easier door closing and latching in accordance with door closing force mandates; a feature that will be well appreciated by installers and fire door inspectors everywhere.

Location: Around rebated frames of single or double butt hinged doors.

Min/Max Gap: 2.5mm to 7mm.

Fixing: Self adhesive.

Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black or white co-extruded Rigid and flexible flame retardant PVC, with an intumescent infill.

Sizes: Available in door set sizes or stock lengths.

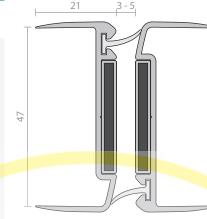
Approvals

Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1. NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22). FRL & FRR-/120/30. 🖑

Smoke NCC Spec. C3.4. Tested to AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.





Smoke



imited



Notes









Notes





Nylon Filament

&RAVEN



The versatility of Raven brush strip seals and ease of installation makes them particularly suitable for sealing hard, flat surfaces and difficult applications such as sliding, revolving, pivot, roll-up and panel lift doors. Suitable for protection against smoke, draughts, light, dust, insects, bushfire embers and for energy retention, Raven nylon brush strips are ideal for heavy duty applications with tests proving minimal wear occurs over prolonged use.

Dense black nylon bristles are locked into a galvanised steel spine which is often fitted into an anodised aluminium holder. Raven brush strips are also available without the aluminium holders. Specify for example RP57 (brush only). Adhesive tape is standard on most holders for ease of installation.

Raven use special nylon filament due to its significantly superior performance over inferior materials such as polypropylene. Withstanding temperatures up to 200°C for 30 minutes, Raven brush strips are self-extinguishing and can be used as a bushfire ember seal, up to BAL FZ for garage doors. Product selection should be made when assessing the mandated requirements of the NCC and Australian Bushfire Standard AS 3959.



Nylon Filament

RP2a

rza

A nylon brush strip seal with an anodised aluminium carrier that mounts to the inside or outside of a door. It is ideal for sliding or double acting doors.

Can be concealed inside of an aluminium door suite bottom rail by the fabricator.

Used in conjunction with Raven threshold plates.

Location: Bottom of single, double, sliding and double acting doors. Suitable for hard, flat surfaces.

Min/Max Gap: Up to 19mm (user determined).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Self adhesive or can be screw fixed. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black fine, dense, UV stabilised nylon filaments.

Sizes: Available in stock lengths.

RP2b

A nylon brush strip seal with an anodised aluminium carrier that mounts to the inside or outside of a door.

Used in conjunction with Raven threshold plates.

Location: Bottom of single, double or sliding doors. Suitable for hard, flat surfaces.

Min/Max Gap: Up to 13mm (user determined).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Self adhesive or can be

screw fixed. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black fine, dense, UV stabilised nylon filaments.

Sizes: Available in stock lengths.

BAL ≤29 Approvals

Fire Brush Strip flammability index 1 when tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.

^{BAL} ≤FZ when used on a garage in accordance with AS 3959.



ritate limited

RP82

Fire Brush Strip flammability index when tested to AS1530.2. **Energy N**CC Pt. 3.12.3.3 & J3.4.

^{BAL} ≤FZI when used on a garage in accordance with AS 3959.

BAL

Approvals

Nylon Filament





^Derimeter Seals

garage doors or lintels and stiles of panel-lift garage doors. Suitable for hard, flat surfaces.

Location: Bottom of single, double, revolving or sliding and double acting pivot doors. Lintels of roll-up

Min/Max Gap: 30mm to 50mm (user determined).

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Seal: Black fine, dense, UV stabilised nylon filaments.

Sizes: Available in stock lengths.



Nylon Filament

RP49, RP50

H 🔜 🏺 🛷 🥐 🧖 🛂

Versatile nylon brush strip seals with angled aluminium carriers. The RP49 has a 90 degree angle and the RP50 has a 45 degree angle.

Location:

RP49 Frame or stiles of sliding doors (user determined). Suitable for hard, flat surfaces.

RP50 Panel lift doors (user determined). Suitable for hard, flat surfaces.

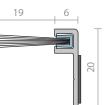
Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

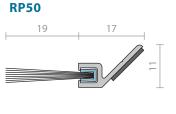
Fixing: Self adhesive or can be screw fixed. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black fine, dense, UV stabilised nylon filaments.

Sizes: Available in stock lengths.

RP49





RP51F

RP51F is a patented brush strip seal that is ideal for sealing the head, jambs and the bottom of automatic sliding doors. The RP51F nylon brush contains an additional barrier fin which is effective in the exclusion of medium temperature smoke, noise and weather.

Location: Head, jambs and bottom of automatic sliding doors. Suitable for hard, flat surfaces.

Min/Max Gap: Up to 13mm (user determined).

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Concealed screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted.

Sizes: Available in stock lengths.

Approvals

BAL ≤29

Approvals

Fire Brush Strip flammability index 1

when tested to AS1530.2.

accordance with AS 3959.

Energy NCC Pt. 3.12.3.3 & J3.4.

BAL ≤FZ when used on a garage in

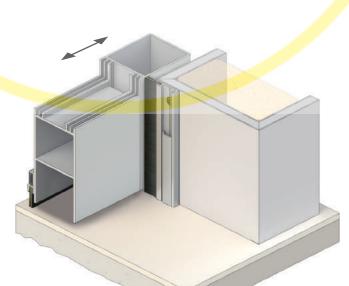
Fire Brush Strip flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

BAL ≤FZI when used on a garage in accordance with AS 3959.

Patented.



9

imited

Perimeter Seals

Nylon Filament

RAVEN



н

) 🔜 👸 🛷 🥐 🧖 BAL

Approvals

Fire Brush Strip flammability index 1 when tested to AS1530.2.

Smoke NCC Spec. C3.4.

Energy NCC Pt. 3.12.3.3 & J3.4.

^{BAL} ≤FZI when used on a garage in accordance with AS 3959.

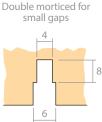
Patented.



RP57

RP58





that is fitted in a concealed manner into a machined groove in a door. Where a small clearance is encountered, the groove should be double morticed to allow the brush and fin to flex. The brush houses a unique medium temperature fin, which is effective in the sealing of medium temperature smoke, noise and weather.

A nylon brush strip without holder,

Location: Stiles or bottoms of single, double, sliding or double acting doors. Suitable for hard, flat surfaces.

Min/Max Gap: Up to 13mm (user determined).

Fixing: Inserted into morticed groove (optional adhesive if required). Where a small clearance is encountered, the groove should be double morticed to allow the brush to flex.

Seal: Black fine, dense, UV stabilised nylon filaments with a medium temperature smoke barrier fin within a galvanised spine.

Sizes: Available in stock lengths.

RP57, RP58



Nylon brush strip seals with aluminium carriers that are ideal where larger gaps are encountered. They can be fitted to lintels of roll-up doors to help prevent the ingress of birds and wind blown embers in bushfire prone areas.

Note: Roll-up doors must have a fairly consistent gap when the door operates to avoid excessive flexing of the seal.

Location: Bottom of single, double, revolving or sliding doors and double acting pivot doors. Lintels of roll-up garage doors. Suitable for hard, flat surfaces.

Min/Max Gap:

RP57 30mm to 50mm (user determined). RP58 50mm to 75mm (user determined).

Finish:

RP57 Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

RP58 Satin clear (silver) anodised aluminium $(15\mu m)$ or paint at extra cost.

Fixing: Self adhesive or can be screw fixed. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black fine, dense, UV stabilised nylon filaments.

Sizes: Available in stock lengths.

Approvals

Fire Brush Strip flammability index 1 when tested to AS1530.2.

Energy NCC Pt. 3.12.3.3 & J3.4.

^{BAL} ≤FZ↓ when used on a garage in accordance with AS 3959.

© Raven Products 2023

Nylon Filament

RP74

H 🔜 🤴 🛷 🥐 妮 🕴 🔤

A nylon brush strip seal with a self adhesive aluminium holder. Mounted to the inside or outside door head and bottom face, RP74 provides a very neat sealing solution with the advantage of final on site installation which overcomes unforeseen floor or sill variation.

Used in conjunction with Raven threshold plates.

Location: Frames or bottoms of single, double, sliding and double acting doors. Suitable for hard, flat surfaces.

Min/Max Gap: Up to 13mm (user determined).

Finish: Satin clear (silver), bronze anodised aluminium (15µm) or paint at extra cost.

Fixing: Self adhesive or can be screw fixed. Note: Contact surface must be clean, smooth and if painted, well cured. Self adhesive seals will not adhere to oiled or alkyd finishes or to easy clean wash and wear paint surfaces.

Seal: Black fine, dense, UV stabilised nylon filaments.

Sizes: Available in stock lengths.

RP74F

A nylon brush strip seal that is ideal for sliding or double acting doors. Can also be used for the stiles of tilt-up doors. The brush houses a unique medium temperature fin, which is effective in the sealing of medium temperature smoke, noise and weather.

Used in conjunction with Raven threshold plates.

Location: Frames or bottoms of single, double, sliding and double acting doors as well as stiles of tilt up doors. Suitable for hard, flat surfaces.

Min/Max Gap: Up to 13mm (user determined).

Finish: Satin clear (silver), bronze, black anodised aluminium (15µm) or paint at extra cost.

Approvals

Fire Brush Strip flammability index 1 when tested to AS1530.2. FRL & FRR-/120/30 and FD120.

Energy NCC Pt. 3.12.3.3 & J3.4.

BAL ≤FZ on an approved side hung fire door in accordance with AS 3959.

ate limited

Fire Brush Strip flammability index 1 when tested to AS1530.2. FRL & FRR-/120/30 and FD120.

Seal: Black fine, dense, UV stabilised

nylon filaments with a medium

temperature smoke barrier fin.

Sizes: Available in stock lengths

BAL

Approvals

Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

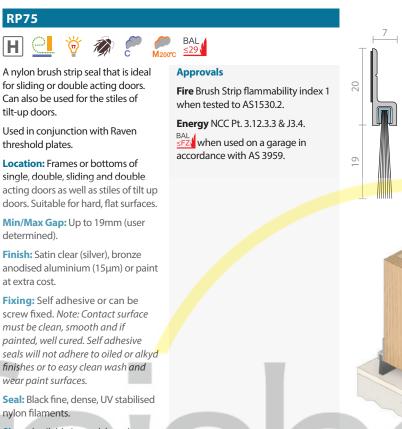
Energy NCC Pt. 3.12.3.3 & J3.4.

BAL ≤FZ, when used on a garage door or on an approved side hung fire door in accordance with AS 3959.



Nylon Filament

RAVEN



Sizes: Available in stock lengths.

RP129F

A heavy duty medium temperature smoke door bottom seal. The seal is achieved by a pair of nylon brush strips with a medium temperature smoke barrier.

The seal can be checked out or drilled to accommodate the pivot, thereby providing a continuous seal.

Can be used in conjunction with RP130Si, other Raven perimeter seals and threshold plates.

Location: Bottom of double butt hinged or centre pivot double acting doors. Suitable for hard, flat surfaces.

Min/Max Gap: 15mm to 18mm.

Finish: Satin clear (silver) anodised aluminium ($15\mu m$) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Seal: RP52F. Black fine and dense nylon filaments, UV stabilised medium temperature smoke barrier fin and galvanised steel spine.

Sizes: Available in stock lengths.

BAL ≤29 Approvals

Fire Brush Strip flammability index 1 when tested to AS1530.2.

Smoke AUS/NZ: NCC Spec. C3.4. NZ BC Compliance Doc. C/AS1 6.19.2(b). AS1530.7 & BS EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS6905 & EN 13501-2"Sa", "Sm".

Energy NCC Pt. 3.12.3.3 & J3.4.

Durability Tested to over 1,000,000 operating cycles without failure.

Patented, Registered Design.

^{BAL}≤FZ when used on a garage in accordance with AS 3959.





Anti-finger Jam Seal

Finger-pinch protection devices should be installed wherever doors are accessible to children in schools, kindergartens and children day care centres. Finger-pinch injuries in doors are a significant cause of injury and claims against liability insurance in child care situations. RP62 helps prevent fingers being jammed on the hinge side of a door. It is recommended RP62 be installed to the full height of the door/jamb for maximum protection. This will reduce tampering and accidental deposit of toys or waste material behind the anti-finger jam seal. RP62 can be retrofitted to butt hinged or centre pivot doors and conform to the UK Workplace (Health, Safety and Welfare) Regulations 1992 Statutory Instrument 1992 No. 3004 clause 18. The RP62BW is reversible for either a brown or white finish.



Approvals

pedestrian doors.

Durability Tested to BS 8613:2017

Class 1 Finger protection devices for

RAVEN

RP62LGBK



A safety strip which prevents fingers being jammed on the hinge side of a door. It is fixed to the door and the jamb on the hinged side.

Note: It is recommended to fit RP62LGBK to the full height of the door/ jamb for maximum protection. For longer lengths, butt join together.

RP62LGBK is reversible for a light grey or black finish.

Location: Door and jamb of 0-180 degree opening butt hinged or centre pivot doors.

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted.

Seal: RP462LGBK. Reversible flexible light grey/black PVC rubber. Light grey and black flexible PVC cover strips included.

Sizes: 2500mm.

RP62s

H

The smaller RP62s safety strip helps prevent fingers being jammed on the hinge barrel side of a door.

When used with the larger RP62 series, these safety strips will assist finger jam protection on both sides of the door at the hinged side.

Note: It is recommended to fit RP62s to the full height of the door/jamb for maximum protection. For longer lengths, butt join together.

RP62s is reversible for a light grey or black finish.

Location: Door and jamb of 0-170 degree opening butt hinged doors. Note: Check dimensions for broad butt and parliament style hinges (user determined).

Finish: Satin clear (silver) anodised aluminium (15µm).

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws and cover strip supplied. Fixing holes are pre-slotted.

Seal: RP462SLGBK. Reversible flexible light grey/black PVC rubber. Light grey and black flexible PVC cover strips included. Sizes: 2500mm.
Approvals

Durability Tested to BS 8613:2017 Class 2 Finger protection devices for pedestrian doors. Not to scale

6

157

211

Not to scale



16

Drip-strip

RP67

Η

A drip strip designed to shed or channel water away from the head of exposed doors. Particularly suitable for outward opening doors. The RP67 requires an allowance of 50mm overlap each side of the door opening.

Location: Above doors.

Finish: Satin clear (silver) anodised aluminium (15µm) or paint at extra cost.

Fixing: Screw fix. Zinc plated, cross recess head S.T. screws supplied.

Sizes: Available in stock lengths.

Faishak singapore private limited



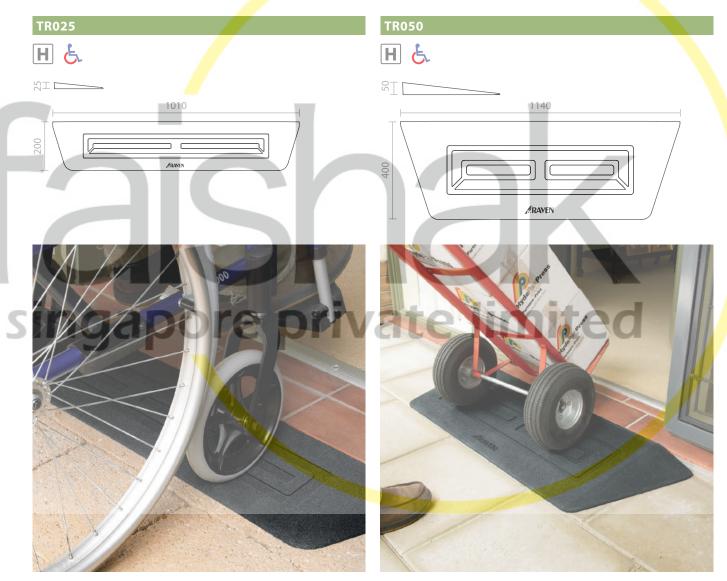
Threshold Access Ramps

Raven Threshold Access Ramps are ideal retrofit solution for users of wheel chairs, walking frames, electric scooters and hand trolleys; anyone that regularly traverses tripping hazards at doorways or abrupt surface transitions around the home or in the work place.

Made from slip resistant recycled rubber, Raven Threshold Access Ramps will be welcomed by home owners, building occupiers, facility managers and OH&S personnel who recognise the need for a permanent and inexpensive retrofit solution to assist access and mobility in the home, at work or in the commercial environment. Until now, the problem involved a trade's person, the use of messy cement, fabricated metal plate or plywood to make and install a threshold access ramp. The new DIY alternative is the Raven Threshold Access Ramp. Simply lay the ramp in place or permanently fix with builders adhesive. Raven Threshold Access Ramps are extremely durable, will last for years and require no maintenance.

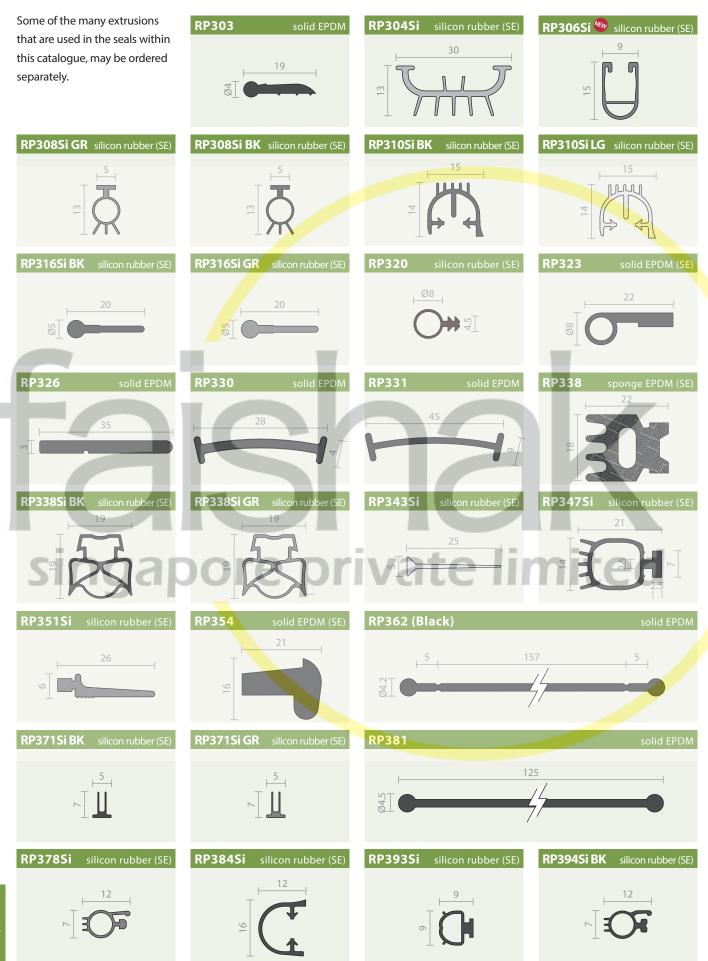
Available in two convenient ramp heights: 25mm (model TR025) and 50mm (model TR050) - gradient 1:8 (front).

When a doorway has a rise height above 35mm maximum, the TR050 becomes a user determined solution. If used as a retrofit Deemedto-Satisfy solution in a new build, an approval should be sought from an access consultant or building engineer. This is necessary where a compliant floor transition may have been missed during the design phase or at the concrete forming stage.



Replacement Components

RAVEN



Replacement Components

RP394Si GR silicon rubber (SE)	RP394Si LG silicon rubber (SE)	RP394HSi GR silicon rubber (SE)	RP394HSi LG silicon rubber (SE)
RP3122Si ^{<i>New</i>} silicon rubber (SE)	RP3126Si silicon rubber (SE)	RP3129Si silicon rubber (SE)	RP404 flexible PVC
RP404a flexible PVC	RP404b flexible PVC	RP410 flexible PVC	RP410a BK rigid PVC
RP410a LG rigid PVC	RP423 BK flexible PVC	RP423 BR flexible PVC	RP423 GR flexible PVC
RP423 LG flexible PVC	I	RP435 BR rigid PVC	
RP460 flexible TPE	RP462 BR flexible PVC	RP462 WH flexible PVC	RP469 rigid/flexible PVC
RP486 rigid/flexible PVC	RP487 rigid PVC	RP462 BW (Brown / White)	
RP462 LGBK (Light Grey /		RP462S LGBK (Light Grey	/ Black) ^{May} flexible PVC

Standards / Authorities



Raven Seals are designed to meet the most rigorous International Standards and Building Codes. Throughout, icons have been used to readily identify and make product selection easier. Raven Seals, in the main, have been tested to Australian, New Zealand, British, ISO and EN standards. In many cases they are the same or similar to US standards and Chinese building code requirements. Specifiers should determine the suitability of products shown or contact Raven's Technical Department for assistance.

	AUS/NZ	UK/EU	
Noise - Acoustic	NCC Sound Transmission & Insulation; Sect. F Parts F5.0, F5.5 (b), Health & Amenity; Sect. 2 Part 2.4, 02.4.6, Sound Insulation; F2.4.6, P2.4.6 V2.4.6, Sect. 3.8, 3.8.6 (appropriate performance requirements (a) (b)).	Building Regulations Approved Document E , Building Bulletin 93 - Special acoustic conditions for schools, BS EN ISO 140-3 Acoustics - Measurement of sound insulation in buildings and of building elements (previous BS 2750), BS 5821 Rating the sound insulation in buildings and building elements (same as ISO 717-1), BS EN 10140 Series Standards - Laboratory measurement of sound insulation	
	AS 1191 (ISO 140-3) Measurements of airborne sound transmission loss etc., AS/NZS 1276.1 Rating of sound insulation in buildings etc. (ISO 717-1), AS 2253 Field measurement of the reduction in airborne sound transmission in buildings.		
	ISO 717-1 Rating of sound insulation in buildings.		
	NZ BC Compliance G6 (airborne and impact sound). ASTM E 336, ASTM E 413.		
Fire and Smoke	NCC Fire Resistance; Sect. C Parts C3, C3.0 - C3.11, Spec. C2.5, Spec. C3.4, Spec. D1.12 (d) (f), Sect. D Part D2.6,. Smoke Hazard Management; Sect. Part E. Bushfire Areas; Sect. G. Part G5. Fire Safety; Part 2.3, Bushfire Areas; Part 2.3 F2.3.4, P2.3.4, SA 3.7.4.3 (c),	Building Regulations Approved Document B , ISO 834 Fire resistance test - Elements of building construction, ISO 3008 Fire resistance test - Door and shutter assembly, BS EN 1634-1 Fire resistance tests for doors and shutter assemblies, BS EN 1634-3 Smoke control test for door and shutter assemblies, BS 5588 Fire precautions in the design, construction & use of buildings,	
	Table SA 3.7.4.1 (external doors). AS 3959 Construction of building in bushfire-prone areas, AS 1530.4 Fire resistance tests of elements of building construction, AS 1905.1 Components for the protection of openings in fire resistant walls, AS 1851 Routine service of fire protection systems, AS 1530.7 Smoke control door and shutter assemblies, AS 1735.11 Lifts, escalators and moving walks - Fire rated landing doors, AS 6905 Smoke doors.	 BS 476 Part 20 Method for determination of the fire resistance of elements of construction, BS 476 Section 31.1 Method for measuring smoke penetration through door sets & shutter assemblies, BS 8214 Code of practice for fire door assemblies with non-metallic leaves, ISO 5925-1 Ambient and medium temperature leakage test, ISO DIS 12472 Fire test - Determination of the efficiency of the intumescer seals with respect to the fire resistance of timber door assemblies, BS EN 13501-2 Fire classification of construction products and building 	
	NZ BC Compliance C (Fire safety), NZS 4520 Fire resistant doorsets.	elements. Classification using data from fire resistance tests, excluding ventilation services.	
SINGA	pore privat	le innitea	
Weather, Energy, Insec ts	NCC Health & Amenity; Sect. F.,	Building Regulations Approved Document L1 & L2, BS 7386, BS 8104, CIBSE TM 23 Testing of building for leakage (Part L1 &	
and Vermin	Energy Efficiency Installations; Part 12, Energy Efficiency - Building Sealing; Sect. J. JP1(f), Part J3. J3.4, Part 3.12.3.3, Bushfire Areas; Sect. G. Part G5, Fire Safety; Part 2.3, Bushfire Areas; Part 2.3 F2.3.4, P2.3.4, SA 3.7.4.3 (c), Table SA 3.7.4.1 (external doors),	L2 requirements), BS 5368 Methods of testing windows (various parts - air permeability, watertightness, wind resistance), BS EN 1634-3 Smoke control test for door and shutter assemblies, BS EN 10077-1 Thermal performance of windows, doors, shutters,	
	Energy Efficiency; Sect. 2., Part 2.6 02.6 F2.6 P2.6.1(f), Building Sealing; Part 3.12. contents 3.12.3.3. AS 4420 Air infiltration test, AS 4420 Water penetration test, AS 2047 Windows & doors in buildings,	IEC 529 Degrees of protection provided by enclosures for electrical equipment, ISO 8272 Air permeability test, ISO 9972 Thermal insulation - Determination of building air tightness - Fan pressurisation method,	
	AS 2047 Windows & doors in building, AS 1530.7 Smoke control door and shutter assemblies, AS 3959 Construction of building in bushfire-prone areas	ISO 5925-1 Evaluation of performance of smoke control door assemblies (Part 1 Ambient temperature test).	
	NZ BC Compliance H (energy efficiency) air tightness H1.3.1, H1.3.3.		
Access and Mobility	NCC Sect. D Part D2, D2.15 and D3, D3.3 Housing Provisions Performance Provisions; Sect. 2. Part 2.5 (thresholds at door ways).	Building Regulations Approved Document M , 'Access and Facilities for Disabled People' and 'Accessible Thresholds in New Housing: Guidelines for House Builders and Designers'. BS 8300 Design of buildings and their approaches to meet the needs of disabled people. Code of Practice.	
	AS 1428 Design for access & mobility. AS 4299 Adaptable housing. NZ BC Compliance D (Access routes), NZS 4121 Design for access & mobility.		

Standards / Authorities

General

	USA	*: CHINA
Noise - Acoustic	IBC International Building Code, ASTM E 90 Standard method for laboratory measurement of airborne sound transmission loss of door panels and door systems, ASTM E 413 Classification for rating sound insulation, ASTM E 336 Standard test for measurement of airborne sound insulation	GB 50118-2010《民用建築隔音設計規範》 GB/T50087-2013《工業企業噪音控制設計規範》 GB/T 8485-2008《建築外窗空氣隔聲性能分級及其檢測 方法》 JGJ 57-2000《劇場建築設計規範》
	in buildings.	JGJ 58-2008《電影院建築設計規範》 JGJ 67-2006《辦公建築設計規範》 JGJ 62-2014《旅館建築設計規範》 GB 50096-2011《住宅 設計規範》 GB 50073-2013《潔淨廠房設計規範》
Fire and Smoke	IBC International Building Code, NFPA 101 Life safety Code,	GBJ-2006《建築設計防火規範》 JGJ 49-2005《綜合醫院建築設計防火規範》
С мосс С А	 NFPA 105 Recommended practice for the installation of smoke and draft control door assemblies, ASTM E 2074 Standard test method for fire tests of door assemblies, including positive pressure testing of side hinged and pivoted swinging door assemblies, 	GB 50016-2014《高層民用建築設計防火規範》 JGJ 39-2016《托兒所,幼兒園建築設計規範》 GB 50226-2007《鐵路旅客車站建築設計規範》 JGJ 60-99《汽車客運站建築設計規範》 JGJ 86-92《港口客運站建築設計規範》
	UL 10B Fire tests of door assemblies, UL 10C Fire tests of door assemblies under positive pressure, UL 1784 Standard for safety for air leakage tests for door assemblies, ASTM E 152 Methods of fire test of door assemblies,	GB 50039-2010《农村防火规范》 JGJ 38-99《圖書館建築設計規範》 JGJ 25-2010《檔案館建築設計規範》
	NFPA 252 Standard method of fire tests of door assemblies, NFPA 80 Installation standard for fire doors & windows, ANSI/UL 263, NFPA 255, ASTM E119, NFPA 251, CAN/ULC-S101. ANSI/BHMA A156.22 American National standard for door gasketing and edge	
ingan	ore private	JGJ 41-2014《文化館建築設計規範》 GB 50073-2013《潔淨廠房設計規範》
Weather, Energy, Insects	IBC International Building Code,	GB 50352-2005《民用建築設計通則》
and Vermin	ANSI/ASHRAE/IESNA Standard 90 P energy conservation in new building design Section 4,	GB 50300《建筑工程施工质量验收统一标准》 GB 50210《建筑装饰装修工程质量 验收规范》
🚓 🛄 🚿	ASTM E283 Rate of air leakage through exterior windows, curtain walls and doors, NFRC 400 Procedure for determining fenestration product air leakage.	JGJ 102-96《玻璃幕牆工程技術規範》 GB/T 7106-2019《建築外窗抗風壓分級及檢測方法》 GB 7108-2002《建築外窗雨水滲透性能分級及檢測方法

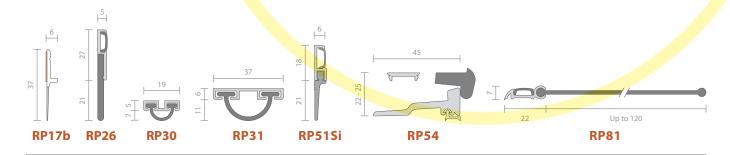
NFRC 400 Procedure for determining fenestration product air leakage.

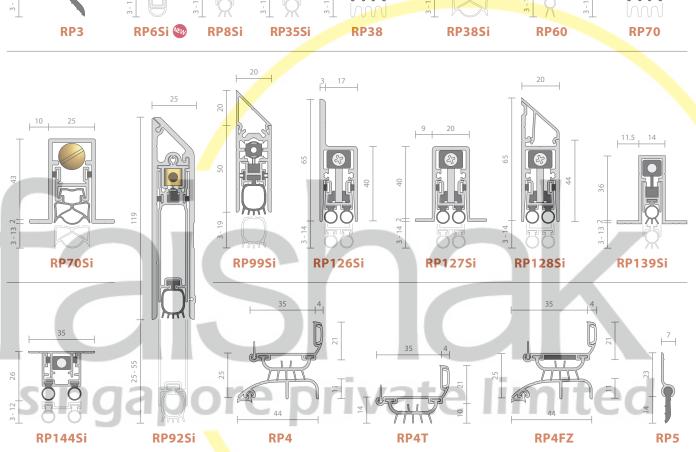
GB 50352-2005 《民用建築設計週則》 GB 50300 《建筑工程施工质量验收统一标准》 GB 50210 《建筑装饰装修工程质量 验收规范》 JGJ 102-96 《玻璃幕牆工程技術規範》 GB/T 7106-2019 《建築外窗抗風壓分級及檢測方法》 GB 7108-2002 《建築外窗雨水滲透性能分級及檢測方法》 GB 50096-2011 (2003版)《住宅 設計規範》 JGJ 26-2018 《严寒和寒冷地区居住建筑节能设计标准》 GB 50176-93 《民用建築熱工設計規範》 JGJ 38-99 《圖書館建築設計規範》 JGJ 25-2010 《檔案館建築設計規範》 JGJ 66-2015 《博物館設計規範》 JGJ 41-2014 《文化館建築設計規範》 GB 50073-2013 《潔淨廠房設計規範》

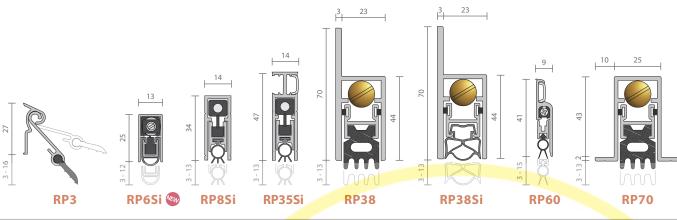
Access and Mobility

IBC International Building Code, Residential Code & ADAAG, ANSI 117 Building access for people with disability, ANSI/BHMA A156.21 American National standard for Thresholds. 88建標字第204號《方便殘疾人使用的城市道路和建築物設計規範》



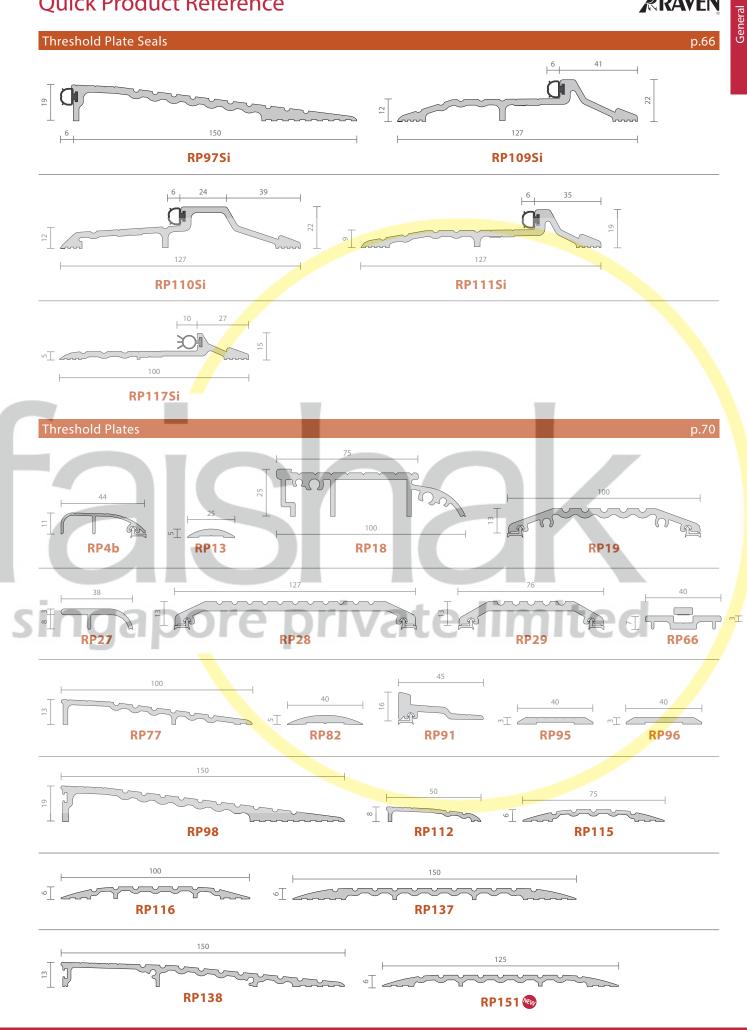






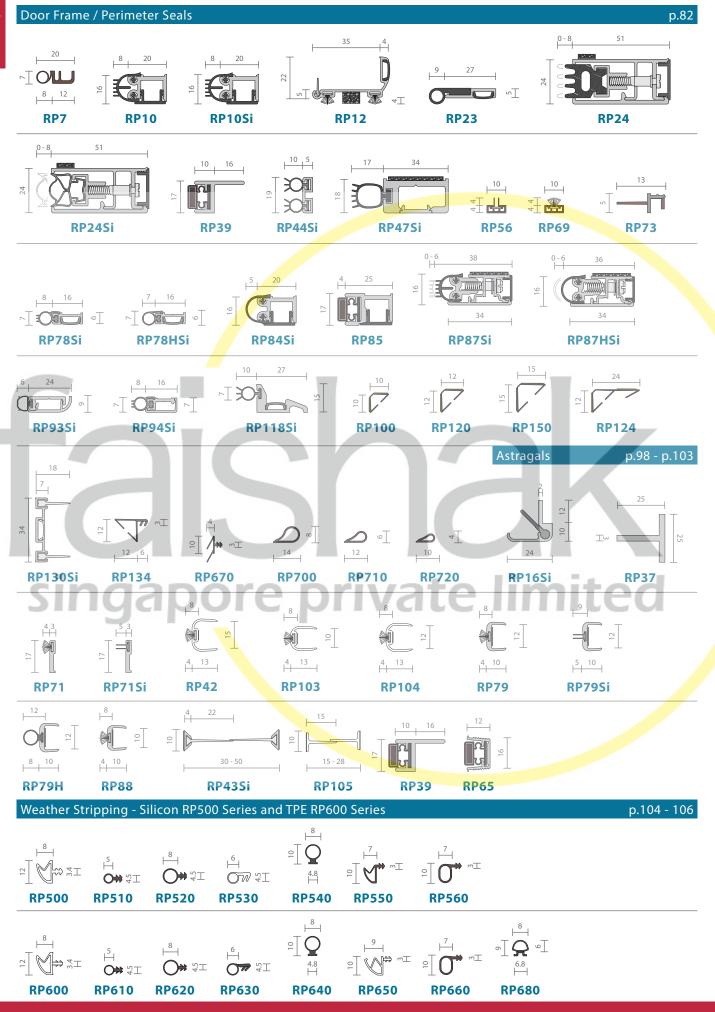
Quick Product Reference

Door Bottom Seals

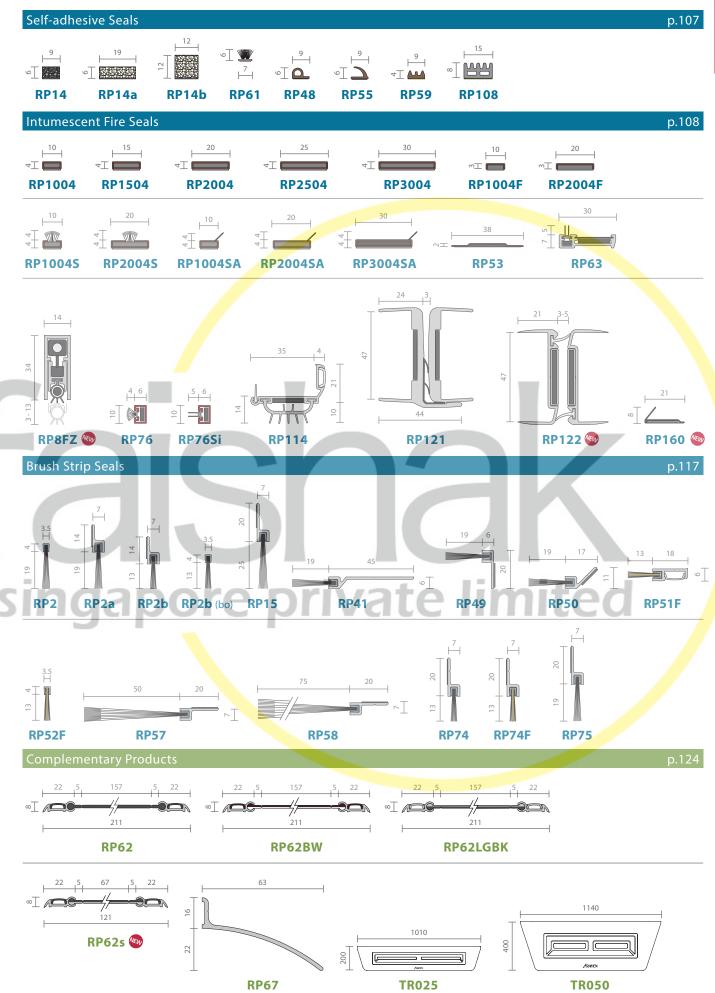


Quick Product Reference

RAVEN



Quick Product Reference



Product Index

Product

RP56......88

RP57 12, 29, 65, 121

RP61 _____ 107

RP62.....124

RP62BW 124

RP62LGBK 125

RP63 111

RP66......74

RP70 36, 37, 40, 42, 45, 47, 52

RP71Si 15, 16, 23, 37, 38, 39, 46,

RP74F 11, 12, 29, 65, 122

RP76_____111

RP76Si24, 111

RP78Si ... 10, 21, 22, 23, 25, 26, 27,

RP79.....100

RP79H100

RP79Si100

RP82.....11, 28, 75

RP89......10, 11, 63

RP93Si27, 36, 46, 92

RP94Si27, 35, 47, 93

RP95.....76

RP96 16, 26, 47, 77

RP98......10, 77

RP99Si ... 27, 34, 35, 36, 39, 40, 41,

RP84Si 10, 15, 38, 39, 47, 90 RP310Si LG

28, 34, 37, 40, 41, 42, 44, 45, 47,

54

47,99

20

Page

Genera

Product Page Index RP2.....65, 117 RP2a 12, 29, 65, 118 RP2b (brush only) 65, 103, 117 RP4......10, 58 RP4b.....71 RP5. 59 RP6Si 🗐 49 RP7 83 RP8FZ 2 RP8Si 10, 15, 21, 22, 23, 24, 25, 27, 34, 35, 37, 38, 40, 41, 43, 44, 45, 46, 47, 50 RP10 10, 34, 35, 39, 83 RP10Si 21, 34, 35, 37, 39, 40, 41, 43, 44, 47, 84 RP14 _____107 RP14a _____107 RP16Si ... 10, 23, 25, 28, 37, 38, 39, 45, 46, 98 RP17b12, 60 RP19......11,72 RP23......21,85 RP24Si ... 15, 22, 26, 38, 41, 43, 44, 86 RP26......60, 103 RP27......73 RP28......73 RP29......74 RP30 61 RP35Si 21, 23, 24, 26, 34, 50 RP38Si ... 15, 21, 22, 23, 25, 26, 27, 38, 41, 43, 51 RP41 12, 28, 29, 65, 119 RP48.....107 RP51F 29, 47, 65, 120 RP52F 11, 12, 16, 47, 65, 121 RP53 _____110

RAVEN

	_	- 0
	Page	Product Page
RP112		RP394Si GR
RP114		RP394Si LG
RP11511		RP404
RP116		RP404a
RP117Si		RP404b 129
RP118Si		RP410
RP12022, 23, 24, 27, 35		RP410a BK
41, 42, 45, 47,	-	RP410a LG 129
RP1211		RP423 BK 129
RP122		RP423 BR
RP123 RP124 15, 22, 23, 24, 25		RP423 GR 129
		RP423 LG
42, 43, 44,	,	RP424
RP126Si 15, 22, 25, 27, 37	, 38, 41, 3, 44, <mark>54</mark>	RP435 BR
43 RP127Si _ 15, 22, 27, 35, 38	, , -	RP435 LG
41, 42, 43		RP460
RP128Si 15, 22, 27, 37, 38	, ,	RP462 BW
INF 12001 10, 22, 27, 57, 50	44, 55	RP462 LGBK
RP129F	,	RP462S LGBK 129
RP129Si 11, 16		RP462 WH
RP130Si 11, 16, 23, 25,		RP469
RP134		RP486 129
RP137		RP487 129
RP138		RP500 13, 104
RP139Si		RP510
RP144Si		RP520 10, 13, 40, 41, 104
RP15022, 23, 25, 27,		RP530 13, 37, 40, 42, 45, 47, 104
RP151		RP540 13, 104
RP160 🖤	113	RP550 13, 104
RP303		RP560 13, 104
RP304Si		RP600
RP306Si 🖤		RP610
RP308Si BK		RP620
RP308Si GR		RP630
RP310Si BK		RP640
RP310Si LG	128	RP65013, 105
RP316Si BK		RP660
RP316Si GR		RP670
RP320		RP680 106
RP323		RP70097
RP326		RP71097
RP330		RP72097
RP331		RP1004
RP338		RP1004F
RP338Si BK		RP1004S
RP338Si GR		RP1004SA 109
RP343Si		RP1504 109
RP347Si		RP2004
RP351Si		RP2004F
RP354		RP2004S 109
RP362 RP371Si BK		RP2004SA 109 RP2504 109
RP371Si GR		RP3004 109
RP378Si		RP3004SA 109
RP381		RP3122Si
RP384Si		RP3126Si
RP393Si		RP3129Si
RP394HSi GR		TR025 127
RP394HSi LG		TR050 127
RP394Si RK		127

Guarantee

Raven seals are guaranteed for 2 years against defects in materials and workmanship, provided seals are fitted in accordance with manufacturer's specifications. Defective goods identified by Raven will be replaced. However, NO claim for work done thereon or damage incurred will be allowed.

Self-adhesive backed; closed cell and open cell foam tape seals are not guaranteed. Defective goods identified by Raven may be replaced. Experience has shown that even for one and the same objective, the exact requirements may vary due to site and environmental conditions that are outside Raven Products control; this includes the surfaces to which self-adhesive products are being installed.

All technical data and recommendations, although based upon our research and believed to be reliable, is given in good faith but without warranty. It is understood that users will independently determine the suitability of all products shown or specified herein for their purposes and as such Raven Products Pty. Ltd. accepts no liability.

Copyright ©

The tradename Raven and its registered trademarks remain the property of Raven Products Pty. Ltd., Australia. Product numbers, drawings and technical details are Raven copyright. Reproduction is by written permission only and must accompany the Raven brand and copyright acknowledgement.

Raven Products Pty. Ltd. reserves the right to alter, delete or make obsolete any product shown in this catalogue or website, without prior notice.

Disclaimer

In this catalogue there are some references to various national and international standards and building codes. No Raven copyright is implied or intended. References are a guide only. It is understood that users of this catalogue will obtain the most current building code and or standards for their intended purposes at all times.

Images

Raven Products have been used in thousands of projects world-wide. Pictured on the front cover from left to right are: Adelaide Botanic High School, South Australia and Ritz-Carlton, Western Australia.

CavitySliders private limited

Premium Cavity Slider Systems

The cavity slider experts, providing high quality cavity sliders, sliding door hardware and door automation for residential, architectural, commercial and health care applications.

cavitysliders.com.au

DTAC

Architectural Floor Tactiles, Stair Treads & Edging Solutions

Australia's pioneer and design innovator, DTAC[®] installs the most aesthetic NCC tested and certified range of Tactile ground surface indicators (TGSI's), Stair Tread and Edging solutions. Form and function can be beautiful.

dtac.com.au



singapore private limited

Raven Products Pty. Ltd.

Head Office and Factory 18 - 22 Aldershot Road Lonsdale, South Australia 5160 Australia

PO Box 67 Lonsdale, South Australia 5160 Australia

T +61 8 8384 5455

Sales Enquiries

T 1800 888 123 Free call anywhere in Australia E sales@raven.com.au

Technical Advice E tech.advice@raven.com.au

raven.com.au

- Hong Kong and China
- **T** +852 2987 6257
- **E** cs.hk@ravensealing.com

India

- **T** +91 87545 04448
- E cs.in@ravensealing.com

Singapore

- **T** +65 6543 6810
- E cs.sg@ravensealing.com

United Arab Emirates

- **T** +971 54 545 4133
- **E** cs.me@ravensealing.com