



Product Catalogue

112

Noise - Acoustic Sealing Smoke Sealing Fire Sealing Weather - Energy Sealing Light Sealing



www.raven.com.au





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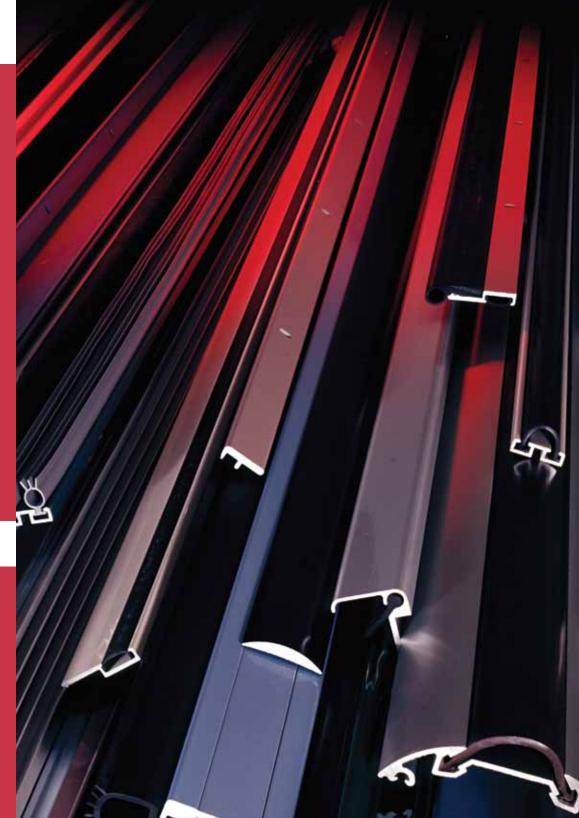
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Associations



Memberships



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Using this catalogue.



The Problem

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

However, these gaps can also allow the intrusion of; » noise

- » fire and smoke
- » rain
- » cold draughts, dust and embers
- » light
- » insects and vermin

And the leakage of;

- » heating
- » air conditioning

The Solution

The solution is to fit a Raven Sealing System which seals the gaps around doors and windows when closed. The seals help seal against a combination of intrusions and leakages. Properly fitted, they can provide a complete and continuous seal for all door and window types that will not impede normal use.

Sealing Systems

Since the 1960's, Raven has developed seals for doors and door frames. When installed with complementary seals for thresholds and meeting stiles, they will produce optimum "Sealing Systems".

More information regarding these systems is listed under the relevant sealing section of this catalogue and the website. The latest Raven PDF catalogue is also available from www.raven.com.au.

Duty Levels

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

Light duty

seals are used in residential and light traffic areas.

Medium duty seals are

used in commercial and medium traffic areas.

Heavy duty

seals are used in public heavy traffic areas with pedestrian and wheeled traffic.

lcons

Icons have been used to identify and make product selection easier. All seals are designed to meet most standards and in many cases perform more than one function.



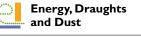




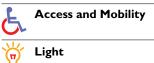


Insects and Vermin





Fire (approved)



Product Information

Adjustability

Many Raven seals have some degree of adjustability and can be adjusted without removing the door or window.Thus maximum efficiency can be maintained in the event of minor building movement.

Door Seal Sizes

Raven seals are available in Stock lengths and Standard Door Set sizes (refer Price List).

Door Sets

Some rigid perimeter seals are pre-cut to various sizes for single and double doors. (mm) Single:1x1000, 2x2100 Double:3x2100 Long Single:1x1000, 2x2750 Long Double:1x2000, 2x2750

Illustrations - Scale

The cross-section profiles in this catalogue are not necessarily to scale. Refer CAD access below. **Note:** Owing to slight variations in extrusions, minor differences may occur. Dimensions are nominal.

CAD

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

Specification

Specify Raven catalogue model number, finish required, preferred configuration of installation and reference to manufacturer's fittings, standards and guarantee.

Storage

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

Maintenance

Periodic inspection, adjustment and cleaning is recommended for all styles of systems. Normally an annual inspection is sufficient. For fire and smoke sealing applications, refer to page 12 for standards and authorities.

Specifications

The aluminium seals in this catalogue essentially consist of two parts: the aluminium extrusion and a flexible seal insert. Many of the seals also incorporate a cover strip which conceals fasteners.

Dependent on function, these inserts can be:

- » Nylon brush filaments
- » Polypropylene pile
- » Rigid or Flexible PVC
- » Silicon Rubber
- » Solid and Sponge EPDM
- » TPE (Thermo Plastic Elastomer)

Materials

Aluminium Extrusions are B6060 T5 or T6 anodised satin clear (silver) or medium bronze unless otherwise specified.

PVC

Raven proprietary grade PVC flexible and rigid extrusions: Highest quality available. Added UV inhibitors. SE (Self Extinguishing) where indicated. Service temp. – 5°C to 70°C.

Silicon Rubber

Raven proprietary grade extruded Silicon Rubber withstands very high temperatures. Conforms to **NCC BCA** *Spec. C3.4*, "Smoke Doors 200°C for 30 minutes". SE (Self Extinguishing) where indicated. Flammability index < 1 where indicated. Service temp. – 60°C to 230°C.



EPDM

EPDM solid and sponge rubber extrusions are developed for the automotive industry to withstand the rigours of compression, heat, cold, water, ozone, UV light, abrasion and aging. EPDM rubbers have exceptional memory which means that the sections will resume their original shape after long periods of compression, such as can be experienced in infrequently used doors and windows. Classified SE/B (Self Extinguishing / Burn) rate to SAE | 369, ISO 3795 where indicated. Service temp. -40° C to 70° C.

TPE (Thermo Plastic Elastomer)

Also referred to as TPR (Thermo Plastic Rubber). Similar to and exceeds some performance characteristics of EPDM rubber. Added UV inhibitors. Flammability index < 5 where indicated. Service temp. - 40°C to 100°C.

Finishes

Anodising Specification

An anodised protective finish is applied to all visible aluminium extrusions, unless otherwise specified. Colour, satin clear (silver) or medium bronze. Architectural perimeter seal extrusions are anodised 15 microns and Threshold plates are anodised 25 microns for maximum durability.

Colours - Finish

Raven polyester enamel finish can be colour matched to virtually any colour sample. This finish outperforms most finishes, including powder coating, in the critical areas of colour choice, durability, flexibility and hardness. Colours are available subject to negotiation at a premium, to special order. They can © Raven Products 2012

be ordered for aluminium and Rigid PVC extrusions. P.E. Paint (extra cost) is a two pack polyester enamel colour match finish which is equal to or exceeds powder coat finish.

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 the seals to be fitted accurately. This allows adjustment and compensation for building movement. Where fasteners are visible, they are colour matched to the finished extrusions.

Selection

When choosing your Raven seal, you should consider;

- » does it provide the required protection?
- » does it provide that protection without impeding normal door use?
- » is it compatible with the construction of the door and other hardware?
- » is it suitable for the projected duty level?

You may find that a door will be required to fulfil several functions at once. If this is the case, you will need to consider seals which will achieve the desired objectives but not interfere with other door hardware.

Situation

Is it intended for an external, internal, residential or commercial fire door and so on?

Suitability

Is it suitable for the door configuration?

- » single leaf, butt hinged inward or outward opening
- » two leaves, butt hinged inward or outward opening
- » one active leaf
- » rebated or plain meeting stiles
- » revolving
- » sliding
- » folding
- » pivot hung, single or double
- » wood, metal, glazed
- » roll-up garage door
- » tilt-up garage door
- » windows: casement, sash, hopper

Ordering

Lengths

See door seal sizes.

Specify

Product number, lengths and finish required. For special painted finishes, quote the brand, colour number, and description. Note: Specify Standard Door Set sizes, and for rigid seals the shortest Stock lengths available. This reduces cost and the potential of bending during transit.

Packaging and Recycling

Raven seals are suitably packaged and protected with recyclable, poly film and cardboard shipper cartons. Fasteners and fitting instructions are enclosed with each product.

Distribution

The Raven seal range shown in this catalogue is available from leading Architectural Hardware Industry distributors throughout Australia.

The Raven DIY seal range can be purchased from all retail hardware chains, groups and Independent hardware stores. Visit www.raven.com.au.

Returns and Allowances

No merchandise will be accepted for return without written permission. Conditions apply.

Ordering Enquiries Refer back cover. Product Index

Refer to page 108.

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.



Why Raven?



From modest beginnings in 1950, Raven has grown to become one of the most trusted brands in the building hardware industry, providing high quality, innovative door and window sealing solutions for architects, builders and home renovators.

Over three generations Raven has built an envied reputation as a world leader in its field, with products found across the globe. While much has changed since 1950, our founding principles have always remained true – to provide the best product at the best price supported by the best service.

The Raven brand has become synonymous with quality, reliability, value and service, which is why it is the brand that architects consistently rely on and recommend.

The architects' choice

The key to Raven's success and demand within the industry can be attributed to one unique feature – the close relationship we maintain with our clients.

A focus on service

When architects and builders are faced with challenges in design, regulation or function they invariably turn to Raven. We have a team of specialists on hand to provide expert advice and develop cost effective, custom-made solutions to some of the most challenging of problems.

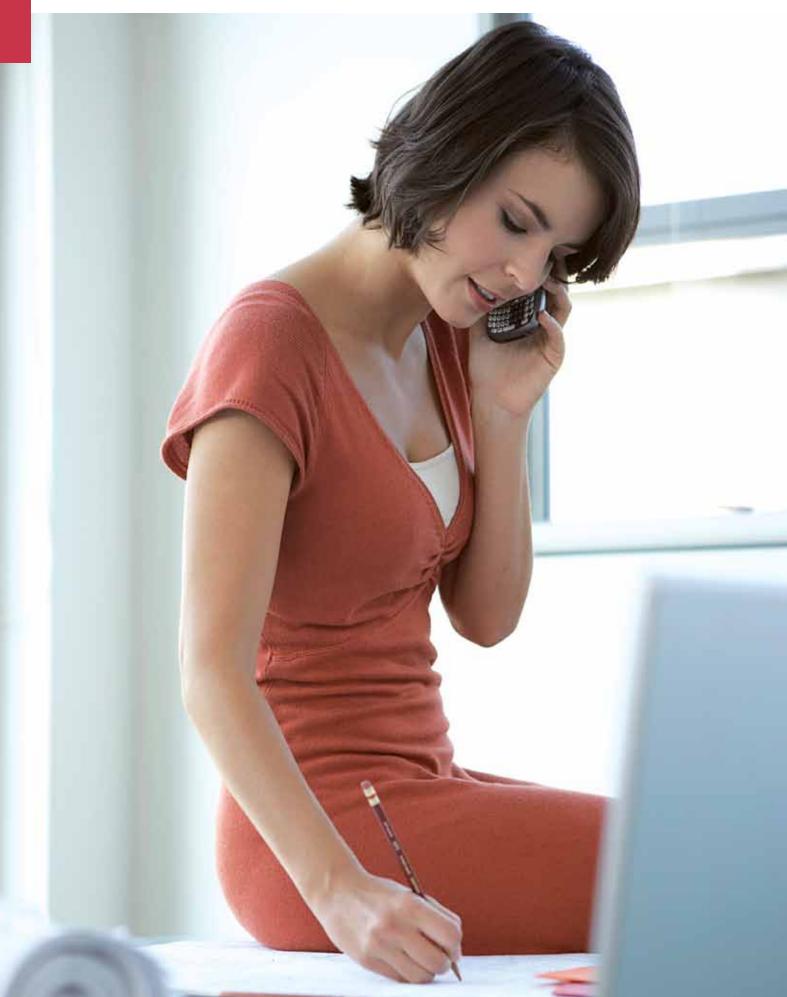
Quality you can trust

Our customers rely on Raven's commitment to quality, which extends from research, development and testing right through to manufacture, delivery, ease of application, durability and after-sales service; regardless of the project size or complexity.

World-class research and development

Our specialist R&D team, works tirelessly to meet the ongoing needs of the building industry, often preempting new challenges and providing innovative products to suit.





Service and advice.

After sixty years in the building industry, Raven understands its complexities, challenges and creative requirements, which is why we are perfectly placed to work with any application and project in reaching an outcome that provides the best value, quality product.

Since Raven developed much of the technology and led many of the advances in thermal, acoustic and particle sealing, it makes sense for architects, builders and specifiers to regularly come to us for advice – after all, this is how many of our leading-edge products were born.

Professional support every time

Raven's specialists are always on hand to provide expert guidance when our clients are searching for a sensible, suitable solution that fits both the application and the budget. We see our role not simply to manufacture a quality product but also to assist architects and builders in improving overall building design and safety while reducing construction costs.

With our free-call technical assistance to help customers achieve their individual project goals, and the straightforward and informative product selection and assessment procedure for architects and specifiers, Raven enjoys a constant, two-way information flow about door and window requirements, modifications and systems. This regular communication improves our own service as well as the services provided by our clients.

Solutions on your doorstep

From our modern dispatch centres in Australia and Asia, we can deliver a tailor-made sealing solution around the corner or across the globe. Our network of distributors and transport agents have delivered Raven hardware to the scorching deserts of outback Australia, mid-ocean oil rigs, the Antarctic ice-caps and the bustling business districts of London and Shanghai. Because of our advanced design and production system, we can often build and deliver tailormade, specifically colour-matched products weeks ahead of other manufacturers.

So when you call on Raven to deliver the ideal sealing solution – you can be sure that's exactly what we'll do. This catalogue is just part of our comprehensive information suite including our fully interactive website www.raven.com.au,

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specific data sheets and our free-call 1800 888 123 number which will put you in touch with our client technical support specialists. tech.advice@raven.com.au



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RAVEN



Leading-edge research - Accredited testing.

Raven's world-class research and testing facility means that we are constantly developing new ways to respond to the rapid advances in the building industry. Every design and invention is then rigorously assessed to meet international requirements, from the prototype phase and initial construction through to random batch testing of the final product.

Our enduring commitment to innovation and quality continues to keep us ahead of other brands. Firstly, by actively providing effective solutions to meet our clients' needs, and secondly by identifying potential advances in building technology and developing new products to suit. An array of worldwide patents and numerous design awards stand as a testament to this commitment.

Our name is your guarantee

We will never put our name to a product until we are fully satisfied that it's not just easy to fit and highly durable, but it can reliably withstand the appropriate extremes in temperature, pressure, smoke, weather and noise.

All Raven products are designed to comply with international building regulations and requirements. Continuous monitoring, and accreditation to international quality standards **ISO 9001**, underscore the company's determination to deliver products and systems that are proven to be the best.

It's all part of the reason why Raven is regularly invited to provide expert advice to the various Australian Standards committees, building regulation panels and fire safety authorities.

Naturally, like all our products, every new design and innovation is backed up by Raven's fully-dedicated customer support team.

When you specify Raven for your door and window seals, you can be confident that you're getting more than just the best product at the best value – you're getting a team of specialists and enduring peace-of mind as well.

Raven's world-class sealing systems don't just support doors and windows – they support your project success as well.



Our on-site testing facility is world-class and all our products are rigorously assessed to meet international requirements, at both the prototype phase and during random batch testing throughout production.





Australian owned - Internationally recognised.

With the third generation of the Raven family now at the helm, this proudly Australian-owned company has embraced a truly global perspective and a vision to deliver the world's best door and window sealing systems to any industry and any location.

To this end, we have a full-time international quality accreditation manager whose responsibility is to ensure the integrity of our products through third-party, independent endorsement and accreditation. Also to make certain our products continue to meet the criteria.

Raven's global reputation for quality of product and service has seen us steadily expand into established international markets such as South East Asia, the Middle East, South Africa, the United Kingdom and Europe, with many of our international orders arising through personal recommendation.

Quality control that set new standards

All Raven products are designed and tested to the most demanding of Australian and international standards in acoustic, thermal, weather and particle barriers. We take our environmental responsibility just as seriously, meeting the stringent accreditation criteria of the internationally recognised Ecospecifier organisation.

We maintain overall control of every aspect of its range. Research, design and development teams work at one key site and every stage is overseen from the design prototype to the manufacturing, batch-testing and marketing. We also carefully select our material suppliers to ensure a superior end product.



Ecospecifier Global is one of the world's foremost environmental-efficiency accreditation agencies. Recognising the important role that door and window seals play in reducing energy and environmental costs in modern, greenrated buildings, Raven responded to this growing need by submitting its procedures and products to Ecospecifier's stringent and comprehensive assessment. Raven operates to environmental **ISO 14001** standard and is committed to environmentally better outcomes in all aspects of product development and manufacturing.

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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	
Noise - Acoustic	 NCC BCA Sound Transmission & Insulation; Sect. F Parts F5.0, F5.5 (b), Health & Amenity; Sect. 2 Part 2.4, O2.4.6, Sound Insulation, F2.4.6, P2.4.6 V2.4.6, Sect. 3.8, 3.8.6 (appropriate performance requirements (a) (b)). AS 1191 (ISO 140.3) Measurements of airborne sound transmission loss etc., AS 1276 Rating of sound insulation in buildings etc. (ISO 717.1), AS 2253 Field measurement of the reduction in airborne sound transmission in buildings. 	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).
	NZ BC Compliance Doc. G (airborne and impact sound). ASTM E 336, ASTM E 413.	
Fire and Smoke	 NCC BCA 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), 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 NZS 1905.1 Components for the protection of openings in fire resistant walls, AS 1851-6 and AS 1851 Section 17 & 18 Maintenance of fire protection equipment, AS 1735.11 Lifts, escalators and moving walks - Fire rated landing doors, AS 6905 Smoke Doors, NZ BC Compliance Doc. C (Fire Safety), NS 4520 Fire Doors. 	 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 building, 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 5925-1 Ambient and medium temperature leakage test, ISO DIS 12472 Fire test - Determination of the efficiency of the intumescent seals with respect to the fire resistance of timber door assemblies, BS EN 13501-2 Fire classification of construction products and building elements. Classification using data from fire resistance tests, excluding ventilation services.
Weather and Energy	NCC BCA	Building Regulations Approved Document L1 & L2 ,
	 Health & Amenity; Sect. F., 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), Energy Efficiency; Sect. 2., Part 2.6 O2.6 F2.6 P2.6.1 (f), Building Sealing; Part 3.12. contents 3.12.3.3. AS 4420.4 Air infiltration test, AS 4420.5 Water penetration test, AS 2047 Windows & doors in buildings, AS 1530.7 Smoke control door and shutter assemblies, AS 3959 Construction of building in bushfire-prone areas. NZ BC Compliance Doc. H (energy efficiency) air tightness H1.3.1, H1.3.3. 	 BS 7386, BS 8104, CIBSE TM 23 Testing of building for leakage (Part L1 & 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, ISO 8272 Air permeability test, IEC 529 Degrees of protection provided by enclosures for electrical equipment, ISO 9972 Thermal insulation - Determination of building air tightness - Fan pressurisation method, ISO 5925-1 Evaluation of performance of smoke control door assemblies (Part 1 Ambient temperature test).
Access and Mobility	NCC BCA Sect. D Part D2, D2.15, 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
-	AS 1428 Design for access & mobility. NZ BC Compliance Doc. D (Access routes), NSZ 4121 Design for access & mobility.	the needs of disabled people. Code of Practice.

	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 in buildings, ASTM E 1408-91 Standard Test Method for Laboratory Measurement of the Sound Transmission Loss of Door Panels and Door Systems. 	GBJ 118 - 88 《民用建築隔音設計規範》 GBJ 87 - 85 《工業企業噪音控制設計規範》 GB 8485 《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》 JGJ 58 - 88 《電影院建築設計規範》 JGJ 67 - 89 《辦公建築設計規範》 JGJ 62 - 90 《旅館建築設計規範》 GB 50096 - 99 《住宅 設計規範》 GB 50073 - 2001 《潔淨廠房設計規範》

IBC International Building Code, GBJ 16-87 《建築設計防火規範》 Fire and Smoke JGJ 49 - 88 《綜合醫院建築設計防火規範》 GB 50045 - 95 《高層民用建築設計防火規範》 NFPA 101 Life safety Code, NFPA 105 Recommended practice for the installation of smoke and draft control door assemblies, JGJ 39-87 《托兒所,幼兒園建築設計規範》 GB 50226 - 95 《鐵路旅客車站建築設計規範》 ASTM E 2074 Standard Test Method for Fire Tests of Door JGJ 60 - 99 《汽車客運站建築設計規範》 Assemblies, Including Positive Pressure Testing of Side JGJ 86 - 92 《港口客運站建築設計規範》 Hinged and Pivoted Swinging Door Assemblies, UL IOB Fire tests of door assemblies, GBJ 39-90《村鎮建築設計防火規範》 JGJ 38 - 99 《圖書館建築設計規範》 **UL IOC** Fire tests of door assemblies under positive pressure, **UBC** Fire tests, JGJ 25 - 2000 《檔案館建築設計規範》 UBC 7.210 Smoke and draft control door assemblies, JGJ 66 - 91 《博物館設計規範》 JGJ 57 - 2000 《劇場建築設計規範》 UL 1784 Standard for safety for air leakage tests for door JGJ 58 - 88 《電影院建築設計規範》 assemblies. ASTM E 152 Methods of fire test of door assemblies, JGJ 62 - 90 《旅館建築設計規範》 NFPA 252 Standard method of fire tests of door JGJ 41-81 《文化館建築設計規範》 GB 50073 - 2001 《潔淨廠房設計規範》 assemblies. NFPA 80 Installation standard for fire doors & windows, Compatibility of related standards with minor wording differences. ASTM E 136 = UBC 43-1, ASTM E 84 = UL 723 = UBC 42-1 = NFPA 255, ASTM E 110 = UL 263 = UBC 43-1 = NFPA 251. JGJ 37 - 87 《民用建築設計通則》 IBC International Building Code, Weather and Energy ANSI/ASHRAE/IESNA Standard 90 P Energy conservation in GBJ 301 - 88 《關於鋁合金門窗安裝工程檢驗評定標準》 《钢结构施工质量验收规范》 new building design Section 4, ASTM E283 Rate of air leakage through exterior windows, JGJ 102 - 96 《玻璃幕牆工程技術規範》 GB 7106 《建築外窗抗風壓分級及檢測方法》 curtain walls and doors, GB 7108 《建築外窗雨水滲透性能分級及檢測方法》 NFRC 400 Procedure for Determining Fenestration GB 50096 - 99 《住宅 設計規範》 Product Air Leakage. JGJ 26 - 95 《民用建築節能設計標準》 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 - 2000 《檔案館建築設計規範》 [G] 66 - 91 《博物館設計規範》 JGJ 41 - 81 《文化館建築設計規範》 GB 50073 - 2001 《潔淨廠房設計規範》 GB 50176 - 93 《民用建築熱工設計規範》

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.

IBC International Building Code, Residential Code & ADAAG, 88建標字第204號 《方便殘疾人使用的城市道路和建築 ANSI II7 Building access for people with disability, 物設計規範》



Noise - Acoustic

Door Sealing Systems

Helping reduce the amount of sound that passes through a doorset is one of the most common applications for door seals.

Sealing the gaps around a door is of prime importance when reducing 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 size of that gap, sound waves move through any gaps around doors with little loss. Consequently, small gaps around a whole doorset can let through nearly as much sound as the door opening itself. Because of this, any small gaps or clearances not sealed can reduce the effectiveness of a good quality acoustic door or partition.

Raven acoustic seals provide an excellent barrier to airborne sound and help ensure that the acoustic attenuation provided by a doorset (the frame and door leaf along with the seals) is, in many cases, equivalent to the wall or partition into which it is installed.

Continued...

Door Sealing Systems

Raven acoustic seals also help isolate buildings from external noise, for example, the noise generated from roads, railways and airports. They also help isolate rooms from airborne noise generated within a building. For example; from plant and machinery, theatres, cinemas, crèches, dental and doctors' surgeries, stairwells, passages, interconnected hotel rooms and adjoining apartments. It may be necessary to check with local regulatory authorities to see if any regulations or standards apply for a particular application.

For example: AUS NCC BCA Sect. F5.5 and Sect. F2.4.6 stipulates a requirement where Class 2 buildings, typically apartments and Class 3 buildings such as hotels, motels and age care buildings, must have entry doors with a sound insulation rating minimum of Rw30. The UK Building Approved Document E states a minimum Rw29 is required. Raven acoustic seals are widely used internationally in airports, hotels, offices, hospitals, homes and anywhere noise infiltration occurs through doors. Their effectiveness is best illustrated by the repeated use of Raven acoustic seals by architects, acoustic consultants, door manufacturers, engineers 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.

The performance of Raven door seals are routinely tested by internationally accredited organisations. Tabulated test data is shown on page 18 to 23.

Acoustic Door Fabricators Increasingly use Raven Door sealing systems in their door sets to achieve

Door Frame Seal



and maintain high ratings. Some are detailed on page 24 and 25 from Techwide Engineering Ltd. Manufacturing Acoustic rated doors featuring Raven seals, which have been independently tested and certified to **Rw52** (STC 52).

RP24 RP38 RP16 Si RP66

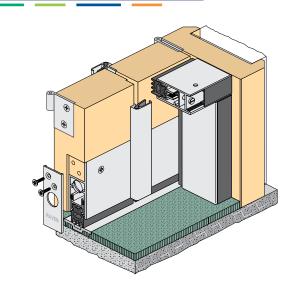


An effective combination of seals for solid core butt hinged doors in situations requiring a consistently high acoustic performance rating (such as in music rooms, plant rooms and ante-rooms in broadcasting facilities), and where these ratings must be maintained by an adjustment facility, is;

RP24 page 71 Door Bottom Seal RP38 (plain meeting stiles) page 46 Astragal RP16 Si page 81 or RP71 (if both leaves

are active) page 82

Threshold Plate RP66 (recommended)...page 63



Door Sealing Systems

Heavy Duty

An effective combination of seals for solid core butt hinged doors is; Door Frame Seal RP47 Si page 73

Door Bottom Seal

Astragal

RP71 (if both leaves are active) page 82 or RP16 Si (plain meeting stiles) page 81

Threshold Plate RP66 (optional) (not illustrated) page 63

Medium Duty

An effective combination of seals for solid core butt hinged doors in situations such as offices, school rooms, hotel rooms and consulting rooms is;

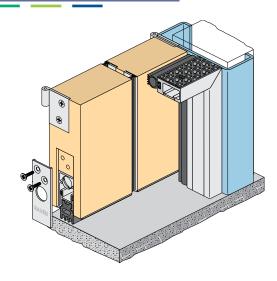
Door Bottom Seal
RP8 Si page 45
Astragal
RP71 page 82
or RP16 Si page 81

RP10 page 69

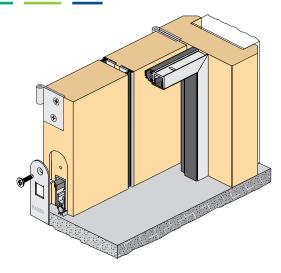
Door Frame Seal

Threshold Plate RP66 (optional) (not illustrated) page 63

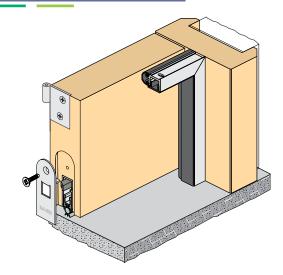
RP47 Si RP70 RP71



RPIO RP8 Si RP7I



RP84 Si RP8 Si



Clean Room -Acoustic

An effective combination of acoustic seals for a clean room, butt hinged door is; Door Frame Seal RP84 Si page 76

Threshold Plate RP96 (optional) (not illustrated) page 65

RAVEN

Bulkhead sealing is used in situations where a continuous, uninterrupted seal is required around all four edges of a door (or around the frame and across the sill), such as in plant rooms. In some cases this means the sill of the door may need to be suitably detailed so that the selected seal can be installed.

Note: Wide butt hinges should be specified.

An effective smoke and acoustic sealing system for plant room doors and emergency exit doors is;

Door Frame Seal

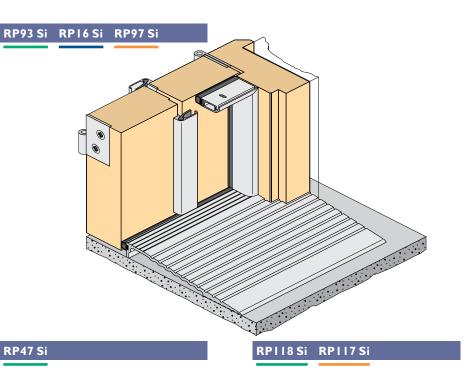
RP93 Si page 77

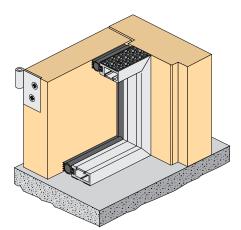
Astragal

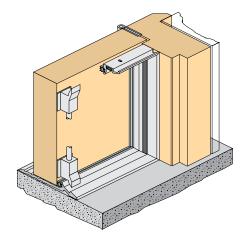
RPI6 Si page 81
or RP71 Si (if both leaves
are active) page 82

Threshold Plate Seal

RP97 Si page 58	3
or RPI 10 Si page 59)

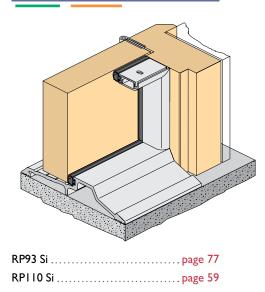






RP47 Si page 73





RP118 Si	page 79	
RP117 Si)

Noise - Acoustic Sealing Systems for Solid Core Doors



&RAVEN

Performance Testing

Raven acoustic sealing systems are tested in accordance with AS 1191 (EN ISO 140.3) and rated to AS 1276.1 (EN ISO 717.1) by the National Association of Testing Authorities (NATA), accredited Vipac Engineers and Scientists Ltd.

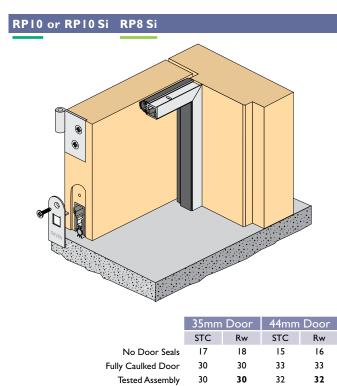
The tabulated results are presented as the Sound Transmission Loss (STL) in the frequencies of 100Hz - 5000Hz. This is the measured sound pressure loss in decibels of the doorset and seal combination at the tested frequency. The Sound Transmission Class (STC) and the Weighted Sound

Reduction Index (Rw) are single number ratings of a material's or an assembly's ability to resist airborne sound transfer at the frequencies of 125Hz - 4000Hz and 100Hz - 3150Hz respectively. Note: Higher acoustic values of up to STC 52 have been certified by using higher density, acoustically designed doors in conjunction with Raven acoustic sealing systems.

To achieve predictable acoustic ratings, the door type, configuration, Raven acoustic sealing system and the room construction should all be considered during the specification process.

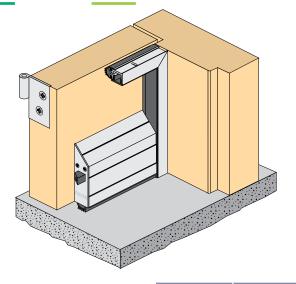


Single Door's



Frequency (Hertz) vs STL (dB) 20.7 21 20.7 26.5 22.2 26.7 24.4 25.3 27.3 28.4 27.9 28.6 30.8 33.6 35.5 35.2 34.8 35.1 21.6 20.6 23.8 25.8 25.2 27.4 29.1 30.1 28.9 30.5 29.5 29.7 31.7 34.6 36.8 35.6 35.5 35.5

RPI0 or RPI0 Si RP99 Si



									3	5m	m [Doc	or	4	4mı	m E)oc	or
									S	тс		Rv	v	S	ΤС		Rw	<i>,</i>
					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
				-	Teste	ed A	ssen	nbly		30		30)		32		32	
					Fr	equ	end	cy (He	rtz)	٧S	STI	_ (d	IB)				
	190	17	16	-loo	28	- SN	100	500	30	800	100	750	100	200	2500	3150	age at	500
Smm Door(dB)	20.7	21	20.4	26.8	22.2	26.7	24.4	25.3	27.9	28.3	28.9	30.2	31.9	34.1	35.5	37.2	37.6	37.3
4mm Door(dB)	21.6	20.6	23.3	26	25.2	27.5	29.1	30.1	29.6	30.5	31	31.8	33.2	35.5	36.8	38	38.9	38.1

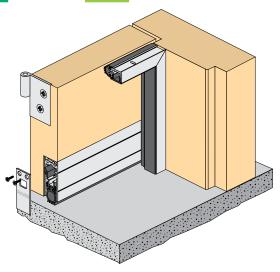
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Threshold Plate Seal / Threshold Plate

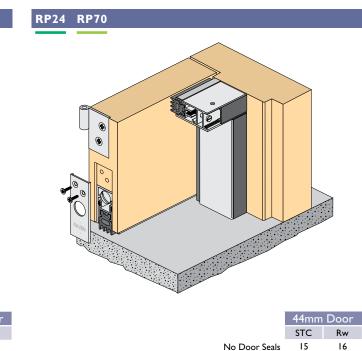


RPI0 or RPI0 Si RP99 Si RPI0 or RPI0 Si RP99 Si ۲ ۲

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									3	5m	m [Doc	or	4	<u>4m</u>	m [Doc	or
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					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	ed D	oor		30		30)		33		33	
				•	Test	ed A	ssen	nbly		30		30)		33		32	
					Fr	equ	iene	су (He	rtz)	vs	STI	L (c	IB)				
	100	17	160	-100	-50	35	100	500	30	00	100	750	100	2000	2500	3150	hol	ŝ
35mm Door(dB)	20.7	21	20.4	26.8	22.2	26.7	24.4	25.3	27.9	28.3	28.9	30.2	32.3	34.4	35.5	37.2	37.3	36.9
44mm Door(dB)	21.6	20.6	23.3	26	25.2	27.4	29.2	30.1	29.6	30.2	31	31.8	33.7	35.7	36.8	38	38.5	37.

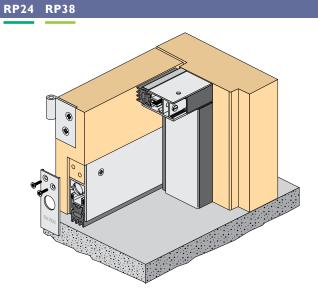


		35mm	n Door	44mm	Door
		STC	Rw	STC	Rw
	No Door Seals	17	18	15	16
	Fully Caulked Door	30	30	33	33
	Tested Assembly	30	30	32	32
	Frequency (I	Hertz) v	vs STL (d	IB)	
Hz 100 125 16	200 250 315 400 500	30 80 1	00,750,600	200 2500 314	ro 400 400
35mm Door(dB) 20.4 21 20.6	26.7 22.2 26.7 24.4 25.3	27.9 28.4 2	8.9 30 31.9	34.3 35.5 37.	.2 37.3 36.9
44mm Door(dB) 21.2 20.6 23.7	26 25.1 27.4 29 29.9	29.6 30.5	31 31.6 33.2	35.5 36.8 38	8 38.5 37.6



														S	тс		R٧	/
										No	Do	or S	eals		15		16	
									Full	y Ca	ulke	d D	oor		33		33	
									-	Teste	ed A	ssen	nbly		31		32	
								су (
	100	15	160	-CD	250	315	100	500	30	800	100	1250	100	2000	2500	3150	hoo	500
44mm Door(dB)	207	21	20.4	768	22.2	263	243	25.2	27.9	784	78.8	30	312	331	33.8	31.8	796	321

21 27.9 28.4 28.8 30 31.2 33.1 33.8 31.8 29.6 32.1 24.3 25.2

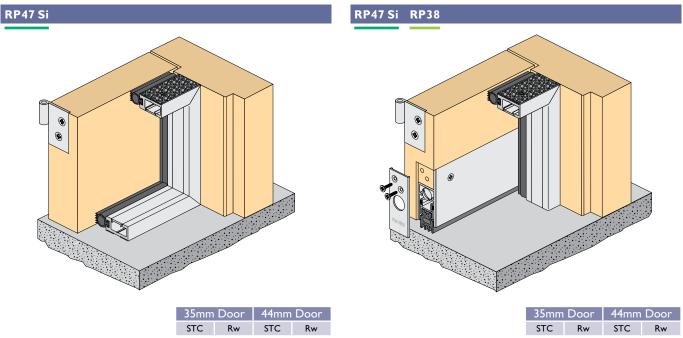


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									S	тс		Rv	v	S	ΤС		R٧	/
					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
				-	Teste	ed A	ssen	nbly		30		30)		33		32	
					Fn	equ	end	су (Hei	rtz)	٧S	STI	L (d	B)				
	190	17	16	-100	~5°	3 ¹ 2	100	500	30	°	100	120	100	200	2500	3150	100	500
35mm Door(dB)	20.7	21	20.2	26.7	22.2	26.6	24.4	25.3	27.9	28.4	28.8	30.2	32.3	34.4	35.5	37	36.8	37.4
44mm Door(dB)	21.6	20.6	22.9	26	25.2	27.4	29.2	30	29.6	30.5	31	31.8	33.7	35.7	36.8	37.7	37.8	38.3

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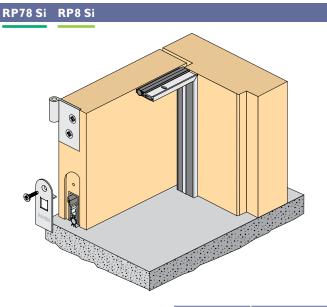
Noise - Acoustic Sealing 🌒

Single Door's

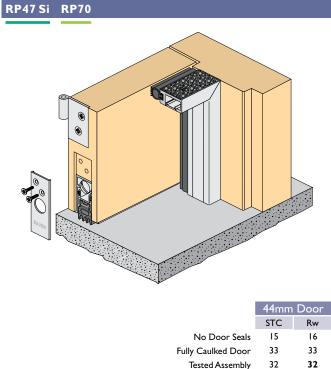


									-	10		11.0	v	5	IC.		17.00	·
					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
					Teste	ed A	ssen	nbly		30		30)		32		32	
					Fn	equ	iend	су (Hei	rtz)	٧S	STI	L (c	B)				
	100	15	16	-leo	28	35	100	500	ŝ	800	100	750	100	200	2500	3150	LOOD	500
35mm Door(dB)	20.6	20.9	20.4	26.7	22.2	26.6	24.3	25.2	27.7	28.4	28.8	30	31.6	33.7	35.3	36.8	37.4	37.5
44mm Door(dB)	21.5	20.5	23.2	26	25.2	27.4	29	29.4	30.5	31	31.6	32.7	34.8	36.5	36.8	37.5	38.6	38.4

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					No	Do	or S	eals		17		18	:		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
				-	Teste	ed A	ssen	nbly		30		30)		32		32	2
					Fr	equ	end	су (He	rtz)	vs	SΤΙ	_ (d	IB)				
Hz	190	17	16	-100	2º	3 ⁵	100	500	30	*D	100	750	100	200	2500	3150	100	500
35mm Door(dB)	20.6	21	20.4	26.6	22.2	26.3	24.3	25.3	27.9	28.4	28.8	30.2	32.3	34.4	35.5	36.5	37	37.3
44mm Door(dB)	21.6	20.6	23.2	25.9	25.2	27	29	30	29.6	30.5	31	31.8	33.7	35.7	36.5	37.2	38.I	38.I



								3	5m	m [Doc	or	4	4m	m D	Doc	or
								S	тс		Rv	v	S	ΤС		R٧	<i>(</i>
				No	Do	or S	eals		17		18	3		15		16	
			Full	y Ca	ulke	d D	oor		30		30)		33		33	
				Teste	ed A	ssen	nbly		30		30)		32		32	
				Fr	equ	end	су (Hei	rtz)	vs	STI	_ (d	IB)				
Hz 🤇	\$ 1 ^t	,60	-60	-iso	35	100	500	S	800	100	750	100	2000	2500	3150	hoo	40 ⁰
nm Door(dB) <mark>20</mark>	.7 21	20.4	26.8	22.2	26.3	24.4	25.3	27	28.4	28.7	29.5	31.1	32.5	34.1	35.I	35.9	35.7
nm Door(dB) <mark>21</mark>	.6 20.6	23.3	26	25.2	27.I	29.1	29.9	28.3	30.5	30.8	30.9	32.I	33.2	35	35.6	36.7	36.2



	,	
	Frequency (Hertz) vs STL (dB)	
10 01 5 10 m	and and and out and an an an an an ar	150 100 1

14mm Door(dB) 21.6 20.6 22.9 25.9 25.1 26.4 28.3 29.5 29.4 30.5 31 31.8 31.8 33.1 34.6 35.9 36.9 32.2

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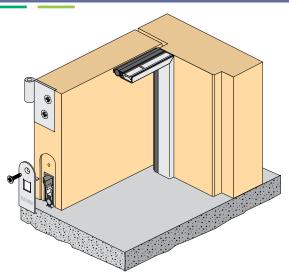
Door Bottom Seal

35m 44m

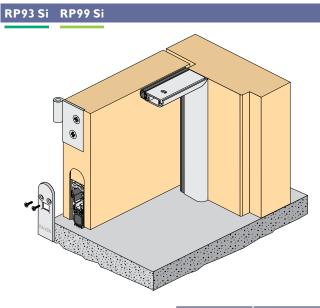
Single Door's

RAVEN

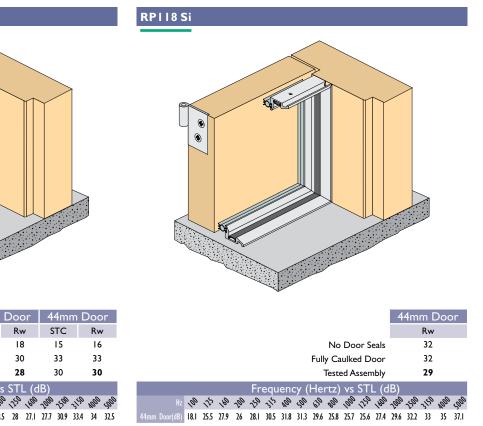
RP94 Si RP8 Si

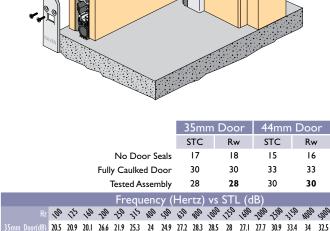


									3	5m	m [Doc	or	4	4m	m E	Doc	or
									5	тс		Rv	v	S	тс		R٧	/
					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
				-	Teste	ed A	ssen	nbly		29		29	,		30		30)
					Fr	equ	end	су (He	r tz)	vs	STI	L (d	IB)				
	190	17	16	-100	-50	35	100	500	30	8D	100	750	100	2000	2500	3150	100	500
35mm Door(dB)	20.5	20.7	20.6	26.6	22.2	26.2	24.2	24.7	25.6	28.3	27.6	28	29.6	30.6	33.I	34.5	34.3	34.3
44mm Door(dB)	21.3	20.4	23.7	25.9	25.I	27	28.6	28.3	26.5	30.2	29.2	28.9	30.3	31.1	33.8	35	34.8	34.7



		35mm	Door	44mm	Door
		STC	Rw	STC	Rw
	No Door Seals	17	18	15	16
	Fully Caulked Door	30	30	33	33
	Tested Assembly	30	30	32	32
	Frequency (I	Hertz) v	s STL (d	IB)	
Hz 100 125 160	20 25 315 40 500	630 800 10	0 750 100	200 250 315	, ¹⁰⁰ 200 ¹
35mm Door(dB) 20.6 21 20.6	26.8 22.2 26.7 24.4 25	27.5 28.4 28	.9 30.2 32.3	34.3 35.5 37.2	2 37.6 37.5
44mm Door(dB) 21.5 20.6 23.7	26 25.2 27.5 29 29.2	29.1 30.5 3	1 31.8 33.7	35.5 36.8 38	38.9 38.4





n Door(dB) 20.5 20.9 20.1 26.6 21.9 25.3 24 24.9 27.2 28.3 28.5 28 27.1 27.7 30.9 33.4 34 32.5 um Door(dB) 21.3 20.5 22.6 25.9 24.6 25.8 28.1 28.8 28.6 30.2 30.4 29 27.5 27.9 31 33.7 34.5 32.8

RP94 Si RP99 Si

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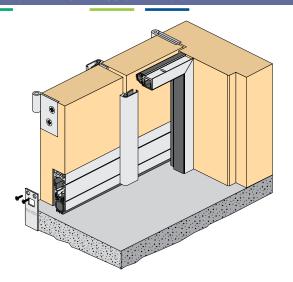
Noise - Acoustic Sealing Single Door's

<section-header></section-header>	
44mm DoorSTCRwNo Door Seals2323	44mm DoorSTCRwNo Door Seals2323
Fully Caulked Door 33 33	Fully Caulked Door 33 33
Tested Assembly 31 31	Tested Assembly 31 31
Frequency (Hertz) vs STL (dB) Hz የቅ ናቅ	Frequency (Hertz) vs STL (dB) Hz ላቅ ላቅ </td

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					En	eau	ien	-v (Hai	rt7)	vs	ST	(IR)				
						cqu		-7 (- LZ)	• 3	51	- (0	<u>, </u>				
	an.	5	a.	a.	a.	.5	a.	a.	2	an.	ne la construcción de la constru	Se .	a,	°	Q,	9.	and a	500
	10	14	10	20	23	3	00	50	6,	80	10.	14	10.	500	25-	3.	Vor	200
44mm Door(dB)	10 0	72.0	70	70 E	20 E	20 E	21.0	21	20.0	70	ר פר	20	21.0	22.2	241	25.2	27	20 E
4411111 DOOR(0D)	17.5	23.7	20	11.3	20.2	20.2	21.7	21	L7.0	20	20.Z	20	J1.0	JJ.J	JH.I	JJ.Z	21	20.2

Pair of Doors

RPI0 or RPI0 Si RP99 Si RPI6 Si



									3	5m	m [Doc	or	4	4m	m E	Doc	or
									S	тс		Rv	v	S	тс		R٧	/
					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
				-	Test	ed A	ssen	nbly		30		30)		32		32	
					Fr	equ	end	cy (He	r tz)	vs	STI	L (d	IB)				
	190	17	16	-100	-59	3NS	100	500	30	°	100	750	100	200	7500	3150	100	500
mm Door(dB)	20.5	20.8	20.7	26.7	22	26.6	24.3	25.3	29.9	28.5	28.8	30.1	31.8	34.1	35.3	36.8	36.9	36.8
Imm Door(dB)	21.3	20.4	23.9	26	24.8	27.4	29	29.9	29.7	30.5	30.9	31.7	33	35.3	36.5	37.5	38	37.5

Interconnecting Doors

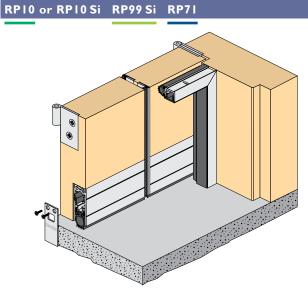
RP94 Si RP8 Si ۲

														4	0m	m [Doc	or
														S	тс		R٧	v
										No	Do	or S	eals		24		28	3
									Full	y Ca	ulke	d D	oor		40		40)
									-	Teste	ed A	ssen	nbly		38		38	3
					Fre	equ	end	су (He	r tz)	vs	STI	L (d	B)				
Hz 🔹	100	15	160	-po	250	35	100	500	30	800	100	120	100	200	2500	3150	1000	500
40mm Door(dB) 2	5.5	22	28.5	35.5	34	37.5	40.5	35	34.5	36	38	N/A	37	39.5	41	41.5	41	39.5



RP10 or RP10 Si RP99 Si RP71 Si ۲ ۲

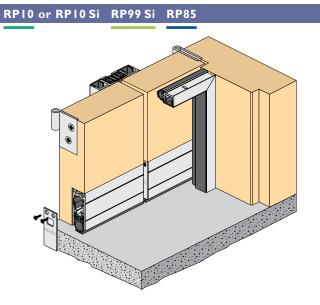
									3	5m	m [Doc	or	4	4m	m E	Doc	or
									S	тс		Rv	v	S	τс		R٧	/
					No	Do	or S	eals		17		18	3		15		16	
				Full	y Ca	ulke	d D	oor		30		30)		33		33	
				-	Teste	ed A	ssen	nbly		30		30)		32		32	
					Fr	equ	end	cy (Hei	rtz)	vs	STI	_ (d	IB)				
	100	15	16	-100	-iso	35	100	500	30	800	100	750	100	2000	2500	3150	100	505
35mm Door(dB)	20.7	20.9	20.7	26.7	22.1	26.6	24.3	25.3	27.8	28.3	28.3	29.9	31.6	34.1	35.3	36.8	37.1	36.9
44mm Door(dB)	21.6	20.5	23.9	26	24.9	27.4	28.8	29.9	29.5	30.3	30.2	31.5	32.7	35.3	36.5	37.5	38.2	37.7



		35mi	n Door	44mm	Door
		STC	Rw	STC	Rw
	No Door Seals	17	18	15	16
	Fully Caulked Door	30	30	33	33
	Tested Assembly	30	30	32	32
	Frequency (I	Hertz)	vs STL (d	B)	
Hz 100 125 16	20 23 315 40 50	30 800	100 120 100	2000 2500 315	oor oon soo
35mm Door(dB) 20.6 20.8 20.7	26.8 22.1 26.7 24.3 25.2	27.8 28.5	28.6 30.1 32.1	34.3 35.4 37.	1 37.4 37.4
44mm Door(dB) 21.5 20.4 23.9	26 24.9 27.5 29 29.7	29.5 30.5	30.6 31.7 33.4	35.5 36.7 37.	9 38.7 38.2

RPI18 Si RP8 Si RP16 Si C ۲ Ĭ

														4	4m	m [Doc	or
														S	тс		R٧	/
									-	Test	ed A	ssen	nbly		31		31	
					Fn	equ	iend	су (He	rtz)	VS	STI	L (c	IB)				
Hz	10	12	18	-lo	-50	312	ro,	200	30	°	100	120	160	rage	1500	3/50	1000	200
44mm Door(dB)	20.7	22.7	26.5	27.0	27.6	29.1	29.6	30.7	29.4	27.3	27.5	28.1	30.3	32.1	33.4	33.9	36.2	37.3



								3	5m	m [Doc	or	4	4m	m E)oc	or
								S	тс		Rv	v	S	ΤС		R٧	/
				No	Do	or S	eals		17		18	3		15		16	
			Full	y Ca	ulke	ed D	oor		30		30)		33		33	
			-	Teste	ed A	ssen	nbly		30		30)		32		32	
				Fr	equ	ieno	су (He	rtz)	vs	STI	L (d	IB)				
Hz 📢	, Ý,	16	-lo	~5°	- S	to,	500	30	°	100	120	160	200	-15 ⁰⁰	3150	LOD	500
35mm Door(dB) 20.	20.9	20.7	26.7	22	26.6	24.3	25.2	27.6	28.3	28.6	30.1	31.6	33.8	35	37	36.9	36.6
44mm Door(dB) 21.	20.5	23.9	25.9	24.8	27.4	29	29.7	29.2	30.3	30.6	31.7	32.7	35	36.2	37.8	38	37.3

& RAVEN

Acoustic Door Fabricators increasingly use Raven Door sealing systems in their door sets to achieve maximum acoustic performance. Some are detailed below. Techwide Engineering Ltd. Manufacture Acoustic rated doors featuring Raven seals, that have been independently tested and certified to Rw49 (STC 48).

RP78 Si

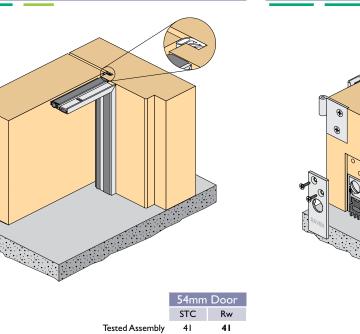
RP530 RP38

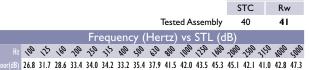
RP16 Si

RP78 Si RP530 RP70

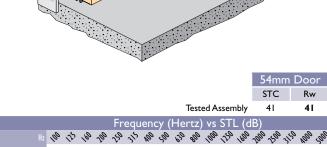
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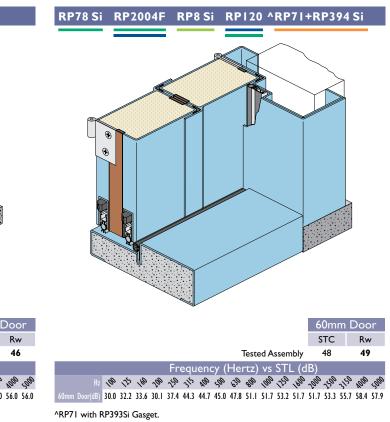


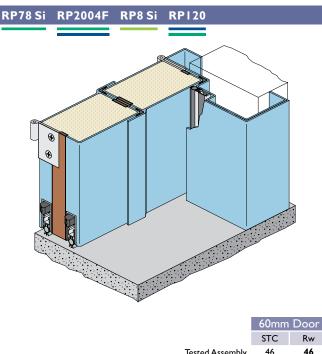


54mm Door



dB) 25.3 33.3 33.0 36.0 33.2 35.3 34.9 36.9 38.2 40.6 41.0 41.4 42.3 43.2 44.3 46.9 49.0 49.1





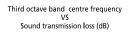
										leste	ed A	ssen	nbly		46		40	
								су (
	100	15	16	-100	-jS	3/2	teo	so)	ŝ	вр	100	750	100	2000	1500	3150	100	S
60mm Door(dB)	29.0	32.0	32.0	30.0	37.0	42.0	43.0	43.0	45.0	47.0	47.0	49.0	49.0	49.0	51.0	54.0	56.0	56.

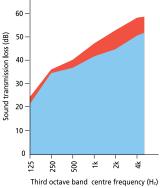
Door Frame / Perimeter Seal

NCO HOKLAS CERTIFIED | Timber and metal acoustic doors.

Raver	n Door	Seal			Freq	uenc	:у (<u>Н</u>	ertz)	vs ST	「L (<u>d</u>	B) _													
Door Bottom	Perir	neter	Threshold	Meeting Stile	ѕтс	Rw	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
100m	m Thic	k Brick	Wall																					
		NO OPE	NING		44.0	44.0	37.0	38.0	37.0	37.0	33.0	34.0	36.0	39.0	41.0	44.0	47.0	49.0	52.0	55.0	57.0	59.0	60.0	62.0
Single	Door'	s																						
50mn	n Thick	Single L	eaf Solid T	imber C	ore D	Door								_										
	Ν		R SEALS		22.0	23.0	13.5	19.5	19.9	20.5	20.2	21.6	22.6	22.3	24.5	23.3	23.7	22.7	20.0	20.8	23.I	21.6	23.0	21.9
	*	FULLY CA	ULKED		34.0	35.0	17.2	26.0	28.4	27.0	29.6	30.5	30.5	27.9	31.2	31.2	33.I	33.0	36.8	39.1	39.3	41.1	43.I	45.I
RP70	RP530	_	—	-		33.0	17.5		28.8	31.8	29.9	30.1	30.1	28.6	30.4	31.3	32.0	31.9	34.9	36.4	36.0	35.I	36.0	36.7
RP38	RP530	—	—	—		33.0	25.2			31.9					31.0			31.8				37.1	36.8	
RP70	RPI20	_	—	_		34.0	20.4		22.9	30.8	27.0	27.7	29.3		30.4		30.5	31.4	34.7	37.1	39.1	39.2	40.2	40.5
RP70	RP530		RPI I 0 Si	—		34.0		27.4	28.8	31.4		31.4			30.8			31.8			37.9	38.1	38.5	38.6
RP70 RP70	RP530 RP530	RP78 Si RP78 Si	— RPI 17 Si	_	33.0 35.0	_	22.2 25.8		23.0		27.2	27.1	29.0	31.9	31.4	31.9	31.8 32.7	31.6	34.4	38.1	39.5	39.7	41.0 41.6	40.9
			eaf Proprie						_					30.2	33.0	33.0	32.7	34.5	30.1	37.1	37.0	40.4	41.0	42.4
RP70	RP530	RP78 Si	RP117 Si	etary AC		_	-		\sim 0	1	- 1		<i>′</i>	33.2	34.0	34 1	35.0	36.0	38.2	42.2	43.7	43.9	45.4	47.8
RP70	RP120	RP78 Si		_		_											37.5						51.7	
RP70	RP530	RP78 Si	RPI 17 Si	_	39.0	_																	53.5	
			eaf Proprie	etary Me	_												1							
RP70	RP530	RP78 Si	_	_	45.0		`		-	1	·	36.9	36.4	40.3	44.2	44.9	46.9	48.9	51.1	52.8	54.5	55.7	56.9	56.8
54mn	n Thick	Single L	eaf Proprie	etary Ac	oustic	: Met	tal D	oor (Com	posit	e Coi	re #3)			1	1							
RP70	RPI20	RP78 Si	^RP71+393 Si	_	43.0	44.0	31.6	32.0	31.4	32.0	35.2	37.2	40.0	43.4	44.9	47.4	47.6	47.9	48.8	51.4	53.5	55.0	53.8	53.3
54mn	n Thick	Single L	.eaf Proprie	etary Ac	oustic	: Met	al D	oor (Com	posit	e Coi	re #4	·)											
	*	FULLY CA	ULKED		47.0	48.0	32.2	34.3	34.6	35.5	38.5	39.4	40.6	42.4	44.6	47.4	48.3	49.7	50.6	52.2	53.I	53.4	55.5	57.5
RP70	RPI20	RP78 Si	^RP71+393 Si	—	46.0	47.0	31.6	34.5	34.8	34.9	36.0	39.3	40.4	41.0	42.8	45.9	47.3	48.3	47.4	49.2	51.4	53.7	55.6	58.3
Paire	d Door	s																						
54mn	n Thick	Double	Leaf Meta	l Door (Comp	oosit	e Co	re #l)															
RP70	RP530	RP78 Si	RP110 Si	—	40.0	42.0	23.6	29.7	23.5	28.5	25.2	31.4	38.1	40.3	43.6	47.2	49.3	49.I	49.I	54.2	56.4	53.6	53.5	56.5
RP70	RP530	RP78 Si	—	—	39.0	39.0	26.9	29.7	23.4	28.6	25.7	32.2	36.8	36.2	36.5	39.1	41.3	41.7	44.5	46.5	45.7	45.2	43.6	44.2
54mn	n Thick	Double	Leaf Meta	l Door (Comp	oosit	e Co	re #2	2)															
RP70	RPI20	RP78 Si	^RP71+393 Si	RPI20	45.0	45.0	32.4	30.4	32.I	38.9	40.6	41.9	43.2	43.5	44.3	45.9	47.0	44.7	41.8	41.6	45.4	50.4	51.9	50.9
Interd	connect	ing Doc	ors																					
50mn	n Thick	Solid T	imber Core	e x 2 set	:s																			
RP70	RP530	—	—	—	44.0	44.0	22.7	34.0	36.0	39. I	35.9	36.9	35.9	38.5	42.4	43.5	45.I	44.8	50.6	54.4	57.7	60.9	62.4	63.5
50mn	n Thick	Single L	eaf Proprie	etry Aco	ustic	Meta	ıl Do	or (C	Comp	osite	#3) :	x 2 se	ets											
RP70	RP120	RP78 Si	^RP71+393 Si	—	52.0	52.0	36.4	39.2	39.3	40.5	40.9	42.0	44.2	47.2	50.6	55.5	58.5	62.2	64.6	65.5	68.3	68.8	69.9	71.2

The acoustic tests above have been carried out in a HOKLAS Accredited laboratory registered by the Hong Kong Accreditation Service, recognised by NATA. These acoustic tests have been conducted to **BS EN ISO 140.3** and **BS EN ISO 717.1** to which the laboratory is registered, in accordance with the terms of H.K.A.S.





STC41 = NCO 54mm Timber Door
 STC45 = NCO 54mm Metal Door

* Theoretical maximum achievable. ^RP71 with RP393Si Gasget.

Tests are conducted at normal door closing forces. HOKLAS Certified tests are performed by Techwide Engineering Ltd. (NCO Doors) under **BS EN ISO 140.3** and **BS EN ISO 717.1**. Results above represent the average decibel (dB) reduction as Sound Transmission Loss (STL), taken from 18 one third octave bands 100 - 5000 hertz. The Sound Transmission Class (STC) indicates the rating for each door and sealing system using frequencies from 125Hz to 4000Hz in one third octave bands. The Rw rating uses the frequencies from 100Hz to 3150Hz in one third octave bands, taking into account the lower frequency bands of the spectrum.

Data Reproduced by Courtesy of Techwide Engineering Ltd. (Hong Kong)

Fire and Smoke Door Sealing Systems

Building regulations mandate, in many instances, fire doors are required for the safety of the occupants of a building. They also stipulate to what level of fire resistance they should provide. Raven produces a number of smoke seals, including 'intumescent' seals, that can be used in conjunction with a fire door to meet these various levels. It will be necessary to check with local regulatory authorities to see which regulations or standards apply for a particular application.

Intumescent seals are designed to expand when subjected to heat. They have an intumescent infill, captivated in either an aluminium or PVC casing which is fitted into the timber door frames and are designed primarily for use with fire rated doors. These seals are incorporated in the design of fire rated door sets by the fire door manufacturer. Refer to page 33 - 35 and page 94 - 99. Raven, in conjunction with international leading fire door manufacturers have successfully fire tested Raven smoke frame seals and mechanical door bottom seals for face mount, semi-mortice, and fully mortice installation up to four hours on fire rated doors. Tests conclude that all doors tested maintained the fire doors labelled integrity rating.

Introduction and Reference Standards Fire and Smoke Sealing



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Fire

Labelled Fire Doors

To determine a fire door rating, the door and seal assemblies are tested to AS 1530 Pt. 4, which is similar to BS 476 Pt. 20 & 22 or BS EN 1634-1. Compliance is stipulated in AS 1905.1 and in the NCC BCA or in the UK Approved Document B, or in New Zealand NZS 4520 and NZ Building Code Compliance Document C.

Smoke Seals

Smoke Doors and Labelled Fire Doors

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 C Smoke that has come down to ambient temperature after drifting from the fire, can be a life threatening concoction. The majority of Raven door frame seals contain cold smoke and therefore can be used to upgrade existing doors. Seals are normally tested to AS 1530.7, ISO 5925-1,

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 is normally required. Raven seals easily exceed this criteria.

Medium Temp. Smoke Smoke doors require seals to withstand greater temperatures (200 degrees Celsius for 30 minutes) to conform to the Building Code of Australia NCC BCA specification C3.4 requirement for "smoke doors". 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.

Fire and Hot Smoke

Presently there is no testing regime or regulation requirement for hot smoke above 200°C. Refer intumescent seals. Such seals are used by fire door manufacturers to maintain or improve the fire resistance level of a fire door assembly. The smoke sealing fin gasket if supplied is usually an ambient (cold) smoke seal or a medium smoke seal to conform to NCC BCA Spec. C3.4 or UK Approved Document B. **New Zealand Building Code** Clause C3 "Fire Safety".

Smoke Seal Testing

Smoke seals are tested in accordance with AS NZS 1530.7 & ISO CD 5925-1 (Similar to BS EN 1634 Pt. 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 the NCC BCA C3.4 specification Deemed-to-Satisfy. ie. 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 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 or similar ISO 5925-1.

Fire Testing

Raven "smoke door seals and intumescent seals" have been fire tested on a range of different door types including "fire resistant doors" to AS 1530.4, BS 476 Pt. 22, similar to EN 1634-1. The Australian NCC BCA defines the "fire door" rating requirements for such door assemblies which must be appropriately marked (labelled) according to Standards AS NZS 1905.1 and AS 1530.4. This is similar to the UK Approved Document B and testing to BS 476 Pt. 20 & 22 (Similar to BS EN 1634 Pt. I).

Door seals intended for use on fire resistant doors are required to perform at ambient temperature initially and as the fire spreads the seals must perform at medium temperature (200°C). The performance of "smoke seals" as used on fire resistant doors relates to the integrity and the insulation of the "fire door assembly". Fire doors are not a structural member of the building therefore fire resistance levels are identified by their fire insulation rating for integrity, but not structural

adequacy. For example, in Australia a fire rating of 60 minutes for integrity and 30 minutes for insulation is referred to as FRL-/60/30 or in NZ as FRR-/60/30 or in the UK as FD60 or in Europe as IE60.

Fire and smoke related standards and codes

There are several standards, which refer to seal properties and testing for Fire and Smoke:

AUS/NZ

Requirements are noted in Australian Building Code NCC BCA 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 and Authorities on page 12.



Smoke Sealing Systems 🛛 🔎 🌧

"Smoke Doors"

As a fire develops within a building, the doors located in the near vicinity will be exposed to ambient and heated smoke. As the doors contain some moisture, the water within will begin to evaporate and condensate on the cool side of the door. This loss of moisture causes the door to shrink and progressively bow. As this door distortion increases, the gaps or margins around the door also begin to increase. These unsealed gaps then allow a fatal concoction of pressurised gasses and smoke particles to escape quickly, under and around the door margins into the adjoining room or corridor. This toxic smoke mix is the number one cause of death in a building fire even when the occupants may be located far from the initial fire source.

Raven pioneered smoke door sealing systems in the early 1970's and have independently tested and certified many Raven sealing systems for optimum sealing performance where smoke and acoustic sealing is required. Excellent results can be achieved by combining the appropriate Raven adjustable frame seals, stile seals, automatic or sweep door bottom seals to standard solid core doors and fire rated doors.



NCC Series 2012 Volume I **BCA** specification C3.4 for smoke doors.

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) (i) The leaves are capable of resisting smoke at 200°C for 30 minutes. (ii) Solid-core leaves at least 35mm thick satisfy (i).
- (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 fail-safe in the closed position.
 - Note: Information contained herein is presented as a general guide only. Product specifications must be read in conjunction with local building regulations and/or mandatory building codes.

- (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) (i) If a glazed panel is capable of being mistaken for an unobstructed *exit*, the presence of the glass must be identified by opaque construction. (ii) An opaque mid-height band, mid-rail or crash bar satisfies (i).



NZ BC Compliance Doc. Clauses CI, C2, C3, C4 Fire Safety.

Smoke control door

A doorset with closefitting 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 Doorsets 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 doorsets. Clause 6.19.6 Doorsets 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.



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UK Building Regulations

Within Approved Document B certain doorsets within a building are identified as where smoke control doorsets are required; tested to BS 476 Section 31.1 1983 Method for measuring smoke penetration through doorsets and shutter assemblies. Those doorsets identified as smoke control doors designated by a 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. Other test methods used to evaluate ambient and medium smoke leakage are ISO 5925-I and EN 1634-3.



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Smoke Sealing Systems Tested and certified ≥ 35mm solid core doors





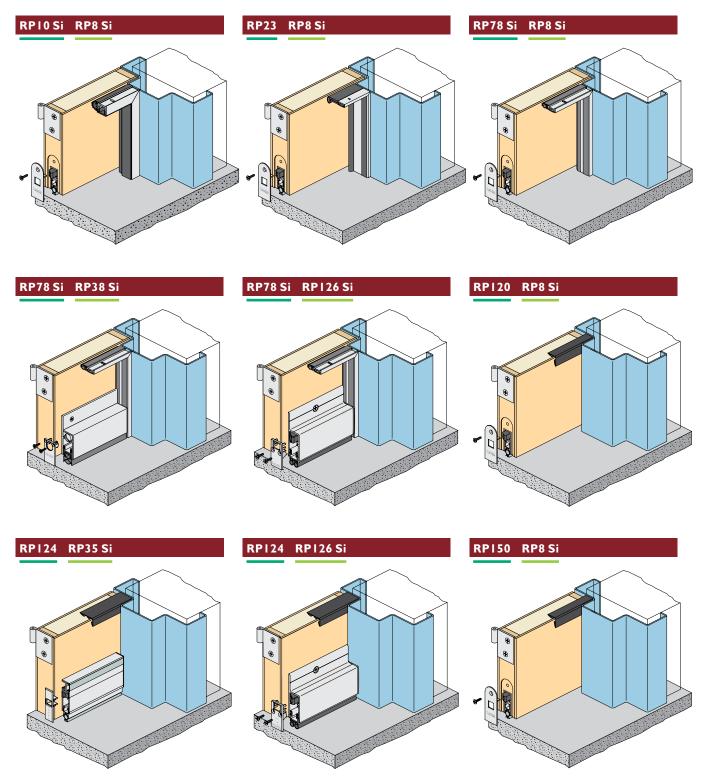
An effective combination of smoke and acoustic seals tested on solid core doors that meet the requirements for AUS NCC BCA specification C3.4 Deemed-to-Satisfy for smoke doors, UK Approved Document B and NZ Building Code Compliance Document C/ASI Pt. 6.19.2 (b). These systems meet the leakage rates specified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

Single Door's

These systems have been smoke leakage performance tested to:

AS 1530.7 < $25m^3/h$ @ 25 Pa when exposed to 200° C > 30 minutes in accordance with AS 6905.

ISO 5925-I and EN 1634-3 $< 3m^3/h/m @ 25$ Pa for ambient and $< 20m^3/h @ 50$ Pa for medium temperature in accordance with BS EN 13501-2.



Smoke Sealing Systems Tested and certified ≥ 40mm solid core doors





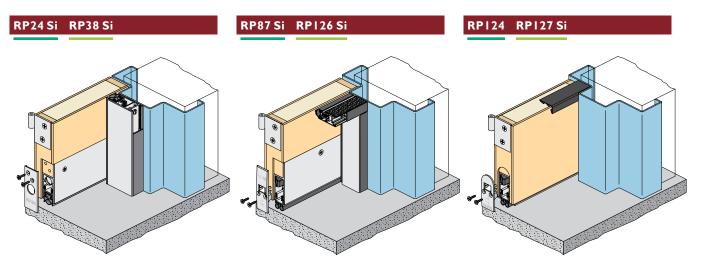
An effective combination of smoke and acoustic seals tested on solid core doors that meet the requirements for AUS NCC BCA specification C3.4 Deemed-to-Satisfy for smoke doors, UK Approved Document B and NZ Building Code Compliance Document C/ASI Pt. 6.19.2 (b). These systems meet the leakage rates specified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

Single Door's

These systems have been smoke leakage performance tested to:

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

ISO 5925-1 and EN 1634-3 $< 3m^3/h/m @ 25$ Pa for ambient and $< 20m^3/h @ 50$ Pa for medium temperature in accordance with BS EN 13501-2.

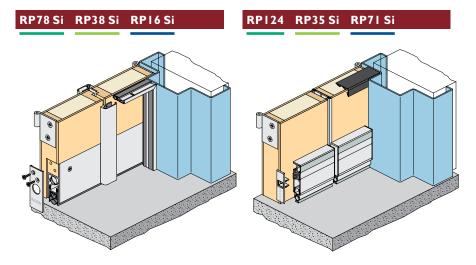


Pairs of Doors

These systems have been smoke leakage performance tested to:

AS 1530.7 < $40m^3/h$ @ 25 Pa when exposed to $200^{\circ}C > 30$ minutes in accordance with AS 6905.

ISO 5925-I and EN 1634-3 < 3m³/h/m @ 25 Pa for ambient and < 30m³/h @ 50 Pa for medium temperature in accordance with BS EN 13501-2.

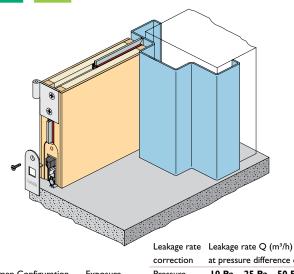


Smoke Sealing Systems Tested and certified on solid core doors

An effective combination of smoke and acoustic seals tested on solid core doors that meet the requirements for AUS NCC BCA specification C3.4 Deemed-to-Satisfy for smoke doors, UK Approved Document B and NZ Building Code Compliance Document C/ASI Pt. 6.19.2 (b). 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. Leakage rates shown as tested to AS 1530.7, ISO 5925-1 and EN 1634-3.

Single Door's ≥ 35mm

RP76 Si RP8 Si



		correction	at press	ure diller	ence oi,
Specimen Configuration	Exposure	Pressure	10 Pa	25 Pa	50 Pa
Opening towards positive	Ambient	SRC	7.8	13.2	19.3
pressure (fire side)					
Opening towards positive	Medium	SRC	4.4	8. I	15.6
pressure (fire side)	200°C	200°C	7.0	13.0	24.9
Opening towards positive	Medium	SRC	5.4	10.9	18.3
pressure (fire side)	200°C >30 min	200°C	8.6	17.4	29.1

RP124 RP35 Si G

Leakage rate Leakage rate Q (m³/h) correction at pressure difference of; 10 Pa 25 Pa 50 Pa Specimen Configuration Exposure Pressure Opening towards positive Ambient SRC 0.6 1.2 1.9 pressure (fire side) SRC <2.0 Opening towards positive Medium <2.0 2.6 pressure (fire side) 200°C 200°C <2.0 3.0 **4**.I Opening towards positive Medium SRC 5.I 12.0 19.7 200°C >30 min pressure (fire side) 200°C 83 19.2 31.6

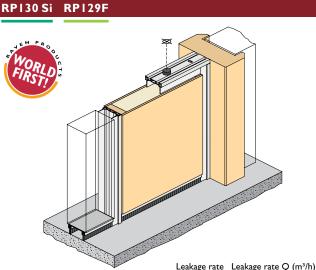
Pairs of Doors ≥ 40mm

RP124 RP8 Si RP16 Si

Leakage rate Leakage rate Q (m³/h)

		Leakage rate	Leakage	Tale Q (
		correction	at press	ure differ	ence of;
Specimen Configuration	Exposure	Pressure	10 Pa	25 Pa	50 Pa
Opening towards positive	Ambient	SRC	3.3	6.2	9.3
pressure (fire side)					
Opening towards positive	Medium	SRC	<2.0	3.5	4.7
pressure (fire side)	200°C	200°C	<2.0	5.3	7.7
Opening towards positive	Medium	SRC	<2.0	5.1	9.5
pressure (fire side)	200°C >30 min	200°C	2.8	8.3	15.5

Pivot Doors Single - Double ≥ 40mm



		_ounage . use			
		correction	at pressure difference of;		
Specimen Configuration	Exposure	Pressure	10 Pa	25 Pa	50 Pa
Opening towards positive	Ambient	SRC	5.8	9.8	15.1
pressure (fire side)					
Opening towards positive	Medium	SRC	3.0	5.1	12.2
pressure (fire side)	200°C	200°C	5.0	8.3	19.8
Opening towards positive	Medium	SRC	3.3	5.8	11.4
pressure (fire side)	200°C >30 min	200°C	5.5	9.6	18.7

SRC = Standard Reference Conditions.

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Door Frame / Perimeter Seal

Door Bottom Seal

Astragal (Meeting Stile Seal)

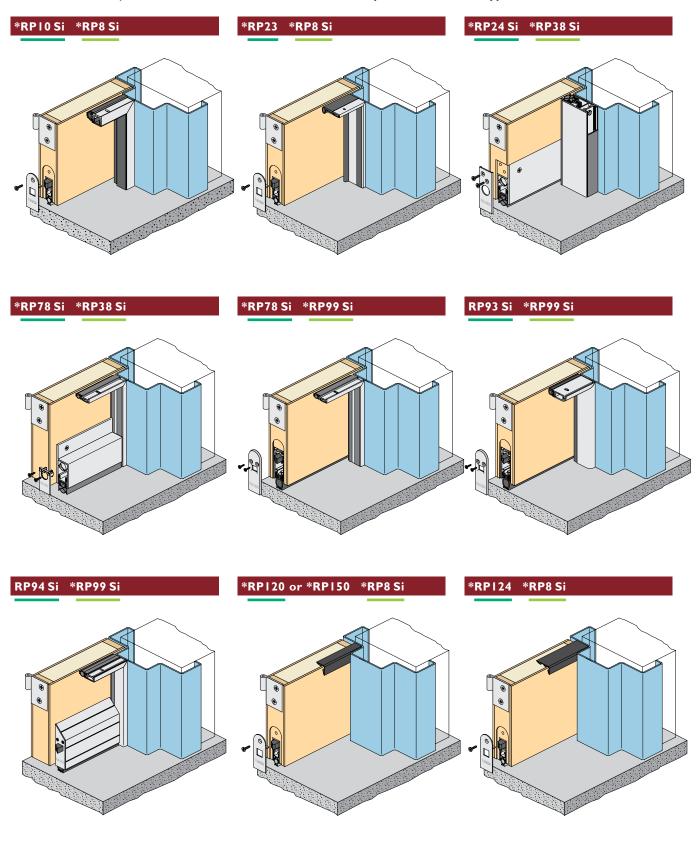
Threshold Plate Seal / Threshold Plate

Smoke Sealing Fire Rated (Labelled) Doors



An effective combination of smoke and acoustic seals for fire rated butt hinged doors.

These seals have been approved to AS 1530.4 and BS 476 *Pt.* 22, similar to BS EN 1634-1. Seals conform to the AUS NCC BCA specification C3.4 Deemed-to-Satisfy for smoke doors 200°C for 30 minutes, NZ BC Compliance Doc. C and UK Approved Document B, Standard BS 5588.



* = Seals smoke tested to AS NZS 1530.7, ISO CD 5925-1/EN 1634-3.

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Intumescent Seals

Fully developed fires exceeding 600°C Hot smoke beyond 200°C



Raven intumescent seals are predominantly used in door assemblies fabricated by fire door manufacturers.

Leading manufacturers of door sets (the door leaf with frame) incorporate Raven Door Sealing Systems prior to leaving the factory. Raven has a large range that satisfies the OEM and retrofit aftermarket.

Properties

Unlike Sodium Silicate based material, Raven intumescent has a unique material formulation that is unaffected by water and can therefore be used in many applications, including very damp or humid environments. Raven intumescent is clean, non-toxic and displays features of outstanding durability and reliability. Raven intumescent seals are used in fire door assemblies of timber, steel or composite construction.

Performance

Raven intumescent expands rapidly to many times its original size upon contact with fire, it concentrates high pressure in confined spaces, exfoliates slowly to protect itself once activated, and has good insulation properties.

Location

When correctly positioned in the door leaf/door frame margin, the seals upon expansion prevent the passage of flames, hot smoke and fumes from one compartment of a building to another.

Test Approvals

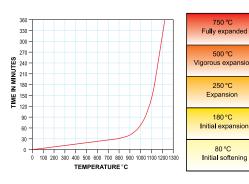
RP63 and RP76 have been independently tested in accordance with Australian Standard 1530.4. AS NZS 1905.1 and British Standard 476 Pt. 22 (similar to BS 5588 and Approved Document B).

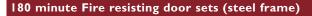
Raven intumescent fire and smoke seals, RP1004 through to RP3004 have been independently tested by Warrington Fire Research Centre, England, and comply with BS 476 Pt. 22 and **Approved Document B.**

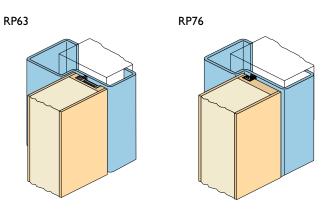
Seals have also been tested to AS 1530.4 and AS 1905.1. Some intumescent fire seals incorporate an ambient smoke seal which is either a woven pile weather strip or flexible PVC fin gasket and complies with the requirements of BS 476 Pt. 31.1.

Specific Raven medium temperature smoke seals and intumescent smoke seals conform to the NCC BCA requirement Spec. C3.4 200°C for 30 minutes, NZ BC Compliance Doc. C and Approved Document B.

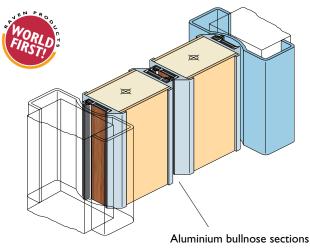
Intumescent Expansion Time / Temperature Curve







120 minute Fire resisting door set (steel frame)



RP63 (inlaid)

750 ℃

500 °C

ous expa

250 °C

180 °C

80 °C

by Pyropanel[™] and E-Core[®].

No seals

RP63 installed



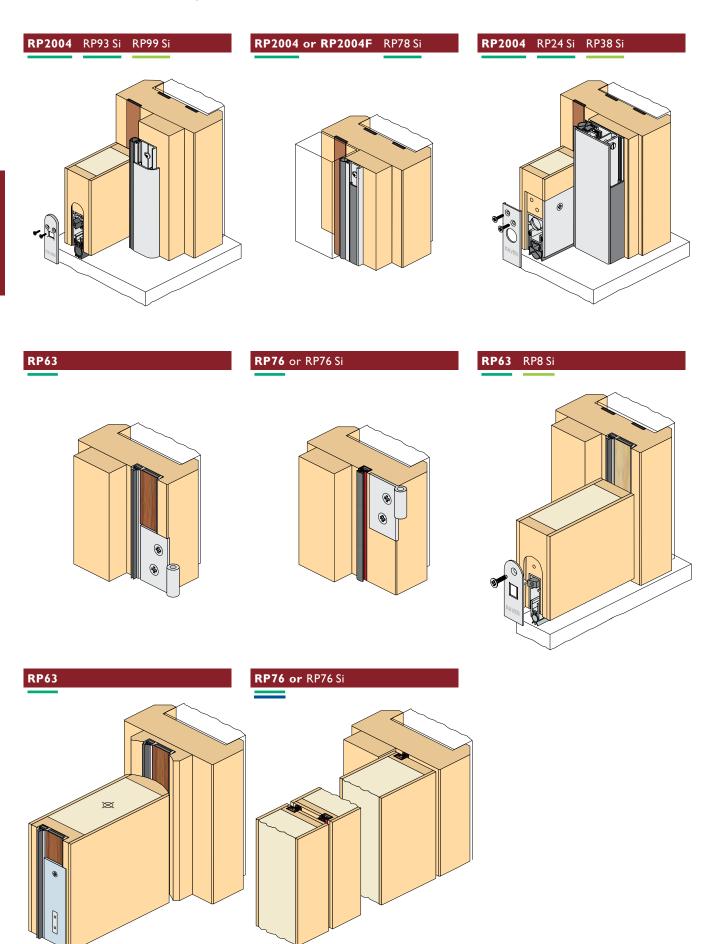
No seals

RP76 installed



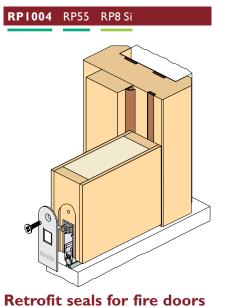
Intumescent Seals 60 minute Fire resisting door sets

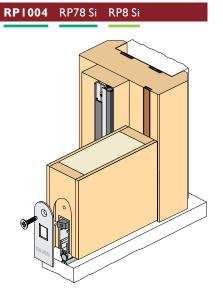




Intumescent Seals





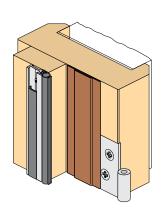


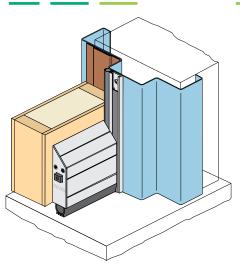


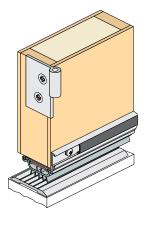


RP53 RP78 Si

RP53 RP78 Si RP99 Si RPII4 RP95





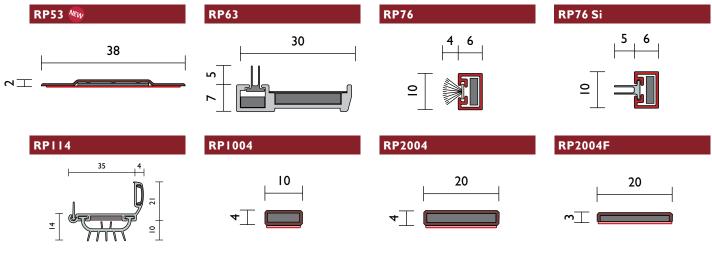


Intumescent Seals

Refer to page 94 - 99

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Door Frame / Perimeter Seal



Door Bottom Seal

Astragal (Meeting Stile Seal)

RAVEN

Weather - Energy Door Sealing Systems

Weather seals prevent draughts and rainwater infiltration through external doors. The amount of sealing required for external doors will depend on the exposure of the door and local weather conditions. Raven produce a variety of seals to suit even the most severe conditions. For doors subject to severe weather, a threshold plate in conjunction with a door bottom seal is necessary. Head, jamb and astragal seals are also required. The thermal efficiency of buildings is of major importance. Air conditioning and heating requirements can be maximised by the installation of Raven seals. The majority of Raven seals can reduce heat loss through a door and improve comfort levels by eliminating cold draughts. Additionally they will stop the ingress of airborne dust, insects, rodents and wind blown embers in bushfire prone areas. Sealing reduces energy use up to 15% as well as increasing the comfort of the occupants.

There are many standards and regulations, which refer to weather seal testing properties, including prescriptive and performance based Building Codes and Regulations. Weather seals are also referred to as "Energy Seals" in the British, Australian and American standards or regulations.

Weather - Energy Sealing Introduction and Reference Standards



RAVEN

NCC BCA

Requirements

3.12.3.3 External windows and doors

Class I and Class I0 buildings.

- (a) A seal to restrict air infiltration must be fitted to each edge of an external door, openable window and other such opening-(i) when serving a conditioned space; or (ii) in climate zones 4, 5, 6,7 and 8, when serving a habitable room.
- (b) A window complying with the maximum air infiltration rates specified in AS 2047 need not comply with (a).
- (c) A seal required by (a). (i) for the bottom edge of an external swing door, must be a draft protection device; and (ii) for the other edges of an external swing 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.

J3.4 Windows and doors Class 2 - Class 9 buildings.

- (a) A seal to restrict air infiltration must be fitted to each edge of a door, openable window or the like forming part of-(i) the envelope of a conditioned space; or (ii) the external fabric of a habitable room or public area in climate zones 4, 5, 6, 7 and 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.
- A seal required by (a)-(c) (i) for the bottom edge of an external swing door, must be a draft protection device; and (ii) for the other edges of an external 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, selfclosing 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 unconditioned 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.

Ember Attack

For bushfire prone areas refer Raven product selection table page 43.

Weather - Energy related standards and codes

There are several standards, which refer to seal properties and testing for Weather - Energy:

AUS/NZ

Requirements are noted in Australian Building Code NCC BCA and New Zealand NZ BC Compliance Doc. C.

UK/EU

Requirements are noted in the **British Building Regulations** Approved Document LI and L2.

USA

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

For further details, refer to Standards and Authorities on page 12.

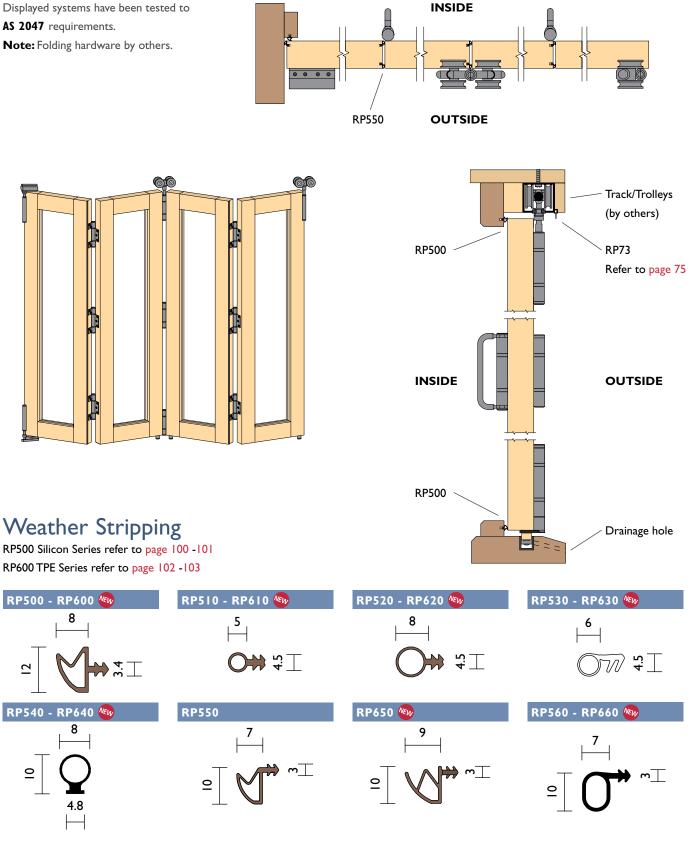
Note: Information contained herein is presented as a general guide only. Product specifications must be read in conjunction with local building regulations and/or mandatory building codes.







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.

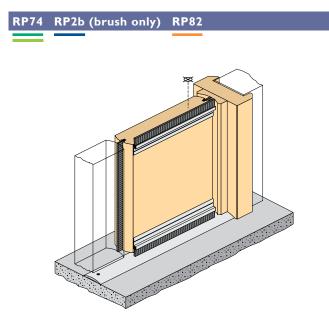




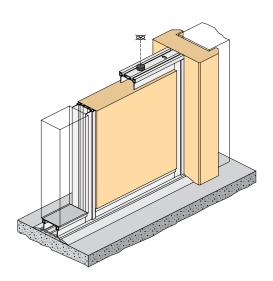


Double acting doors present one of the more difficult sealing problems. When a centre pivot hung door is opened, it must be considered that the leaf is travelling in two directions at once. That is to say, if a door is opened out, then that portion between the pivot and the jamb will be opening inward.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

Timber Pivot Doors



RPI30 Si RPI29 Si RPII5



Aluminium Pivot Doors

RP74 RP2b (brush only) RP19	RP89 RPII6

Note: Vertical stile pile weather stripping supplied by fabricator. Weather - Energy Sealing

Garage Doors

RAVEN

Sectional Overhead Garage Doors

Weather sealing sectional overhead garage doors presents some problems owing to varying styles and quite often large gaps and uneven surfaces.

Door Frame Seal RP41 page 90

Door Bottom Seal RP4Tpage 51

Door Head Seal (Lintel) RP41 page 90

Threshold Plate RP91page 64

For bushfire prone areas refer Raven product selection table page 43.

Roll-up Garage Doors

Weather sealing roll-up garage doors present some problems owing to varying styles and quite often large gaps and uneven surfaces.

The following are examples of systems that Raven has developed to be effective in these situations.

Door Bottom Seal

RP4T page 51

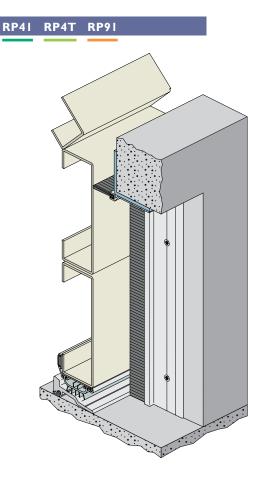
Door Head Seal (Lintel)

RP57 page 91	
or RP41 page 90	
or RP58 page 92	

Threshold Plate

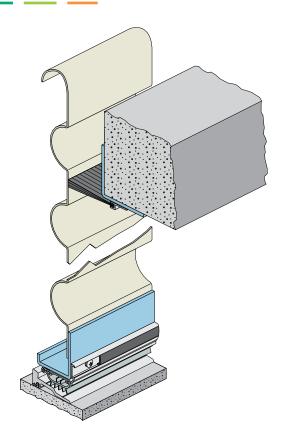
RP91	page 64
or RP29	page 63

For bushfire prone areas refer Raven product selection table page 43.



RP4T RP91 **RP57**

The



Astragal (Meeting Stile Seal)

Sliding Doors and Light Sealing Doors Weather - Energy Sealing



'RAVEN

Sliding Doors

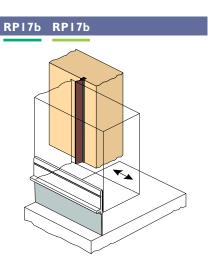
Sliding doors present many different sealing problems due to the various types and configurations, from residential to industrial.

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

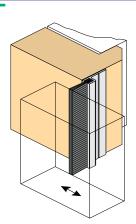
RP17b page 52	
RP73 page 75	
RP2a page 88	
RP2 page 88	

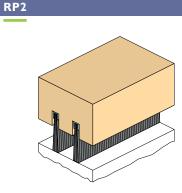
Also refer:

RP2b page 89
RP15 page 89
RP81 page 55



RP2a





Light Sealing Doors

On some occasions it will be necessary for a door to exclude light completely to protect light sensitive processes such as those used in the film processing industry. It may also be necessary for a door to exclude light for privacy or comfort.

It is recommended that the door and surrounds should be painted matte black to reduce reflected light.

A combination of seals may be necessary such as head, jambs and meeting stiles on double doors and a door bottom seal.

An effective light sealing system for a butt hinged door in a new installation is:

 $\overline{\mathbf{n}}$

Door Frame Seal RP10 page 69

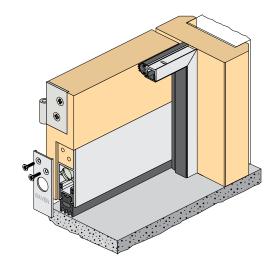
Door Bottom Seal RP38 (semi morticed) page 46

In a retrofit situation Raven recommends:

Door Frame Seal RP78 Si page 75

Door Bottom Seal RP74 page 92 Inside & outside door bottom

RPI0 RP38



Weather - Energy Sealing

Butt Hinged Doors

RAVEN

Commercial Shop Front Doors

An effective weather energy sealing system with disabled access for commercial shopfronts;

Door Frame Seal

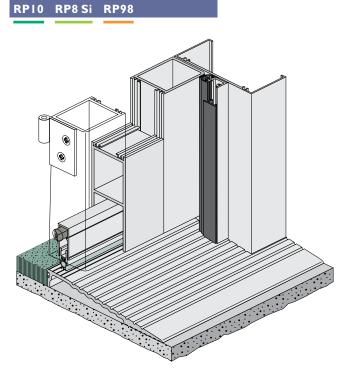
RP10 (Fitted to plain frame) page 69

Door Bottom Seal

RP8 Si (Installed by fabricator)page 45

Threshold Plate

RP98	 	 	• •		 •	 . page 65
or RP77	 	 				 . page 64



Butt Hinged Doors

An effective combination of seals for weather proofing butt hinged timber doors, inward or outward opening is;

Door Frame Seal

RP78 Si page 75 or RP94Si or RP113 page 78 Refer Silicon Weather Stripping page 100

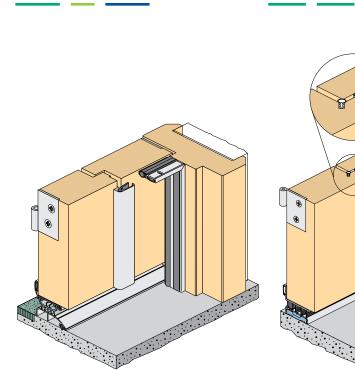
Door Bottom Seal

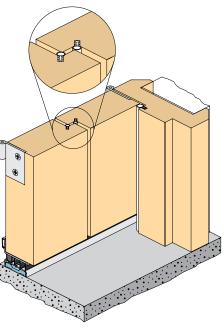
RP4 page 51	
or RPI23 page 56	
or RP86 page 55	

Astragal

RP16 Si	page 81
or RP71	. page 82

Illustrations show inward opening door configurations.





RP510 RP520 RP123

RP78 Si RP4 RP16 Si

Weather - Energy Sealing 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.

Note: Product selection should be made when assessing the mandated requirements listed in the AUS NCC BCA 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 Standard AS 3959 BAL (Bushire Attack Level) BAL - LOW	Side Hung (Ember Attack) Raven Perimeter Seal and Door Bottom Seal All Raven Seals that display one or more icons.	Garage Doors (Ember Attack) Roller and Sectional Overhead © Raven Products 2012 Raven Nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RP57, RP58, RP74, RP74F, RP75 at door head and sides where required. Door bottom seal RP4T or RP51 Si (if bottom seal not supplied with door) Option:Threshold plate RP91 Refer to page 40
BAL - 12.5 - 29	All Raven Seals that display one or both icons or has a flammability index < 5.	Raven Nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RP57, RP58, RP74, RP74F, RP75 at door head and sides where required. Door bottom seal RP4T or RP51 Si (if bottom seal not supplied with door) Option:Threshold plate RP91 Refer to page 40
BAL - 40	All Raven Seals that contain a Silicon Rubber sealing gasket and displays one or both icons or has a flammability index < 5.	Raven Nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50, RP74, RP74F, RP75 at door head and sides where required. Door bottom seal RP4T (if bottom seal not supplied with door) Threshold plate RP91 Refer to page 40
BAL - FZ	All Raven Seals that have a fire test approval AS 1530.4 and display both icons.	Raven Nylon brush strip seal RP2a, RP2b, RP41, RP49, RP50,RP74, RP74F, RP75 at door head and sides where required.Door bottom seal RP4T(if bottom seal not supplied with door)Threshold plate RP91Refer to page 40



RAVEN



Door Bottom Seals

Seals that are designed to fill the gap between the bottom of a door and the floor or sill are called Door Bottom Seals.

There are two common versions of these seals; the mechanically lifting automatic seal and the sweep seal. The operation of both of these seals is enhanced when they are used in conjunction with a low profile threshold plate which has been fixed to the sill immediately under the door.

The automatic door bottom seal lifts automatically as the door is opened and conversely lowers to seal as the door is closed.This ensures that the seal does not impede the normal function of the door, allowing the seal to lift clear of carpets and other obstacles. They look neat if face mounted to the door and some versions can even be fully morticed into the door out of sight

The sweep seal operates by bringing a flexible seal, mounted on the door, into contact with a low profile threshold plate. These seals are often made of a strip of flexible PVC (rubber or brush) mounted into an aluminium holder.

Note: Ensure that the floor surface is lower than the sealing surface of the threshold plate to avoid the sweep seal from fouling.

RAVFN

Latch side jamb

.

RP3

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.

Location Door bottom of single inward opening butt hinged doors.

Min/Max Gap Up to 16mm.

Seal Sizes 915mm and 1220mm maximum (between door stops).

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver), Bronze or Bright Gold finish.

RP8 Si



A concealed, acoustic automatic door bottom silicon seal for medium temperature smoke and fire door applications.

RP8Si is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres. Mounted into a 15mm x 34mm groove that has been morticed into the bottom edge of the door, it is operated automatically by pressure against the door jamb on its adjustable strike block.

RP8 Si can also be fitted into the bottom hollow rail of an aluminium door by the fabricator.

Location Single and double butt hinged doors.

Min/Max Gap 3mm to 13mm.

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

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish.

Seal Material Silicon Rubber (SE) (Grey).

Fixing Method Concealed, with supporting colour matched stainless steel escutcheon plates. Screws supplied.

Adjustment Has adjustment strike block screw for sealing action adjustment.

Seal Material EPDM or TPE (Black).

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size are supplied. Fixing holes are pre-slotted.

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9

Replacement Seal RP303.

Used in Conjunction Raven threshold plates.

Approvals

Fire Gasket flammability index < 5 when tested to AS 1530.2. Durability Tested to over 1,000,000 operating cycles without failure. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented.



Escutcheon Plate Dimensions Stainless steel rounded: 22mm wide, 57mm high, (Ø22mm router bit) 1.2mm thick.

Replacement Seal RP308 Si.

Approvals

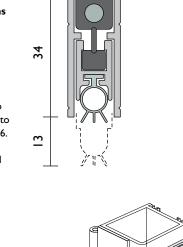
Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191,AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved

Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/60 and FD240

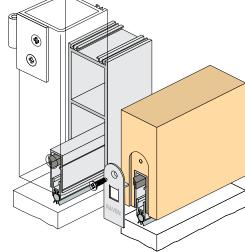
Gasket flammability index 1 when tested to AS 1530.2.

Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building

Sealing & Energy efficiency.



14





RP35 Si is a medium duty automatic door bottom seal which is spring loaded to lift clear off the sill as soon as the door leaf is opened. Acoustically designed for face mounted and semi-morticed applications. It is operated automatically by pressure against the door jamb on its adjustable strike block.

Location Solid core single and double, butt hinged doors.

Min/Max Gap Imm to 13mm.

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

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish.

Seal Material Silicon Rubber (SE) (Grey) with rigid PVC cover strip (Grey). Fixing Method Zinc plated, cross recess S.T. screws and colour matched escutcheon plates supplied.

Replacement Seal RP308 Si.

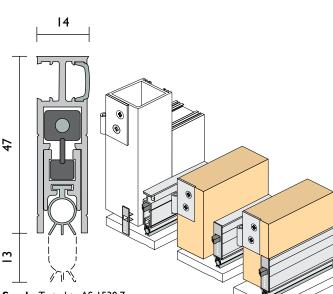
Approvals

Acoustic UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3, BS EN ISO 717.1, BS 2750 & BS 5821. Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/60 and FD240 Gasket flammability index 1 when tested to AS 1530.2.

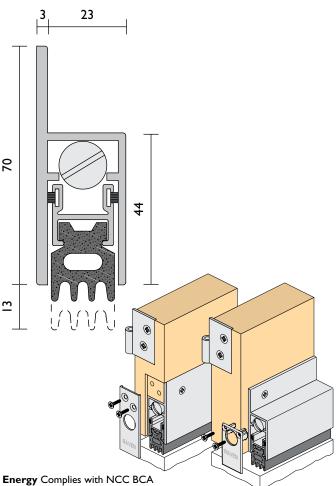
Patented, Registered Design.

H



Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm".

Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Energy Complies with NCC BC Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RP38



A heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

The seal is operated automatically by pressure against the door jamb on the adjusting screw. It seals when the door closes and retracts automatically when the door is opened. It is self levelling.

This aesthetic seal, incorporating a kick plate, is installed into a solid core door in a semi-morticed manner. It is adjustable for left and right handed operation.

Location Single or double butt hinged door bottoms. Minimum door thickness 50mm for rebated meeting stiles and 40mm for plain meeting stiles (for semi mortice).

Min/Max Gap 3mm to 13mm.

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

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material EPDM Sponge (SE) (Black).

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and colour are supplied. Escutcheon plates supplied.

Adjustment Has screw for sealing action adjustment.

Replacement Seal RP338.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 谢 Durability Tested to over 1,000,000

operating cycles without failure.





A medium temperature smoke door bottom seal, with an extruded silicon sealing component. It is a heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

The seal is operated automatically by pressure against the door jamb on the adjusting screw. It seals when the door closes and retracts automatically when the door is opened. It is self levelling.

RP38 Si can be face mounted or semi morticed in proprietary fire doors. It is adjustable for left and right handed operation.

Location Single or double butt hinged door bottoms. Minimum door thickness 50mm for rebated meeting stiles and 40mm for plain meeting stiles (for semi mortice).

Min/Max Gap 3mm to 13mm.

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

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Grey).

RP60



A face mounted automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres. It is operated automatically by pressure against the door jamb on its adjusting screw, and it incorporates concealed fixings.

Location Single or double butt hinged doors.

Min/Max Gap 3mm to 15mm.

Seal Sizes 915mm only (between door stops, unit cuts back to 450mm minimum).

Standard Finish Aluminium anodised 15 microns. Satin Clear, Bronze or Bright Gold Finish.

Seal Material TPE (Black).

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and colour are supplied. Escutcheon plates supplied.

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Adjustment Has screw for sealing action adjustment.

Replacement Seal RP338 Si.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/60 and FD240

Gasket flammability index 1 when tested to AS 1530.2.

Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented, Registered Design.

Fixing Method Zinc plated,

cross recess S.T. screws of the

appropriate size are supplied.

Adjustment Has screw for seal

action adjustment. Self levelling.

Replacement Seal RP460.

and door frame seals.

Approvals

Patented.

Used in Conjunction Raven threshold plates RP13, RP82

Durability Tested to over 500,000

Energy Complies with NCC BCA

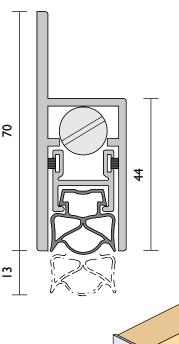
operating cycles without failure.

Pt. 3.12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

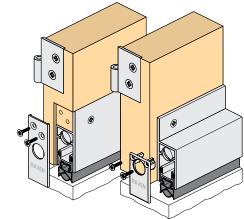
Fixing holes are slotted

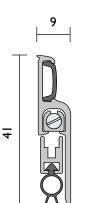
with push in cover strip.



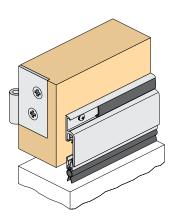
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RP70 automatic door seal is the fully morticed version of the RP38 door seal. It is a heavy duty door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

The seal is operated automatically by pressure against the door jamb on the adjusting screw. It seals when the door closes and retracts automatically when door is opened. It is self levelling.

When using RP70 door bottom seal, the door must be a minimum of 45mm thick and of suitable construction for morticing this seal. It is reversible for left and right handed operation.

Note: For double door bottoms, plain meeting stiles are required.

Location Single or double butt hinged doors, minimum thickness is 45mm.

Min/Max Gap 3mm to 13mm.

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

RP70 Si

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish.

Seal Material Sponge EPDM (SE) (Black). Fixing Method Morticed

plates supplied. **Replacement Seal** RP338.

and screw fixed. Escutcheon

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt.

20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 **Durability** Tested to over 1,000,000

operating cycles without failure.



RP70 Si automatic door seal is the fully morticed version of the RP38 Si door seal. It is a heavy duty door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

The seal is operated automatically by pressure against the door jamb on the adjusting screw. It seals when the door closes and retracts automatically when door is opened. It is self levelling.

When using RP70 Si door bottom seal, the door must be a minimum of 45mm thick and of suitable construction for morticing this seal. It is reversible for left and right handed operation.

Note: For double door bottoms, plain meeting stiles are required.

Location Single or double butt hinged doors, minimum thickness is 45mm.

Min/Max Gap 3mm to 13mm.

Seal Sizes 1500mm, 1220mm, 1070mm, 920mm, 610mm, 450mm to 300mm (min). Seals

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish.

cut back to exact size.

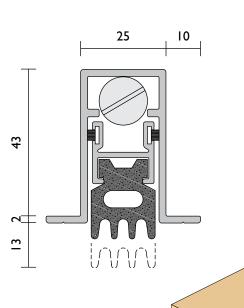
Fixing Method Morticed and screw fixed. Escutcheon plates supplied.

Seal Material Silicon Rubber (SE) (Grey).

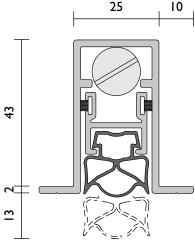
Replacement Seal RP338 Si.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. App. C6.1.1. UK/EU: Conforms to Approved Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30 and FD240 Gasket flammability index 1 when tested to AS 1530.2.

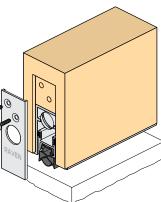


Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Durability Tested to over 1,000,000 @

operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



RAVEN



RP92 Si is a heavy duty automatic door bottom seal, which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres, RP92 Si is designed for butt hinged doors with large gaps and can accommodate ramped floors/sills with gradients up to 1:5. Particularly suitable for wheelchair access ramps where large clearances are necessary under inward opening doors. Larger gaps can be accommodated if set lower on the door bottom and smaller gaps if set higher on the door bottom (user determined).

Location Timber or aluminium single and double butt hinged doors.

Min/Max Gap 25mm to 55mm.

Seal Sizes 1200mm, 1070mm, 920mm, 820 to 600mm (min). Seals cut back to exact size.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. Black anodised inner. .

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Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied. Escutcheon plates and self adhesive striker plate (25mm x25mm) included.

Adjustment Has set screw for sealing action adjustment.

Replacement Seal RP347 Si.

Approvals

Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pt. 3.2. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). UK/EU: Conforms to Approved Document B.

Gasket flammability index 1 when tested to AS 1530.2. Access & Mobility AUS/NZ:

Conforms to NCC BCA D3, D3.2. UK/EU: Conforms to Approved Document M. **Durability** Tested to over 1,000,000 operating cycles without failure.



RP99 Si is a heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

RP99 Si has an extruded silicon component for medium temperature smoke and is an acoustically designed seal for face mounted, semi morticed or fully morticed applications. The door bottom seal is operated automatically by pressure against the door jamb on its adjustment block (strike).

Note: Face mount aluminium angle and all escutcheon plates included.

Location Solid core single and double butt hinged doors. Face fix, fully and semi morticed applications. Minimum door thickness 40mm recommended.

Min/Max Gap Imm to 19mm.

Seal Sizes 1220mm, 1070mm, 920mm, 820mm, 720mm, 600mm, 380mm to 295mm (min). Seals cut back to exact size.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3). Seal Material Silicon Rubber (SE) (Black).

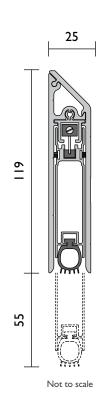
Replacement Seal RP347 Si.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Conforms to NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Conforms to Approved Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/60 and FD240

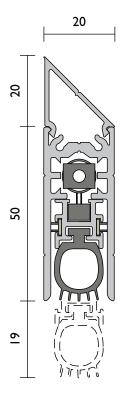
Gasket flammability index 1 when tested to AS 1530.2. **Smoke** Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm".



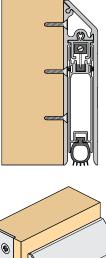
Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

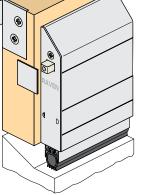
Patented.

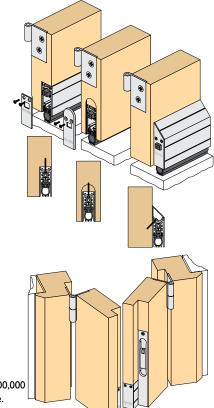
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Durability tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.







Concealed flush bolt (by others)



RP126 Si is a heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

RP126 Si has an extruded silicon component for medium temperature smoke and is an acoustically designed seal for face mounted or semimorticed applications. The door bottom seal is operated automatically by pressure against the door jamb on its adjustment block (strike).

RP126 Si seals when the door closes and retracts automatically when the door is opened.

Location Solid core single and double butt hinged doors. Face fix and semi morticed applications. Minimum door thickness 40mm recommended.

Min/Max Gap Imm to 14mm.

Seal Material Silicon Rubber (Black).

RPI27 Si

Seal Sizes 1500mm, 1220mm, 1070mm, 920mm, 820mm, 600mm to 305mm (min). Seals cut back to exact size. **Standard Finish** Aluminium anodised 15 microns. Satin Clear (Silver). P.E. Paint (at extra cost, refer page 3).

Fixing Method Zinc plated, cross recess CSK S.T. screws of the appropriate size and colour are supplied. Escutcheon plates supplied.

Replacement Seal RP3126 Si.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. Gasket flammability index 1 when tested to AS 1530.2. Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3. Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Durability Tested to over 1,000,000 operating cycles without failure. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented, Registered Design.

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RP127 Si is a heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

RP127 Si has an extruded silicon component for medium temperature smoke and is an acoustically designed seal for fully morticed applications. The door bottom seal is operated automatically by pressure against the door jamb on its adjustment block (strike).

RP127 Si seals when the door closes and retracts automatically when the door is opened.

Location Solid core single and double butt hinged doors. Fully morticed applications. Minimum door thickness 40mm recommended.

Min/Max Gap 3mm to 14mm.

Seal Material Silicon Rubber (Black).

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver). Seal Sizes 1500mm, 1220mm, 1070mm, 920mm, 820mm, 600mm to 305mm (min). Seals

cut back to exact size.

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and colour are supplied. Escutcheon plates supplied.

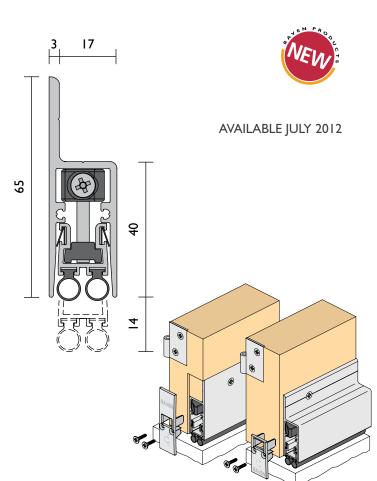
Replacement Seal RP3126 Si.

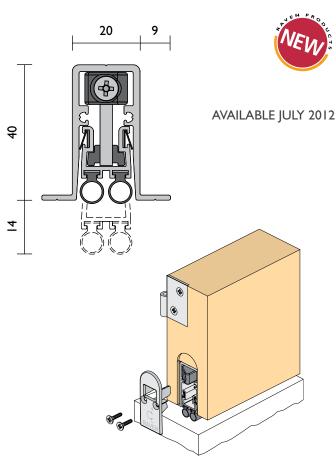
Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. Gasket flammability index 1 when tested to AS 1530.2.

Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3. Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented, Registered Design.





RAVEN



A storm proof door bottom seal, that is used in situations where maximum weather protection is required. The multi-blade seal defies rain infiltration.

RP4 can be fitted to the square cut bottom of a door without removing the door, provided there is a gap of 25mm under the door before the seal is installed. It is quick and easy to fit to both door and sill.

The sealing section is slotted for adjustment.

Location Door bottom and sill of single and double butt hinged doors.

Min/Max Gap 23mm to 25mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver), Bronze or Bright Gold finish. Threshold Plate 25 microns.

Seal Material PVC (Grey).

RP4T



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 roll-up doors. Its fixings are concealed and its multi-blade seal defies rain infiltration.

Location Roll-up doors. Single and double butt hinged doors (if used with threshold plate RP91) or bulkhead applications.

Min/Max Gap User determined.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

RPI14

RPI14 Intumescent fire & hot smoke seal designed to salvage non compliant fire doors. Please refer page 98 for full product details. Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied.

Replacement Seal RP404.

Replacement Gaskets RP404a and RP404b.

Approvals

Access & Mobility NZ: NZ BC Compliance Doc. D1/ ASI 1.3.2. UK/EU: Conforms to Approved Document M. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



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Seal Material PVC (Grey).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

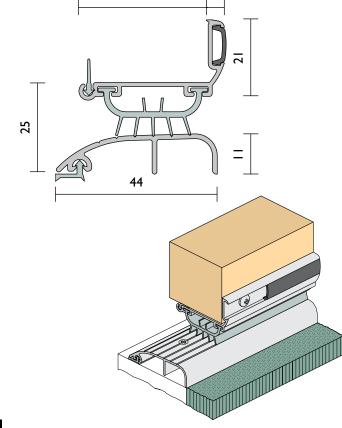
Replacement Seal RP404.

Replacement Gasket RP404b.

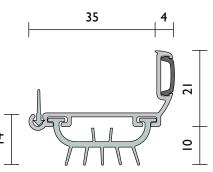
Used in Conjunction Raven threshold plates RP29, RP77, RP95, RP98 and RP112.

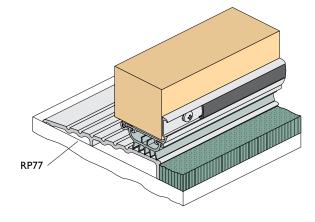
Approvals Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

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RP5



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.

Location Door bottoms, sash windows. Around stiles of tilt-up doors.

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

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver), Bronze or Bright Gold finish. P.E. Paint (at extra cost, refer page 3).

Seal Material EPDM (Black).

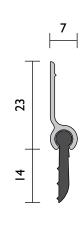
Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied.

Replacement Seal RP303.

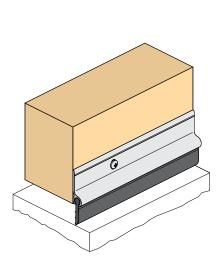
Used in Conjunction Raven threshold plates RPI3 and RP82.

Approvals

Fire Gasket flammability index < 5 when tested to AS 1530.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



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RP17b



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

Location Door bottoms, Around sliding doors.

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

Seal Sizes Available in stock lengths.

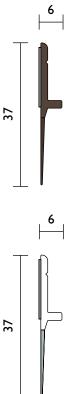
Seal Material Rigid and flexible co-extruded PVC (White/Grey or Brown)

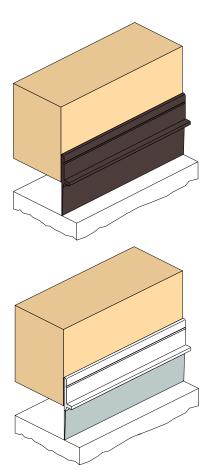
Fixing Method Adhesive backed (surface must be smooth, clean and well cured). Can be screw fixed.

Used in Conjunction Raven threshold plates RPI3 and RP82.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





RAVEN



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A heavy duty EPDM sweep seal for door bottoms of outward opening doors. It has slotted holes for the adjustment of its concealed fixings, behind a push-in cover strip.

Location Door bottoms, single or double outward opening, butt hinged or tilt-up doors can be used as an astragal seal.

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

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material EPDM (Black)

RP30



A concealed sweep type seal which is fitted in a morticed groove that has been cut into the bottom of a door. The groove should be sufficiently deep to allow packing for adjustment.

Location Door bottoms, meeting stiles, bumper strip.

Min/Max Gap 3mm to 8mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

RP3



A heavy duty sweep type seal, similar to RP30 but with greater compression, which is fitted to the bottom of a door with concealed fasteners. The design of the seal does not allow adjustment so it should not be installed in situations where adjustability is required.

Location Door bottoms, meeting stiles, bumper strip.

Min/Max Gap User determined.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3). Н

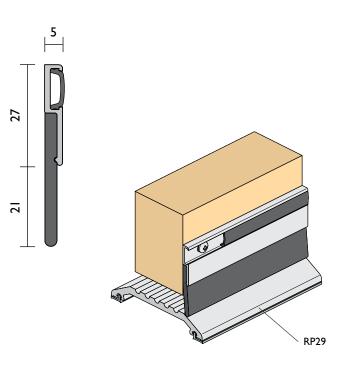
Fixing Method Zinc plated, cross recess head S.T. screws of appropriate size are supplied.

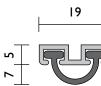
Replacement Seal RP326.

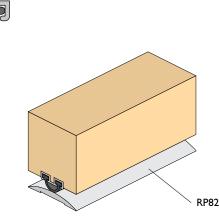
Used in Conjunction Raven threshold plates.

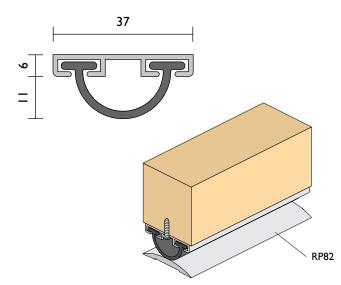
Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building









Seal Material EPDM (Black).

Sealing and Energy efficiency.

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Replacement Seal RP330.

Used in Conjunction Threshold plates RP13 and RP82 (essential).

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

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Seal Sizes Available in stock lengths.

Seal Material EPDM (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Replacement Seal RP331.

Used in Conjunction Raven threshold plate RP82 (essential).

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



A heavy duty Silicon Rubber sweep seal for the bottom of outward opening doors. RP51 Si has slotted fixing holes for adjustment with a push-in cover strip for concealed fixing.

Location Door bottoms, single or double outward opening, butt hinged or tilt-up doors can be used as an astragal seal.

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

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Grey)

Fixing Method Zinc plated, cross recess head S.T. screws of appropriate size are supplied.

Replacement Seal RP351 Si.

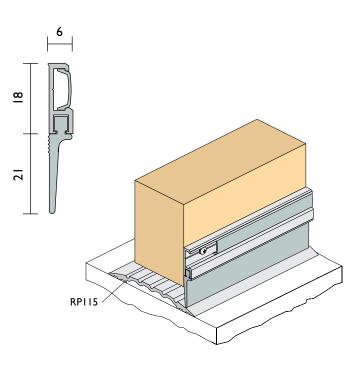
Used in Conjunction Raven threshold plates.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt.

20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/120/30 and FD120

Gasket flammability index 1 when tested to AS 1530.2. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



RP54



RP54 (Daniels Patent) is a heavy duty door bottom weather seal for inward opening butt hinged doors. It incorporates a threshold plate, to prevent rain infiltration. Ideal for residential and commercial applications.

Location Single and double inward opening butt hinged timber doors.

Min/Max Gap 23mm to 25mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Seal Material EPDM (Black).

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied. Nails Z.P.

Replacement Seal RP354.

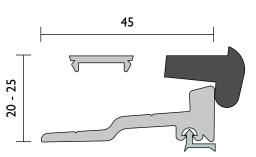
Replacement Gaskets RP404a.

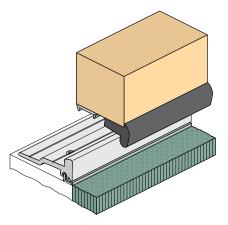
Used in Conjunction Raven door frame seals.



Approvals Fire AUS/NZ:Approved to AS 1530.4 & AS/NZS 1905.1. UK/EU:Tests above are similar to BS EN 1634-1, BS 476 Pt. 20 & 22. Approved on fire rated doors up to FRL & FRR-/60/30 and FD60 Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

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RP81



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

Location Door bottoms outward opening, industrial sliding doors.

Min/Max Gap to 120mm. Rubber can be slit to suit, on site.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish.

Seal Material EPDM (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of appropriate size are supplied.

Replacement Seal RP381.

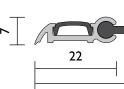
Used in Conjunction Raven threshold plates RP82 and RP29.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

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RP86



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 Door bottom of butt hinged timber doors.

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

Seal Sizes Available Tops: 820mm, 870mm, 1000mm. Threshold plate: 826mm, 1000mm, 1660mm.

Standard Finish Threshold Plate: Aluminium anodised 25 microns. Satin Clear (Silver), Bronze or Gold finish.Top: rigid black, grey PVC fins.



Seal Material Rigid and flexible PVC. UV stabilised.

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied.

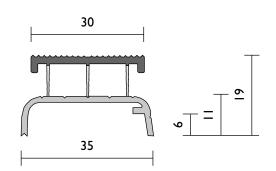
Replacement Seal RP486.

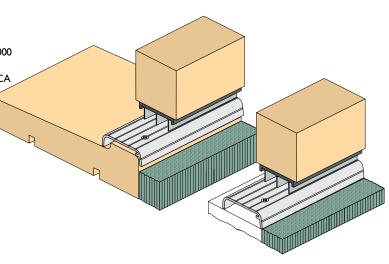
Used in Conjunction RP86B.

Approvals

Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M. Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.







A rigid and flexible copolymer, 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 factory and retrofit applications. When used in conjunction with a Raven threshold plate an excellent weather and energy seal is achieved.

Location 40-45mm hollow channel aluminium commercial doors. Suits butt hinged and pivot hinged systems. Sliding doors (user determined). Note: Seal to coordinate

with other door hardware. (User determined).

Min/Max Gap 6mm to 9mm to Raven threshold plate or raised sill. Note: a threshold plate is recommended for RP89 to clear floor surface.

Seal Sizes 1000mm.



Seal Material Rigid (Black) and flexible (Grey) copolymer. UV stabilised.

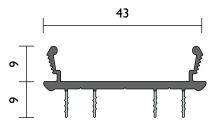
Fixing Method Snap fit design includes two end support lugs with self drill screws (supplied).

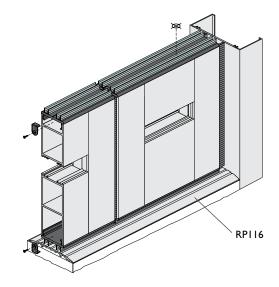
Used in Conjunction Raven threshold plates and perimeter seals.

Approvals

Durability Tested to 500,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.





RP123



A co-extruded door bottom weather seal and threshold combination, RPI23 easily fits to the bottom of a door and is used where maximum weather protection is required.

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. It is quick and easy to fit to both door and sill.

Location Door bottom of single and double butt hinged doors. Rebated or flat sill.

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

Seal Sizes 826mm, 926mm and 1750mm.

Standard Finish Weather seal: Light grey rigid PVC body with dark grey flexible PVC seal or brown rigid PVC body with black flexible PVC seal. Threshold plate: Aluminium anodised 15 microns. Satin Clear (silver) or bronze finish.



Seal Material Rigid and flexible co-extruded PVC. UV stabilised.

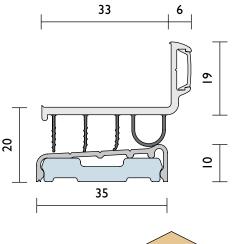
Μ

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Threshold plate can be fastened with adhesive for concealed fix.

Approvals

Access & Mobility NZ: NZ BC Compliance Doc. D1/AS1 1.3.2. Durability Tested to over 500,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented, Registered Designs.





AVAILABLE JUNE 2012



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.

Location Double butt hinged and centre pivot double acting doors.

Min/Max Gap 15mm to 18mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver). P.E. Paint (at extra cost, refer page 3).

Seal Material Fine, dense, black nylon filaments, UV stabilised and medium temperature fin. Galvanised steel spine.

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and colour are supplied.

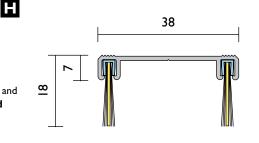
Replacement Seal RP52F.

Used in Conjunction Raven RP130 Si, other perimeter seals and threshold plates. Refer to **world first** sealing system page 31.

Approvals

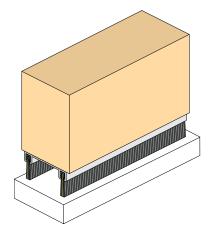
Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented, Registered Design.



NEW

AVAILABLE JUNE 2012





A heavy duty medium temperature smoke and weather door bottom seal. The seal is achieved by a pair of silicon fins that meet the deemed to satisfy specification C3.4 for smoke doors.

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

Location Double butt hinged and centre pivot double acting doors.

Min/Max Gap 14mm to 18mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver). P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Light grey).

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and colour are supplied.

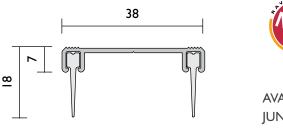
Replacement Seal RP3129 Si.



Approvals

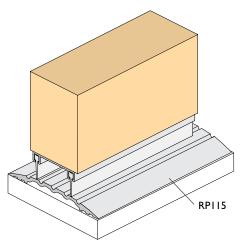
Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pt. 3.2. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). Fire Gasket flammability index 1 when tested to AS 1530.2. Durability Tested to over 1,000,000 operating cycles without failure. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.





AVAILABLE JUNE 2012



See next page 'brush strip seals'.

Brush Strip Seals

Refer to page 88 - 93



Threshold Plate Seals

Threshold Plate Seals incorporate a seal in the Threshold Plate and as such, do not require a door bottom seal.

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outward opening butt hinged doors. When used in conjunction with RP93 Si and RP16 Si an excellent smoke and acoustic system is achieved. For acoustic applications the void under the RP97 Si should be filled with sound foam or other suitable material (by others). Conforms to NCC BCA Pt. D2.15 Thresholds (a), (b), (c).

Note: RP67 drip-strip should be considered above doorway if opening has no eave weather protection.

Note: Specify order length wider than door opening to provide a neat detail at door frame (see illustration).

Location Door sills abutting outward opening butt hinged plant room or emergency exit doors. Not recommended for pedestrian entry doors.

Min/Max Gap Compression of seal 0mm to 2mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

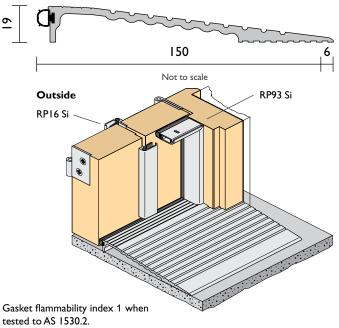
Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or can be fastened with builders adhesive for concealed fixing (user determined).

Replacement Seal RP393 Si.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved on fire rated doors up to FRL & FRR-/240/30



tested to AS 1530.2. Access & Mobility NZ: Conforms to NZ BC Compliance Doc. D1/AS1 1.3.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Threshold Plate Seals



The RP109 Si 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).

Location Door sill. Outward opening doors (butt hinges recommended).

Min/Max Gap Compression of seal 0mm to 2mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) finish.

Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or can be fastened with builders adhesive for concealed fixing (user determined).

Replacement Seal RP393 Si.

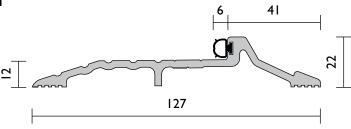
Used in Conjunction Raven RP93 Si, astragal seals and suitable panic type exit devices (by others).

Approvals

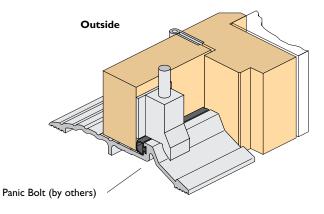
Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. Approved on fire rated doors up to

FRL & FRR-/240/30 🖑 Gasket flammability index 1 when

tested to AS 1530.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.







RP110 Si



The RPI10 Si 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).

Location Door sill. (butt hinges recommended).

Min/Max Gap Compression of seal 0mm to 2mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) finish.

Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or can be fastened with builders adhesive for concealed fixing (user determined).

Replacement Seal RP393 Si.

Used in Conjunction Raven door frame seals, astragals and suitable panic type exit devices (by others).

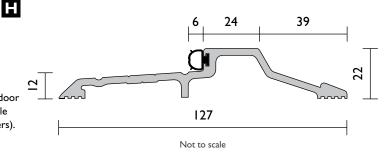
Approvals

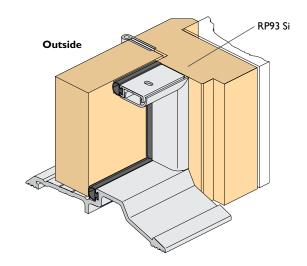
Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191 (similar to AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3, BS EN ISO 717.1, BS 2750 & BS 5821.

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. Approved on fire rated doors up to

FRL & FRR-/240/30

Gasket flammability index 1 when tested to AS 1530.2. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





Threshold Plate Seals

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The RPIII Si 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).

Location Door sill. (butt hinges recommended).

Min/Max Gap Compression of seal 0mm to 2mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with builders adhesive for concealed fixing (user determined).

Replacement Seal RP393 Si.

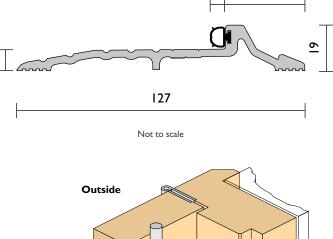
Used in Conjunction Raven door frame seals, astragals and suitable panic type exit devices (by others).

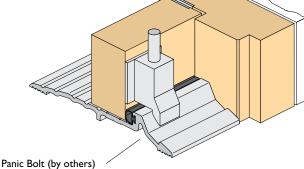
Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. Approved on fire rated doors up to

FRL & FRR-/240/30 **V** Gasket flammability index 1 when

tested to AS 1530.2. Access & Mobility AUS/NZ: Conforms to NZ BC Compliance Doc. D1/AS1 1.3.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





RP117 Si

The RP117 Si 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).

Location Door sill. (butt hinges recommended).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) finish.

Seal Material Silicon Rubber (SE) (Grey).

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with builders adhesive for concealed fixing.

Replacement Seal RP308Si.

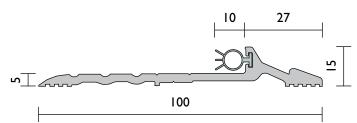
Min/Max Gap Compression of seal 0mm to 2mm.

Used in Conjunction Raven door frame seals and suitable panic type exit devices (by others).

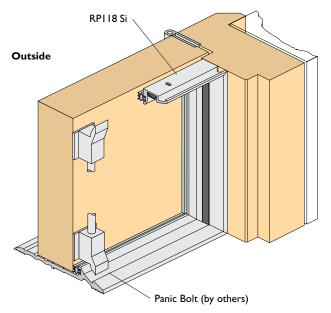
Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5. 5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821. Fire & Smoke AUS/N7: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved on fire rated doors up to FRL & FRR-/240/30 🖑 Gasket flammability index 1 when tested to AS 1530.2. Access & Mobility AUS/NZ: Conforms to NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved

Document M. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.









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, uneven or sloping 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 profiles do not impede wheeled traffic nor do they present any tripping hazard to 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 c is shown including the approvals description.

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RP4b

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A medium duty threshold plate with an integral sill gasket for use with door bottom seals.

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

Replacement Gasket RP404a.

Used in Conjunction Raven door bottom seals.

RP13



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

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or can be fastened with adhesive.

Used in Conjunction Raven door bottom seals.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved

Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30

FKL & FKK-/240/30

Approvals

App. C6.1.1.

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

Fire AUS/NZ: Meets NCC BCA

to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC

UK/EU: Conforms to Approved

Access & Mobility AUS/NZ:

Standard AS 1428.1 and NZ BC

Compliance Doc. D1/AS1 1.3.2.

FRL & FRR-/240/30 🖑

UK/EU: Conforms to

Approved Document M.

Document B. Approved to BS 476

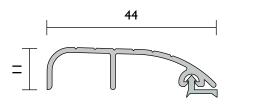
Pt. 20 & 22 (similar to BS EN 1634-1).

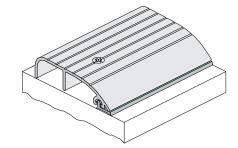
Approved on fire rated doors up to

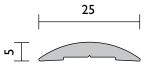
Conforms to NCC BCA D3 D3.2,

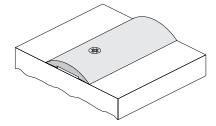
Spec. C3.4 for fire doors. Approved

Compliance Doc. C/ASI 6.19.2(a) &









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RP18

A heavy duty threshold plate designed for butt hinged, single, double, or pivot hinge doors. It allows the door leaf to clear high pile carpets which have been laid up to the frame. It has been designed to accommodate concealed screw fixings through the door jambs.

An aluminium door frame, complete with the threshold plate, can be assembled by a door fabricator prior to transporting as a complete unit. RP18 will accommodate Pivot Sets for most types of Transom Closers.

Location Door sill.

Sizes Available in stock lengths.

RP19



A heavy duty door threshold plate. This ribbed profile threshold is available in aluminium and solid brass. When exposed to weather, the brass version will in time turn to a bronze finish.

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

Replacement Gasket RP404a.

Used in Conjunction Raven door bottom seals.

Standard Finish Aluminium

(Silver) or Bronze finish.

anodised 25 microns. Satin Clear

Fixing Method By fabricator.

Used in Conjunction Raven

RP74 (RP8 Si butt hinged doors).

door bottom seals RP2b and

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved

Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30

Access & Mobility AUS/NZ: Conforms to NZ

BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.



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A heavy duty door threshold plate for sill and carpet edge protection.

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

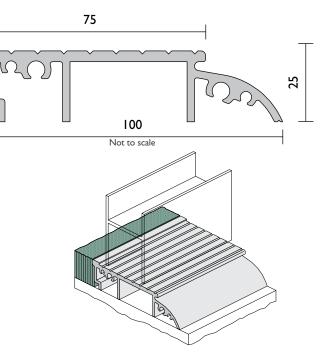
Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

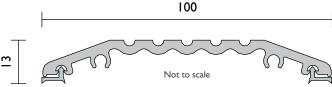
Used in Conjunction Raven door bottom seals.

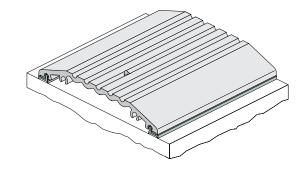
Approvals Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to

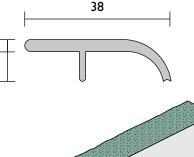
FRL & FRR-/240/30

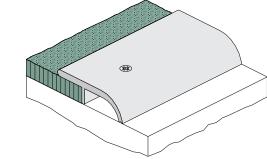
AUS/NZ: Conforms to NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.











RP28



A wide heavy duty door threshold plate used in conjunction with door bottom seals or pivot hinge doors. This ribbed profile threshold is also available in solid brass, which, when exposed to weather, will in time turn to a bronze finish.

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

RP29



A heavy duty door threshold plate used in conjunction with door bottom seals or pivot hinge doors.

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

Replacement Gasket RP404a.

Used in Conjunction Raven door bottom seals. RP66



A flush fitting threshold plate for carpet covered floors. Used in conjunction with a door bottom seal such as RP38 Si, it is designed to provide an optimum sealing surface, as carpets can flatten and thus reduce sealing effectiveness. RP66 has concealed fixings with self adhesive aluminium insert.

Location The carpeted sill of interior doors.

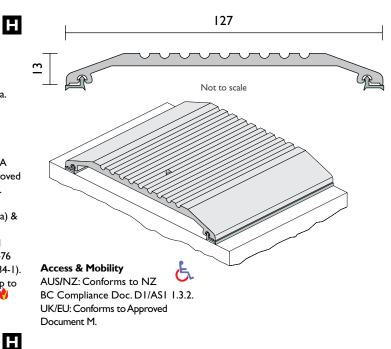
Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish. Replacement Gasket RP404a.

Used in Conjunction Raven door bottom seals.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30 and FD120



76



Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1.

UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30

Access & Mobility

AUS/NZ: Conforms to NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.



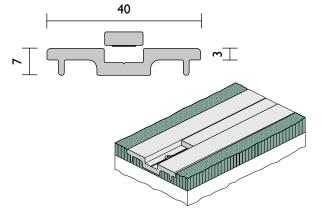
Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size are supplied.

Used in Conjunction Raven door bottom seals.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

UK/EU: Conforms to Approved Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30



Access & Mobility AUS/NZ:

Conforms to NCC BCA D3 D3.2, Standard AS 1428.1 and NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.

RAVEN

RP77



A heavy duty door threshold.The ribbed extrusions can be positioned back to back to provide a two way threshold ramp. Conforms to NCC BCA Pt. D2.15 Thresholds (b).

Location Door sill or used to provide a ramp frame for internal door mats.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

RP82



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

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with adhesive. Raven door bottom seals. Approvals

Used in Conjunction

Approvals

App. C6.1.1.

Raven door bottom seals.

Fire AUS/NZ: Meets NCC BCA

to AS 1530.4 & AS/NZS 1905.1.

Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) &

UK/EU: Conforms to Approved

FRL & FRR-/240/30 🖑

Document B.Approved to BS 476 Pt.

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

Approved on fire rated doors up to

Spec. C3.4 for fire doors. Approved

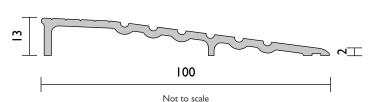
Used in Conjunction

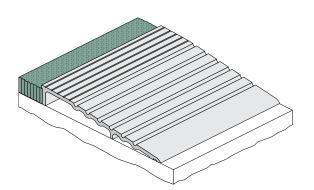
Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30 Access & Mobility AUS/NZ: Conforms to NCC BCA D3 D3.2, Standard AS 1428.1 and NZ BC Compliance Doc. D1/AS1 1.3.2.

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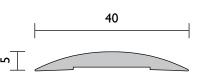
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(**B**B)

UK/EU: Conforms to Approved Document M.



Access & Mobility AUS/NZ: Conforms to NCC BCA D3 D3.2, Standard AS 1428.1 and NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to

Approved Document M.

RP91



A heavy duty threshold plate with an integral sill gasket. Ideal for use with door bottom seals on roll-up and tilt-up doors.

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

Replacement Gasket RP404a.

Used in Conjunction Raven door bottom seals.

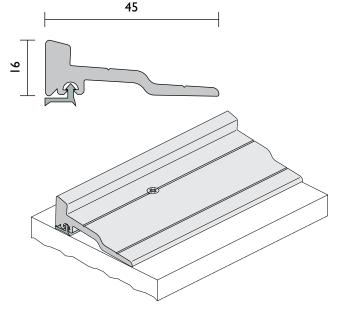
Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

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

Approved on fire rated doors up to FRL & FRR-/240/30

Conforms to NZ BC Compliance Doc. DI Pt. 1.3.2.



RP95



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

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with adhesive.

Used in Conjunction Raven door bottom seals.





RP96 has the same specifications as for RP95 above, but without the top surface vee grooves.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

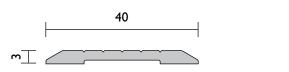
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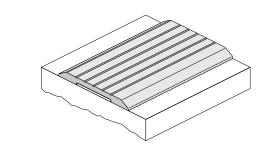
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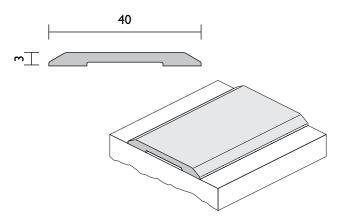
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UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30 and FD240 Access & Mobility AUS/NZ:

Conforms to NCC BCA D3 D3.2, Standard AS 1428.1 and NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.







RP98



A heavy duty threshold plate. RP98 can be positioned back to back to provide a two way ramp. RP98 is ideal for commercial shop fronts providing a neat ramp detail between carpets or tiles at doorways. Conforms to NCC BCA Pt. D2. I5 Thresholds (b).

Note: Specify order length wider than door opening to provide a neat detail at door frame (see illustration).

Location Door sill or used to provide a ramp frame for internal door mats.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with builders adhesive for concealed fixing. App UK

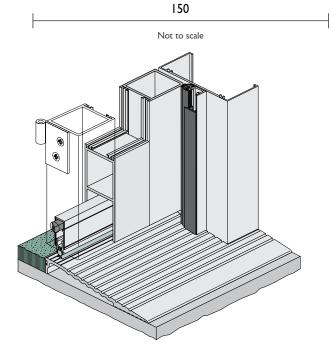
Used in Conjunction Raven door bottom seals and door frame seals. Refer to sealing system page 42.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1.

UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30

Access & Mobility AUS/NZ: Conforms to NCC BCA D3 D3.2, Standard AS 1428.1 and NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.



RPI12



A medium duty threshold plate. Conforms to NCC BCA Pt. D2.15 Thresholds (b).

Location Door sill or used as a ramp frame for internal door mats and tiles.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied.

RP115



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

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with adhesive.

RPI16



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

Location Door sill.

Sizes Available in stock lengths.

Standard Finish Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or it can be fastened with adhesive. **Used in Conjunction** Raven door bottom seals.

Used in Conjunction

Approvals

App. C6.1.1.

Raven door bottom seals.

Fire AUS/NZ: Meets NCC BCA

Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) &

UK/EU: Conforms to Approved

Document B.Approved to BS 476

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

Approved on fire rated doors up to

FRL & FRR-/240/30 and FD180 🖑

Used in Conjunction

Approvals

App. C6.1.1.

Raven door bottom seals.

Fire AUS/NZ: Meets NCC BCA

Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) &

UK/EU: Conforms to Approved Document B.Approved to BS 476 Pt.

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

FRL & FRR-/240/30 and FD180 🖑

Access & Mobility AUS/NZ:

Standard AS 1428.1 and NZ BC

Compliance Doc. D1/AS1 1.3.2.

Approved on fire rated doors up to

Conforms to NCC BCA D3 D3.2,

Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1.

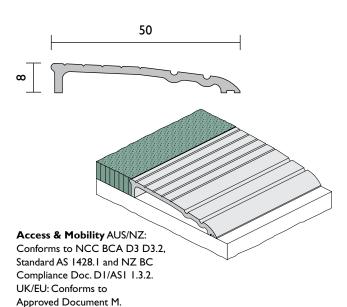
Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1.

Approvals

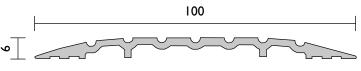
Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/30 and FD240

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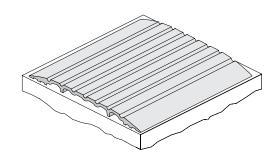
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Access & Hobility AUS/NZ: Conforms to NCC BCA D3 D3.2, Standard AS 1428.1 and NZ BC Compliance Doc. D1/AS1 1.3.2. UK/EU: Conforms to Approved Document M.







UK/EU: Conforms to Approved Document M.

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Notes	





Door Frame Perimeter Seals

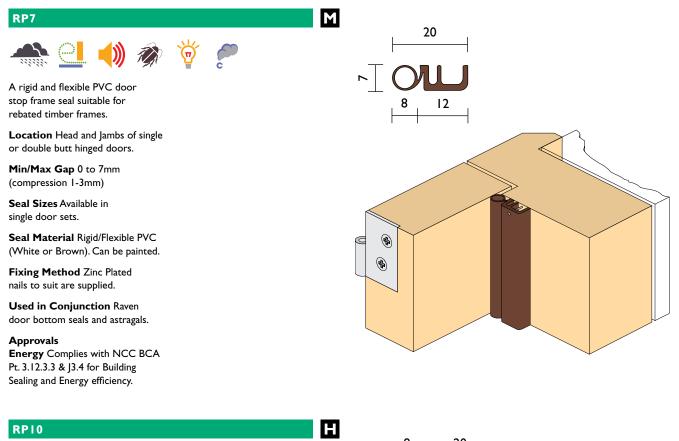
In this catalogue seals designed for the gap between the door and the frame (up and down the jamb and across the head of the door) are termed Door Frame Seals.

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.

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Door Frame or Perimeter Seals



A neat, anodised aluminium door stop frame seal which has proven to be an effective acoustic seal. RP10 is quick and easy to install

RP10 is quick and easy to install on plain or rebated door frames. Adjustable by large concealed fixing slots for a precision fit, RP10 has a tamper resistant, rigid PVC cover strip (Self Extinguishing).

The superior multi-fin sealing prevents the leakage of noise and energy through air movement around the edges of a door. The minimum deflection design of the five sealing fins creates maximum efficiency. The RP10 can be mitred or butt jointed to give an integrated aesthetic appearance.

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

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

Min/Max Gap 0mm to 10mm.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. Rigid PVC cover strip (SE) (Black). P.E. Paint (at extra cost, refer page 3). **Seal Material** Flexible PVC (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Fixing holes are slotted to allow the seals to be fitted accurately and to allow adjustments to be made for building movement.

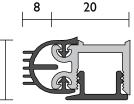
Replacement Seal RP410.

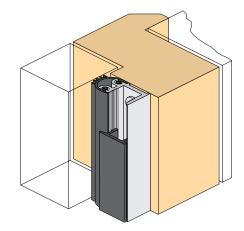
Used in Conjunction Raven door bottom seals, astragals and threshold plates.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.





Door Frame or Perimeter Seals



A neat, anodised aluminium door stop frame seal which has proven to be an effective acoustic and smoke seal. RP10 Si is quick and easy to install on plain or rebated door frames. Adjustable by large concealed fixing slots for a precision fit, RP10 Si has a tamper resistant, rigid PVC cover strip (Self Extinguishing).

The superior multi-fin sealing prevents the leakage of noise, medium temperature smoke and energy around the edges of a door. The minimum deflection design of the sealing fins creates maximum efficiency. RP10 Si can be mitred or butt jointed to give an integrated aesthetic appearance.

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

Min/Max Gap 0mm to 10mm.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Black or Light Grey).

Used in Conjunction Raven door bottom seals, astragals and threshold plates.

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Fixing holes are slotted to allow the seals to be fitted accurately and to allow adjustments to be made for building movement.

Replacement Seal RP310 Si

Approvals

Acoustic Refer to RP10. Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors.Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved

Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/240/60 and FD240

Gasket flammability index 1 when tested to AS 1530.2. **Smoke** Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.

RPI2



Woven pile weather-strip with unique Quiet-fins (for Noise Protection).

The RPI2 sliding door seal is designed to limit noise leakage and to control dust and air movement. It is quick and easy to install to the door or frame.

Location Door frames (Head and Jambs).

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

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Polypropylene Pile with felt weather fins (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Fixing holes are pre-drilled and are slotted to allow the seals to be fitted accurately and to allow adjustments to be made for building movement. Concealed fixing.

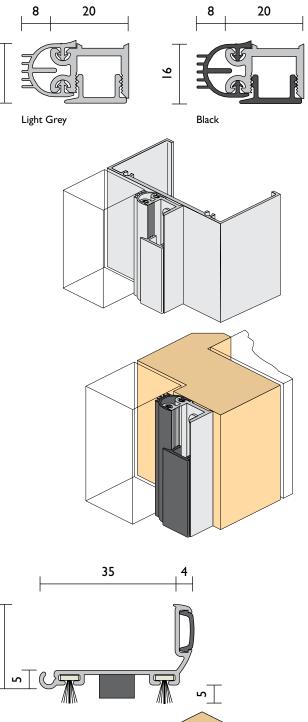
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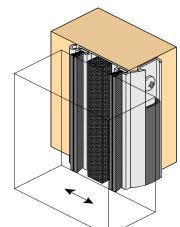
22

Used in Conjunction A double row of RP2 seals fitted into grooves in the door bottom edge or face mount RP74.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.







A tested S.E. EPDM compression smoke and weather seal for butt hinged doors. Its aluminium carrier is sturdy and slotted for adjustment with concealed fixings. It can be mitred or butt jointed.

RP23 is quick and easy to install onto door stops around the jamb and head and can be fitted without removing the door. A built up sill across the foot of the door, similar in profile to the stops on the door jambs, will be required for bulkhead sealing applications.

Location Head and jambs on single or double butt hinged doors (or bulk head applications).

Min/Max Gap 0mm to 7mm.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material EPDM (SE) (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

RP24

Replacement Seal RP323.

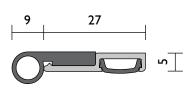
Used in Conjunction Raven door bottom seals, astragals and threshold plates.

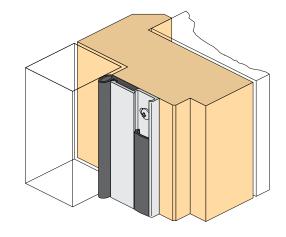
Approvals

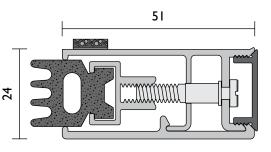
Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. UK/EU: Tests above are similar to BS EN 1634-1, BS 476 Pt. 20 & 22. Approved on fire rated doors up to FRL & FRR-/240/60 and FD240

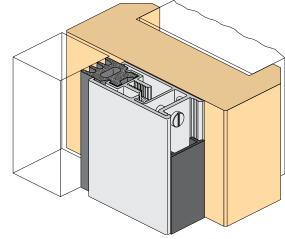
Smoke Tested to AS 1530.7,

ISO 5925-1 & EN 1634-3 similar to BS 476 section 31.1. Meets smoke leakage rates specified in AS 6905 and EN 13501-2 "Sa", "Sm". Conforms to BS 5588 Pt. 1 when tested in accordance with BS 476 Pt. 31.1. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.









Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

An adjustable door stop seal for noise, light and smoke. The RP24 seal uses independently adjustable fasteners to achieve up to 8mm sealing adjustment for maximum noise control.

The seal can be butt jointed at the corners of the frame to produce an easily installed continuous seal around the door frame, replacing the conventional doorstop on either steel or timber door frames. It is tamper proof with fully concealed fasteners to give the seal an aesthetic appearance. The closed cell S.E. Sponge EPDM seal requires only normal door closing force. If fixing to rebated frames of single doors, specify a long backset door latch. RP24 has been granted an Australian Design Award.

Location Head and jamb of single or double butt hinged doors.

Min/Max Gap 0mm to 8mm.

Seal Sizes Available in stock lengths or door set sizes.

Seal Material Sponge EPDM (Black).

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Adjustment Can be adjusted by 8mm independently of the fixing screws.

Replacement Seal RP338.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire AUS/NZ: Meets NCC BCA Spec. C3.4 Pt. 3.2. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a). Approved on fire rated doors up to

FRL & FRR-/120/30 and FD120 💐

'RAVFN



An adjustable door stop seal for noise, light and smoke. The RP24 Si seal uses independently adjustable fasteners to achieve up to 8mm sealing adjustment for maximum noise control.

RP24 Si can be butt jointed at the corners of the frame to produce an easily installed continuous seal around the door frame, replacing the conventional doorstop on either steel or timber door frames. It is tamper proof with fully concealed fasteners to give the seal an aesthetic appearance. The Silicon Rubber seal requires only normal door closing force. If fixing to rebated frames of single doors, specify a long backset door latch.

Location Head and jamb of single or double butt hinged doors.

Min/Max Gap 0mm to 8mm.

Seal Sizes Available in stock lengths or door set sizes.

Seal Material Silicon Rubber (SE) (Grey).

RP39

Standard Finish Aluminium

anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Adjustment Can be adjusted by 8mm independently of the fixing screws.

Replacement Seal RP338 Si.

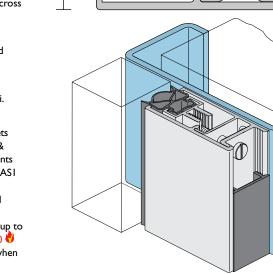
Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B.

Approved on fire rated doors up to FRL & FRR-/240/60 and FD240 🖑

Gasket flammability index 1 when tested to AS 1530.2.

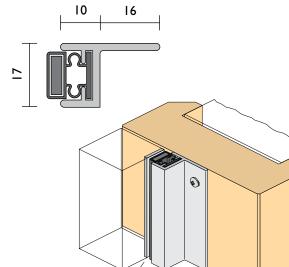
Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 &



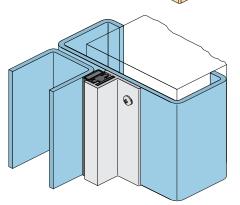
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EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Timber door with steel insert (by others)



A refrigeration type vinyl magnetic strip in an anodised aluminium housing, which provides a very tight seal for steel clad doors and jambs, and may be used as a stop. For timber doors, a thin steel strip can be attached to the door face. The magnetic strip has sufficient closing strength that latches are not required. It can also be used in pairs on meeting stiles of timber doors.

Note: As an astragal seal, RP39 is not recommended for highly active doors, ie: best suited to infrequent use and door closer hold open applications.

Location Single or double doors, sliding doors and stiles, heads and jambs or bulk head applications. Butt hinges recommended.

Min/Max Gap 4mm to 8mm (meeting stiles).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

Seal Material PVC (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Fixing holes are slotted.

Used in Conjunction Raven door bottom seals.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22. Approved on fire rated doors up to FRL & FRR-/60/30 and FD60 🖑 **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RAVEN



An effective acoustic door seal which can be installed on door stops of sufficient depth. Wide butt hinges should be specified. RP44 Si has two extruded silicon bulb gasket for medium temperature smoke door applications. The corners can be mitred or butt jointed.

Note: check backset door latch requirement.

Location Head and jambs on single or double, wide butt hinged doors or bulk head applications.

Min/Max Gap 8 to 10mm. No adjustment (allow 13-14mm for installation) refer to product dimensions.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

RP47 Si

Seal Material Silicon Rubber (SE) (Grey).

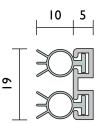
Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied.

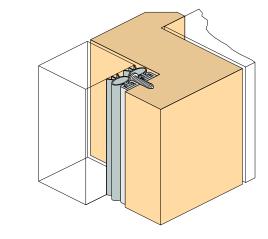
Replacement Seal RP308 Si.

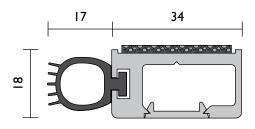
Used in Conjunction Raven door bottom seals.

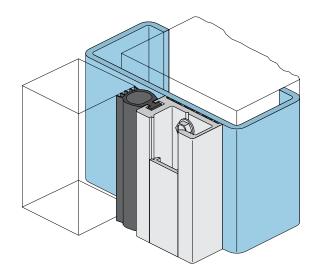
Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pt. 3.2. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). UK/EU: Conforms to Approved Document B. Gasket flammability index 1 when tested to AS 1530.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.









A heavy duty door seal which has been designed to replace the conventional door stop, around the head and jambs of the door frame. RP47 Si has an extruded silicon gasket for medium temperature smoke/fire door applications. Its proven, excellent acoustic qualities make it particularly suitable in heavy traffic areas that sustain high abuse, such as in hospitals, hotels, airports and prisons.

Concealed behind an aluminium cover strip can be found a space for low voltage cable management, along with adjustable fastener slots for achieving perfect fitment. This rugged tamper proof seal can be mitred or butt jointed for ease of installation.

Note: If fixed to existing 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.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, Tek self drilling screws (metal) of the appropriate size are supplied.

Replacement Seal RP347 Si.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pts. 2 & 3.2. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

UK/EU: Approved Document B. Approved on fire rated doors up to FRL & FRR-/120/30

Gasket flammability index 1 when tested to AS 1530.2. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RP56



A finned sweep seal that is designed to fit into a groove around the door perimeter or frame to reduce noise and air movement. This unobtrusive seal does not restrict the door's operation. Before specifying, check latching requirements.

Location Around internal doors.

Min/Max Gap 2mm to 4mm.

Seal Sizes Available in stock lengths.

Seal Material Rigid PVC holder (Bronze). Flexible PVC fins (Black).

Fixing Method 10mm x 4mm groove with adhesive.

Replacement Seal RP469.

Used in Conjunction Raven automatic door bottom seals and brush strip seals.

unobtrusive seal does not restrict the door's operation. Before specifying, check latching requirements. Location Around internal doors. Min/Max Gap 3mm to 4mm. Seal Sizes Available in stock lengths.

Seal Material PVC rigid holder (Bronze). Black woven polypropylene pile weather strip. Fixing Method 10mm x 4mm groove with adhesive. Used in Conjunction Raven automatic door bottom seals and brush strip seals.

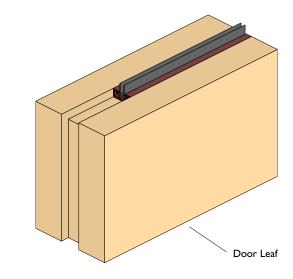
Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Approvals

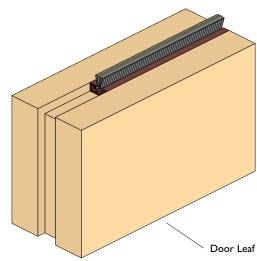
Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22. Approved on fire rated doors up to FRL & FRR-/60/30 and FD60 Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



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Approvals

RAVEN



Approvals

Acoustic AUS/NZ: Conforms to

NCC BCA Spec. F5.5. Approved to

AS 1191, AS 1045 & AS/NZS 1276.

UK/EU: Conforms to Approved

717.1, BS 2750 & BS 5821).

Pt. 3.12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO

Energy Complies with NCC BCA

An extremely flexible co-extruded PVC sweep seal that fits into a saw kerf groove cut into the frame or door. It holds tight radii and compound curves when bent around a frame. It resists UV, ozone, mildew and colour change.

Note: For noise, specify two rows of seal.

Location Around sliding doors, door frames and pivot doors.

Min/Max Gap 6mm to 8mm.

Seal Sizes 1000mm increments to 200 metres (coil).

Seal Material Rigid/Flexible PVC co-extrusion (Brown).

Fixing Method 2.5mm x 6mm deep kerf groove, push-in locking fit.

Used in Conjunction Raven brush strip door bottom seals.



An acoustic medium temperature smoke door frame seal designed 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. RP78 Si can be mitred or butt jointed.

Location Head and jambs on single or double butt hinged doors.

Min/Max Gap 0mm to 6mm.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Grey or Light Grey).

Fixing Method Zinc plated, cross recess head S.T. screws and self-drilling screws of the appropriate size are supplied.

Replacement Seal RP394 Si.

Used in Conjunction Raven RP8 Si, RP16 Si, RP38 Si, RP70 Si, RP99 Si.

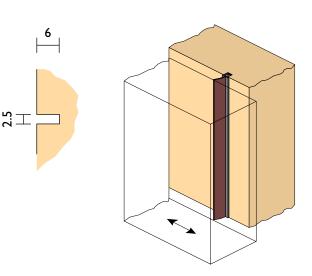
Approvals

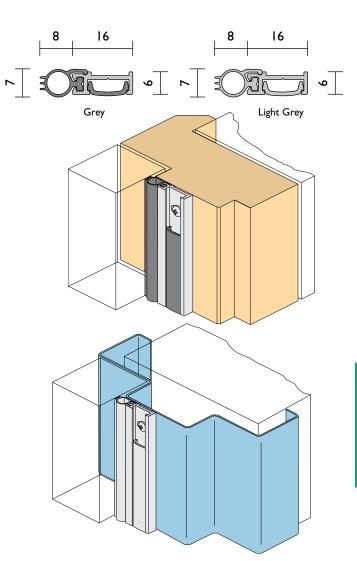
Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5. 5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved

Document B.Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to

FRL & FRR-/240/60 and FD240 Gasket flammability index 1 when tested to AS 1530.2. Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.







RAVFN



Designed specifically for 'clean room' applications. Its easy cleaning aluminium extrusion and flexible smooth silicon sealing section considerably reduces sound transmission and prevents movement of airborne contaminates, thus allowing for controlled air ventilation.

Location Head and jambs for single and double butt hinged doors.

Min/Max Gap 0mm to 7mm.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (Black).

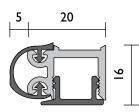
Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

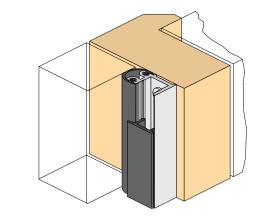
Replacement Seal RP384 Si.

Used in Conjunction Raven door bottom seals and astragals.

Approvals

Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pt. 3.2. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). UK/EU: Conforms to Approved Document B. Fire Gasket flammability index 1 when tested to AS 1530.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





RP85



A magnetic seal that is fixed to the head and jambs as a door stop where steel clad doors are used. For timber doors, a thin steel strip can be attached to the door face. The magnetic strip has sufficient closing strength that latches are not required.

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

Location Head and Jamb for single and double butt hinged doors.

Min/Max Gap 0mm to 4mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

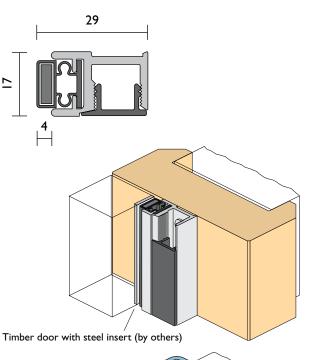
Seal Material PVC (Black).

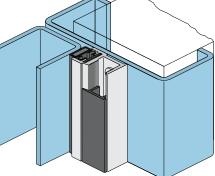
Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Used in Conjunction Raven door bottom seals and astragals.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821) Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.







An adjustable door stop seal for noise, light and smoke. The RP87 Si seal uses independently adjustable fasteners to achieve up to 6mm sealing adjustment for maximum noise control.

The seal can be butt jointed at the corners of the frame to produce an easily installed continuous seal around the door frame, and can replace the conventional doorstop on either steel or timber door frames. It is tamperproof with fully concealed fasteners to give the seal an aesthetic appearance.

The Silicon seal only requires normal door closing force. If fixing to rebated frames of single doors, specify a long backset door latch.

Location Head and jamb of single or double butt hinged doors.

Min/Max Gap 0mm to 8mm.

Seal Sizes Available in stock length or door set sizes.

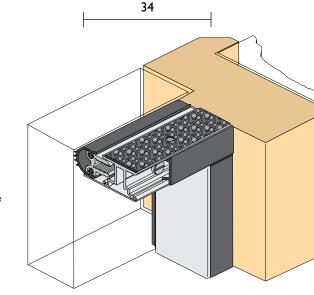
Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3). Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Approved to AS 1191,AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B.

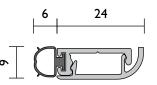
Approved on fire rated doors up to FRL & FRR-/240/30 and FD240 Gasket flammability index 1 when tested to AS 1530.2. Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 &

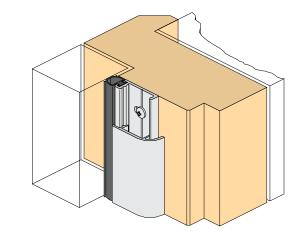


EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.

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Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 Gasket flammability index 1 when tested to AS 1530.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RP93 Si



A weather and acoustic seal suitable for plain or rebated frames. RP93 Si 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 coverstrip is not recommended for removal once installed, refer RP78 Si or RP10 Si for this feature.

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

Min/Max Gap 0mm to 6mm.

Seal Sizes Available in stock length or door set sizes.

Standard Finish Cover strip only. Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Replacement Seal RP393Si.

Used in Conjunction Raven RP8 Si, RP16 Si, RP38 Si, RP70 Si, RP97 Si, RP99 Si.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5. 5. Approved to AS 1191,AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pts. 2 & 3.2. Approved to AS 1530.4 & AS/NZS 1905.1. UK/EU: Conforms to Approved Document B. (Tests above are similar to BS EN 1634-1, BS 476 Pt. 20 & 22 & Sec. 31.1).



A weather and acoustic seal, suitable for rebated frames. RP94 Si 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.

Note: The tamper proof aluminium coverstrip is not recommended for removal once installed, refer RP78 Si for this feature.

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

Min/Max Gap 0mm to 6mm.

Seal Sizes Available in stock lengths or door set sizes.

Standard Finish Cover strip only. Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Black).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.



Used in Conjunction Raven door bottom seals, astragals and threshold plates.

Approvals

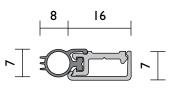
Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5. 5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & ADD. C6.1.1. UK/EU: Conforms to Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476

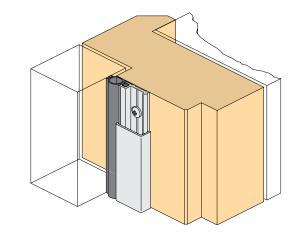
Pt. 20 & 22). Approved on fire rated doors up to

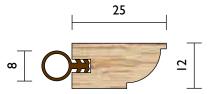
FRL & FRR-/240/30 and FD240 Gasket flammability index 1 when tested to AS 1530.2.

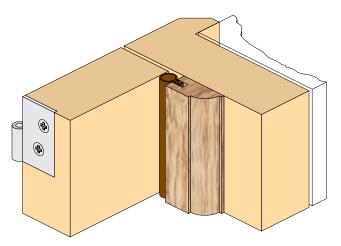
Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

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RPI13



A timber door stop frame seal suitable for plain or rebated frames.

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

Location Head & Jambs of single or double butt hinged doors.

Min/Max Gap 0mm to 7mm (compression I-3mm).

Seal Sizes Available in single and double door set sizes.

Seal Material Silicon Rubber (Brown). Timber is genuine plantation Tasmanian oak.

Fixing Method Zinc Plated nails to suit are supplied.

Replacement Seal RP320 (Brown).

Used in Conjunction Raven door bottom seals and astragals.



Approvals

Acoustic AUS/NZ:Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU:Approved to BS EN ISO 140.3, BS EN ISO 717.1, BS 2750 & BS 5821.

Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pt. 3.2. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). UK/EU: Conforms to Approved Document B. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building

Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RAVEN



RP118 Si is a smoke, weather and acoustic frame seal. It is ideal for use on outward opening butt hinged doors.

Its design accommodates a latch engagement for a suitable panic exit device at the head of the door.

Used in conjunction with RP117 Si threshold plate seal, RP118 Si provides a complete perimeter seal around the door with a top and bottom latch engagement for a panic exit device (by others).

Its aluminium carrier is sturdy and slotted for adjustment with concealed fixings.

RP118 Si is quick and easy to install (mitre joint) around the jamb and head of plain or rebated frames and can be installed without removing the door.

Location Head and jambs on single or double, butt hinged doors.

Min/Max Gap 0mm to 10mm.

Seal Sizes Available in stock lengths.

RPI20



Delta Seal ™

RP120 is a co-extruded PVC, acoustic and smoke seal. Discreetly located in the protected corners of rebated timber or steel door frames. RP120 is suitable for new and retrofit applications.

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

Min/Max Gap 3mm to 5.5mm.

Seal Sizes Available in door set sizes.

Seal Material Rigid and Flexible flame retardant PVC, with an aggressive self adhesive backing tape on both sides of the rigid carrier (Black).

Fixing Method Self adhesive

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

RPI50

Refer to RP120 for all other specifications.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Grey).

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Replacement Seal RP308 Si.

Used in Conjunction Raven RP8 Si, RP16 Si, RP70 Si, RP99 Si (fully morticed), RP117 Si (shown).

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5. 5. Approved to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 Pts. 2 & 3.2. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 &

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Used in Conjunction Raven door bottom seals, threshold

plates and astragals.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5. 5. Approved to AS 1191 (similar to AS 1045 & AS/NZS 1276). UK/EU: Conforms to Approved Document E. Approved to BS EN ISO 140.3, similar to BS EN ISO 717.1, BS 2750, BS 5821.

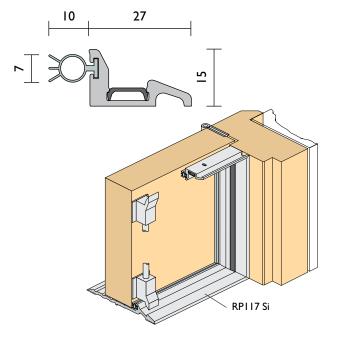
Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.

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

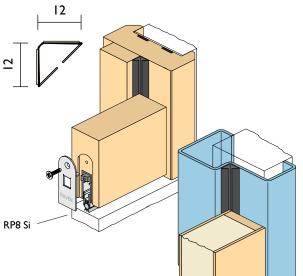
FRL & FRR-/240/30 and FD240



Μ



App. C6.1.1. UK/EU: Conforms to Approved Document B. Gasket flammability index 1 when tested to AS 1530.2. **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 similar to BS 476 section 31.1. Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building

Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Approvals

Document F.

Acoustic AUS/NZ: Conforms to

UK/EU: Conforms to Approved

Fire AUS/NZ: Meets NCC BCA

Approved to AS 1530.4 &

6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved

Spec. C3.4 for fire & smoke doors.

AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1

Document B.Approved to BS 476 Pt.

20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to

FRL & FRR-/120/30 and FD120 🖑

ISO 5925-1 & EN 1634-3 similar to

BS 476 section 31.1. Meets smoke

leakage rates specified in AS 6905 &

Energy Complies with NCC BCA

Pt. 3.12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

Smoke Tested to AS 1530.7,

EN 13501-2 "Sa", "Sm".

Registered Design.

NCC BCA Spec. F5.5.

Delta Seal Plus™

RP124 is a co-extruded rigid and flexible copolymer acoustic smoke seal. This multi-finned self adhesive seal is located in the protected corners of rebated timber or steel door frames. RP124 is suitable for new or retrofit applications.

Location Around rebated frames of single or double butt hinged doors.

Min/Max Gap 3mm to 5.5mm.

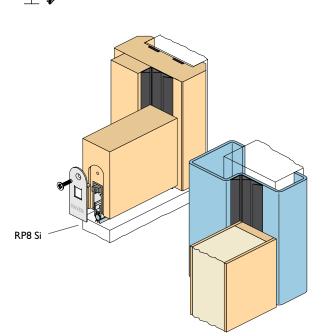
Seal Sizes Available in door set sizes.

Seal Material Co-extruded Rigid and Flexible flame retardant PVC (Black).

Fixing Method Self adhesive backing on both rigid fixing legs.

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

Used in Conjunction Raven door bottom seals, astragals and threshold plates.



RP130 Si



A heavy duty medium temperature smoke seal designed to be fitted to the door head & jamb reveal of pivot door frames. May also be installed to the door stile edges and to one leaf of plain meeting stiles of timber double pivot doors. The aluminium body of the seal can be checked out or drilled to accommodate pivot hardware and latch ware at the meeting stile.

Location Around frames of single and double acting pivot doors. Stiles of timber doors.

Min/Max Gap 14mm to 18mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver). P.E. Paint (at extra cost, refer page 3).

Seal Material Fins: Silicon Rubber (SE) (Light grey). Coverstrip: PVC (Light grey).

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and

Replacement Seal RP3129 Si.

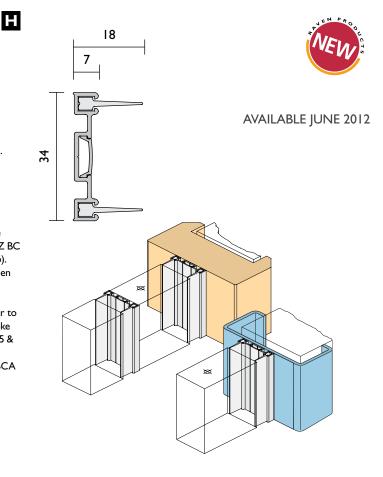
colour are supplied.

Used in conjunction Refer to sealing systems page 31 and 39.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b). Gasket flammability index 1 when tested to AS 1530.2. Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 similar to BS 476 section 31.1. Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Registered Design.



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.

Μ

RP16 Si



RP16 Si is an acoustic, smoke astragal. 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, ie: One for each door leaf. (Minimum door thickness subject to centre latch and dimensions of morticed door bottom seals).

RP16 Si 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.

Seal Material Silicon Rubber (SE) (Grey).

Seal Sizes Available in stock lengths

RP37

A simple heavy 'T' section for meeting stiles that provides security.

Location Meeting stiles of doors.

Seal Sizes Available in stock lengths.





RP65

Refer page 85.



Standard Finish Aluminium anodised 15 microns, Satin Clear (Silver). P.E. Paint (at extra cost, refer page 3).

Standard Finish Aluminium

(at extra cost, refer page 3).

Fixing Method Zinc plated,

cross recess CSK S.T. screws

of the appropriate size and

colour are supplied. Seal can

be rebated or face mounted.

Replacement Seal RP316 Si.

Acoustic AUS/NZ: Conforms to NCC BCA Sect. F5. 5. Tested to

AS 1191, AS 1045 & AS/NZS 1276.

Document E.Tested to BS EN ISO

140.3 (similar to BS EN ISO 717.1,

UK/EU: Conforms to Approved

Fire & Smoke AUS/NZ: Meets

NCC BCA Spec. C3.4 for smoke

Compliance Doc. C/ASI 6.19.2(b).

Gasket flammability index 1 when

Smoke Tested to AS 1530.7, ISO

H

5925-1 & EN 1634-3 similar to

doors. Meets requirements of NZ BC

BS 2750 & BS 5821).

tested to AS 1530.2.

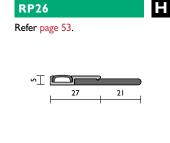
Fixing holes are pre-drilled.

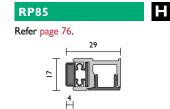
Approvals

anodised 15 microns. Satin Clear

(Silver) or Bronze finish. P.E. Paint

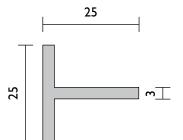
Fixing Method Zinc plated, cross recess CSK S.T. screws of the appropriate size and colour are supplied. Fixing holes are pre-drilled.



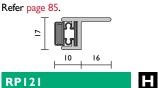


2 0 24 BS 476 section 31.1. Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm".

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

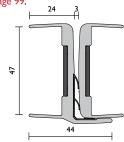


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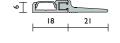


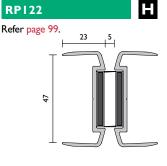
Refer page 99.

RP39









RAVEN



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 sealing portion is made from a black woven pile weather-strip with a unique Quiet-fin, which is effective in the sealing of noise and weather.

Two seals are installed onto one door stile, allowing space for a latch between the seals. The legs of the seals can be cut out (checked) to accommodate the latch bolt front plate, thereby providing a continuous seal (minimum door thickness subject to centre latch and dimensions of morticed door bottom seals).

Location Double butt hinged and centre pivot double acting doors.

Min/Max Gap 3mm to 4mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).



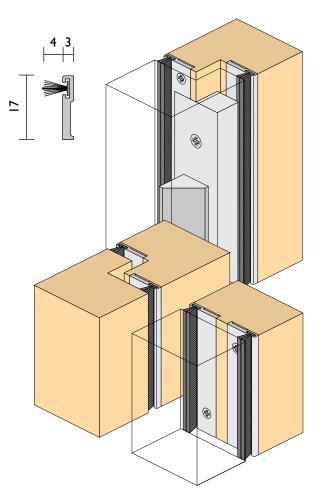
Μ

Seal Material Polypropylene pile with felt weather fins (Black).

Fixing Method Zinc plated, cross recess CSK S.T. screws of the appropriate size and colour are supplied. Fixing holes are pre-drilled.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Sect. F5.5. Tested to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Tested to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Μ **RP71 Si**

A medium temperature smoke astragal seal designed for plain or rebated meeting stiles of timber double doors where a centre latch bolt may be required, or where both double doors are active. The seal is achieved by a pair of silicon fins.

Two seals are installed onto one door stile, allowing space for a latch between the seals. The aluminium leg of the seal can be cut out (checked) to accommodate the latch bolt front plate, thereby providing a continuous seal (minimum door thickness subject to centre latch and dimensions of morticed door bottom seals).

Location Double butt hinged and centre pivot double acting doors.

Min/Max Gap 3mm to 5mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Silicon Rubber (SE) (Grey).

Fixing Method Zinc plated, cross recess CSK S.T. screws of the appropriate size and colour are supplied. Fixing holes are pre-drilled.

Replacement Seal RP371 Si.

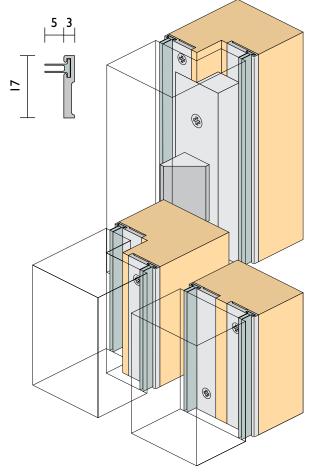
Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Sect. F5.5. Tested to AS 1191.AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Tested to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets

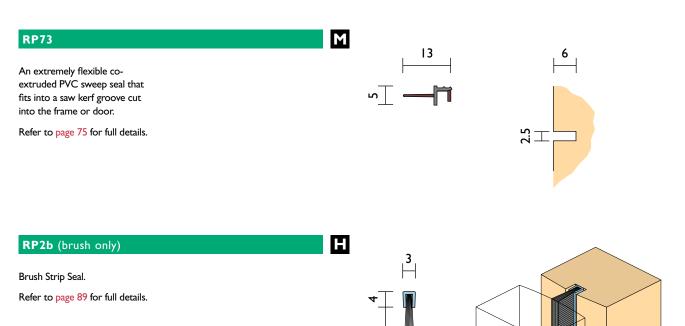
NCC BCA Spec. C3.4 for smoke doors. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(b).

Gasket flammability index 1 when tested to AS 1530.2

Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 similar to BS 476 section 31.1. Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Astragals Meeting Stile Seals



Η

Astragals Meeting Stile Seals for Frameless Glass

RP42



A clear polycarbonate astragal seal for 15mm thick frameless glass doors. The woven pile sealing strip is combined with a weather fin to form an effective seal.

Location Stiles.

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

Seal Sizes 3000mm.

Standard Finish Clear hi-impact UV stabilised polycarbonate.

Seal Material Black polypropylene pile with weather fin.

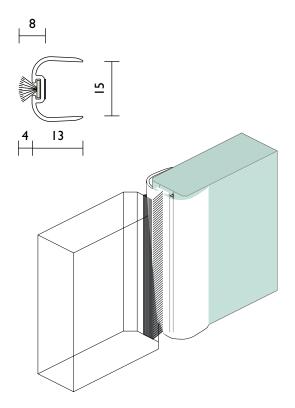
Fixing Method Adhesive double sided tape.

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

Used in Conjunction Raven brush strip door bottom seals RP2b, RP74 and threshold plates.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Astragals

Meeting Stile Seals for Frameless Glass

RP79



An astragal for 12mm thick frameless glass doors. The woven pile sealing strip is combined with a weather fin to form an effective seal. Refer to RP88 for 10mm glass applications.

Location Stiles.

Min/Max Gap 8mm to 9mm (prior to installation).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. **Seal Material** Polypropylene pile with a weather fin.

Н

Н

Fixing Method Adhesive double sided tape.

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

Used in Conjunction Raven brush strip door bottom seals RP74 and RP2b.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RP88

An astragal for 10mm thick frameless glass doors. The woven pile sealing strip combined with a weather fin to form an effective seal.

Refer to RP79 for 12mm thick glass and all other specifications.

RP103



A clear polycarbonate astragal seal for 10mm thick frameless glass doors. The woven pile sealing strip combined with a weather fin to form an effective seal.

Location Stiles.

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

Seal Sizes 3000mm.

Standard Finish Clear hi-impact UV stabilised polycarbonate.

Seal Material Black polypropylene pile with weather fin.

RP104

An astragal for 12mm thick frameless glass doors. The woven pile sealing strip combined with a weather fin to form an effective seal.

Refer to RP103 for 10mm glass, RP42 for 15mm glass and all other specifications.

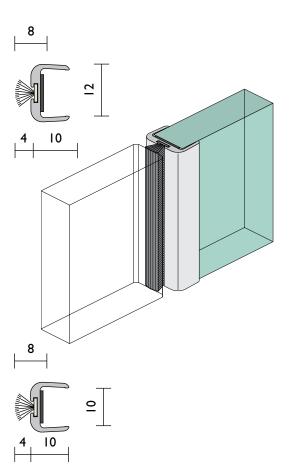
Fixing Method Adhesive double sided tape.

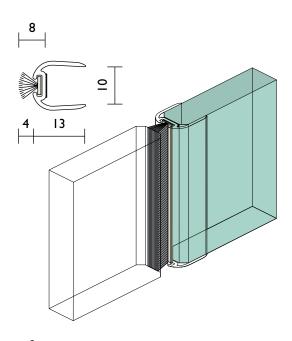
Note: Contact surface must be clean, smooth and if painted, well cured.

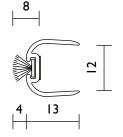
Used in Conjunction Raven brush strip door bottom seals RP2b, RP74 and threshold plates.

Approvals Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Н







Magnetic Astragals

Magnetic Meeting Stile Seals





A refrigeration type vinyl magnetic strip in an anodised aluminium housing, which provides a very tight seal for steel clad doors and jambs, and may be used as a stop. For timber doors, a thin steel strip can be attached to the door face. The magnetic strip has sufficient closing strength that latches are not required. It can also be used in pairs on meeting stiles of timber doors.

Note: As an astragal, RP39 is not recommended for highly active doors, ie: best suited to infrequent use and door closer hold open applications.

Location Single or double doors, sliding doors and stiles, heads and jambs or bulk head applications. Butt hinges recommended.

Min/Max Gap 4mm to 8mm (meeting stiles).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. P.E. Paint (at extra cost, refer page 3).

Μ

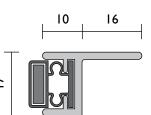
Seal Material PVC (Black).

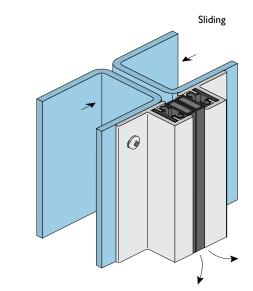
Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size are supplied. Fixing holes are slotted.

Used in Conjunction Raven door bottom seals.

Approvals

Fire AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B & BS 426 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR-/60/30 and FD60 Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





Outward Opening Application

RP65



A refrigeration type PVC magnetic strip in an anodised aluminium channel, that is morticed into the stiles of hardwood double timber doors, either pivot, sliding or butt hinged, to form an effective astragal. It provides a very positive seal and has sufficient closing strength that latches may not be required.

Note: Centre latching cannot be used in this configuration.

The aluminium channel is designed to fit into a 16.5×12 mm mortice. The magnetic seals are locked to prevent 'creeping'.

Note: RP65 is not recommended for highly active doors. ie: best suited to infrequent use and door closer hold open applications.

Location Double swinging doors and sliding door meeting stiles.

Min/Max Gap 5mm to 7mm (Swing Doors).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish. Black flexible PVC retaining magnet strip.

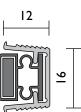
Seal Material Magnetic strip with flexible PVC holder (Black).

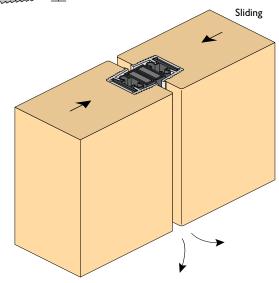
Fixing Method Press fit into 16.5mm x 12mm deep mortice (adhesive optional). Hardwood timber doors 40mm minimum thickness.

Used in Conjunction Raven door bottom seals and door frame seals.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



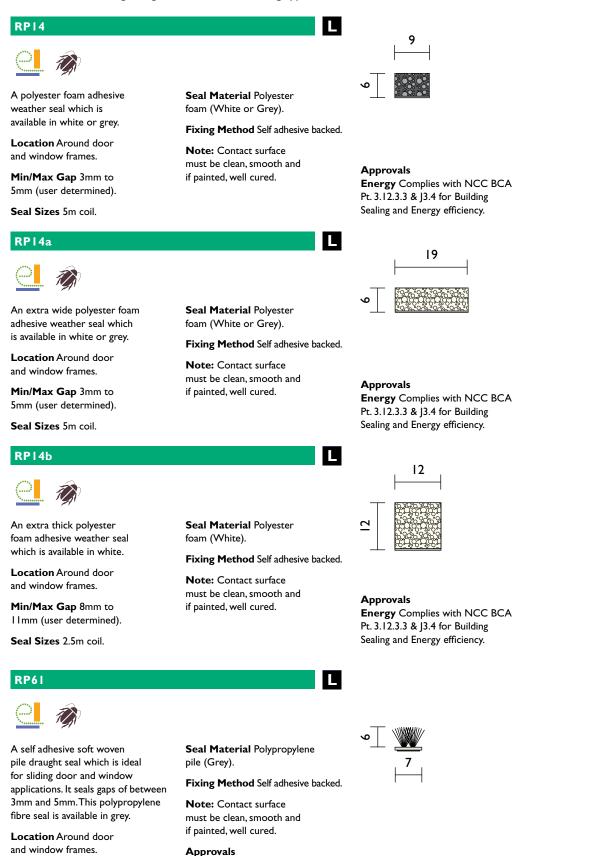


Outward Opening Application

Self Adhesive Seals



The seals below are open cell foam adhesive weather seals for doors and windows. Quick and easy to install, they are D.I.Y. products which work well in eliminating draughts, rattles and cushioning applications.



Energy Complies with NCC BCA

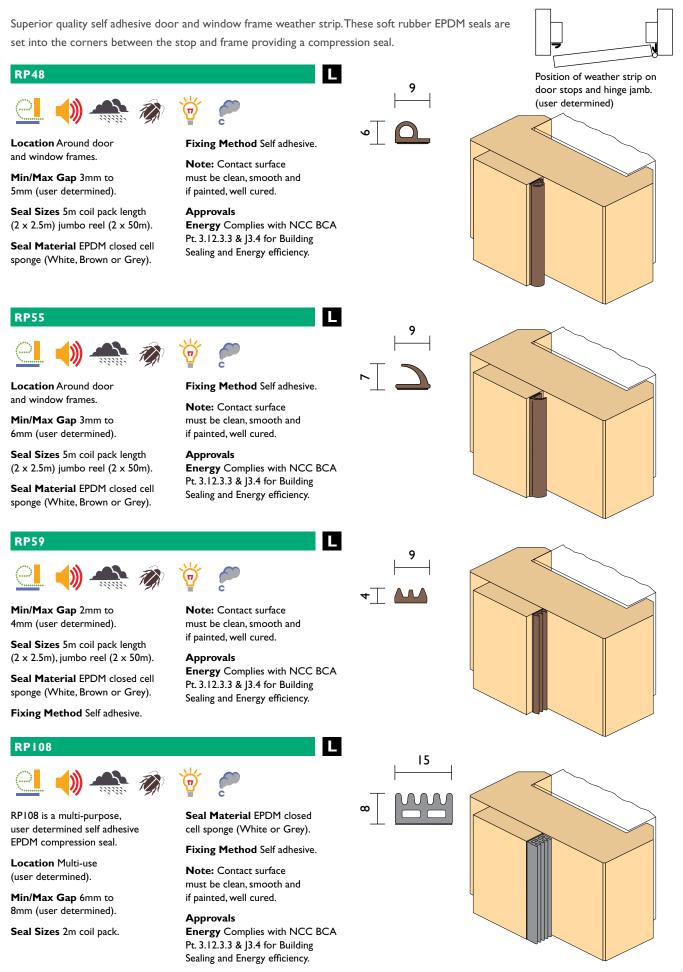
Pt. 3.12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

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

Seal Sizes 5m coil.

Self Adhesive Seals



Brush Strip Seals Nylon Filament



The versatility of Raven brush strip and ease of installation makes it particularly suitable for sealing difficult applications such as sliding, revolving, pivot, roll-up and panel lift type doors against smoke, odours, draughts, light, dust, insects, bushfire embers and for the retention of air conditioning.

Raven nylon brush strip sealing is recognised as solving draught problems where heavy duty use is required in areas such as public transport applications. Tests have proven that minimal wear occurs with prolonged use to either brush or contact surfaces. Dense black nylon bristles are locked into a galvanised steel spine which is then generally fitted into an anodised aluminium holder. The aluminium holder will take all bristle lengths, and the adhesive PVC foam tape is standard on most aluminium holders. Raven brush strips are available without the aluminium holders. Specify for example RP57 (brush only).

Note: Raven use special nylon filament due to its significantly superior performance over inferior materials such as polypropylene in these applications. Raven nylon brush strip withstands temperatures up to 200°C for 30 minutes without significant deterioration.

Raven brush strips are self extinguishing and comply with **AS 3959** up to **BAL FZ** for vehicle access doors (garage doors). Product selection should be made when assessing the mandated requirements listed in the **AUS NCC BCA** and the Australian Bushfire Standard **AS 3959**. Specifiers will determine the suitability of the information provided when selecting a Raven seal for their purposes.



RP2

For medium temperature smoke door sealing refer to RP52F, RP74F and RP129F.



A nylon brush strip seal without holder, 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 to flex.

Location Door bottoms or stiles of single, double, sliding or double acting doors.

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

Seal Sizes Available in stock lengths.

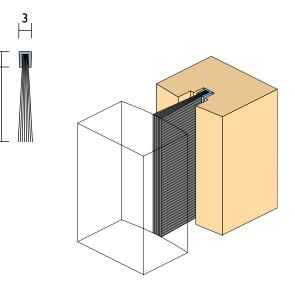
RP2a



Seal Material Fine, dense, black nylon filaments, UV stabilised. Galvanised steel spine.

Fixing Method Bowed and inserted in mortice groove (builder's adhesive if required).

Approvals Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





A nylon brush strip seal, with an aluminium carrier, that mounts to the inside or outside of a door. It is ideal for sliding or double acting doors. When fitted by the fabricator, the seal can be concealed inside of an aluminium door suite bottom rail.

Location Door bottoms, single, double or sliding and double acting.

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

Seal Sizes Available in stock lengths.

Seal Material Fine, dense, black nylon filaments, UV stabilised.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

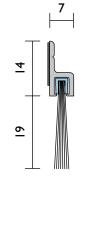
Fixing Method Self adhesive backing. Can screw fix.

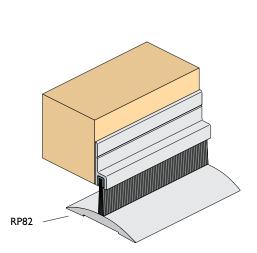
Note: Contact surface must be clean, smooth and if painted, well cured.

Used in conjunction Raven threshold plates.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





Nylon Filament

'RAVFN

RP2b



A nylon brush strip seal, with an aluminium carrier, that mounts to the inside or outside of a door.

Location Door bottoms, single, double or sliding.

Min/Max Gap Up to 13mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Fine, dense, black nylon filaments, UV stabilised.

RP2b (brush only)



Without its aluminium carrier RP2b (brush only) is recess fixed in a double morticed groove at the stiles of a bull nose timber door. The fine nylon filament engages a suitable concave hinge jamb moulding (by others), providing an excellent unobtrusive seal.

Brush strip sealing is recognised as solving draught problems where heavy duty use is required.

Location Door bottoms or stiles of single, double, sliding or double acting doors.

Min/Max Gap Up to 13mm (user determined).

RP15



A nylon brush strip seal that is ideal for installations where larger gaps are encountered.

Location Door bottoms, single, double or sliding.

Min/Max Gap Up to 25mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Fine, dense, black nylon filaments, UV stabilised.

Fixing Method Self adhesive backing. Can screw fix.

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

Used in conjunction Raven threshold plates.

Approvals

Smoke AUS/NZ: Smoke leakage and obscuration test on by-parting outer lift door on a single track. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Seal Sizes Available in stock lengths.

Seal Material Fine, dense, black

Fixing Method Galvanised steel

mortice groove to provide a friction fit. Builder's adhesive if required.

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

spine is bowed and inserted in

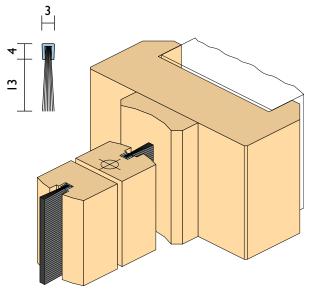
nylon filaments, UV stabilised.

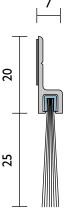
Galvanised steel spine.

Approvals

Н









Fixing Method Self adhesive backing. Can screw fix.

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

Used in Conjunction Raven threshold plates.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

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Nylon Filament

RP41

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19



A nylon brush strip seal that is ideal for installations where large gaps occur or can be fitted to lintels of roll-up doors. In this application, helps prevent the ingress of birds and wind blown embers in bushfire areas.

Note: Roll-up doors must have a fairly constant sealing gap when the door operates to avoid excessive flexing of brush filament.

Location Door bottoms, single, double, revolving or sliding and double acting pivot doors, lintels of roll-up doors (refer **Note:** above).

Min/Max Gap 30mm to 50mm (user determined).

RP49

RP50



A versatile nylon brush seal with a 90° angle aluminium carrier.

Location Door frame, door stiles of sliding doors (user determined).

Seal Sizes Available in stock lengths.

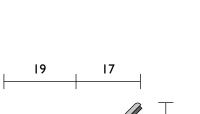
Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Fine, dense, black nylon filaments, UV stabilised.

Fixing Method Self adhesive backing. Can screw fix.

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

Approvals Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish.

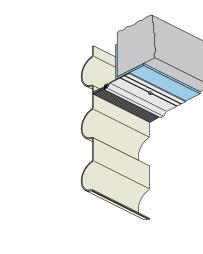
Seal Material Fine, dense, black nylon filaments, UV stabilised.

Fixing Method Zinc plated, cross recess S.T. screws of the appropriate size and colour are supplied.

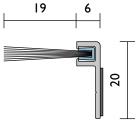
Used in conjunction Refer to sealing system on page 40.

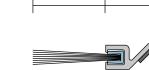
Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



45





Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish.

A versatile nylon brush seal with

Location Can be used on panel

a 45° angle aluminium carrier.

lift doors. User determined.

Seal Material Fine, dense, black nylon filaments, UV stabilised.

Fixing Method Self adhesive backing. Can screw fix.

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

م

Nylon Filament

RAVEN



holder, 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/fin to flex. The brush houses a unique medium temperature fin, which is effective in the sealing of medium temperature smoke, noise and weather.

Location Door bottoms or stiles of single, double, sliding or double acting doors.

Min/Max Gap Up to 13mm (user determined).

Seal Sizes Available in stock lengths.

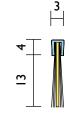
Seal Material Fine, dense, black nylon filaments, UV stabilised with medium temperature fin. Galvanised steel spine.

Fixing Method Bowed and inserted in mortice groove. (builder's adhesive if required).



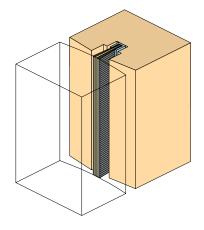
Smoke Tested to AS 1530.7. Complies with AS 6905. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Patented.





AVAILABLE JUNE 2012



RP57



A nylon brush strip seal that is ideal for installations where large gaps occur or can be fitted to lintels of roll-up doors. In this application, helps prevent the ingress of birds and wind blown embers in bushfire areas.

Note: Roll-up doors must have a fairly constant sealing gap when the door operates to avoid excessive flexing of brush filament.

Location Door bottoms, single, double, revolving or sliding and double acting pivot doors, lintels of roll-up doors (refer Note: above).

Min/Max Gap 30mm to 50mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Seal Material Fine, dense, black nylon filaments, UV stabilised.

Fixing Method Self adhesive backing. Can screw fix.

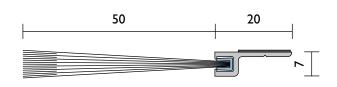
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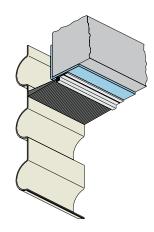
Note: Contact surface must be clean, smooth and if painted, well cured.

Used in conjunction Refer to sealing system on page 40.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





Nylon Filament

RP58



A nylon brush strip seal that is ideal for installations where large gaps occur or can be fitted to lintels of roll-up doors. In this application, helps prevent the ingress of birds and wind blown embers in bushfire areas.

Note: Roll-up doors must have a fairly constant sealing gap when the door operates to avoid excessive flexing of brush filament.

Location Door bottoms, single, double or sliding and double acting pivot doors. Lintels of roll-up doors.

Min/Max Gap 50mm to 75mm (user determined).

Seal Sizes Available in stock lengths.

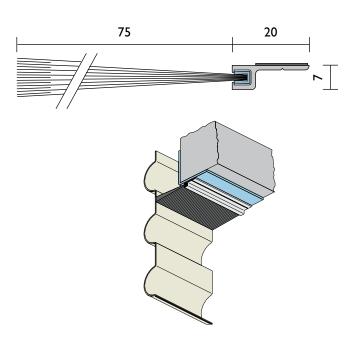
Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3). **Seal Material** Fine, dense, black nylon filaments, UV stabilised.

Fixing Method Self adhesive backing. Can screw fix.

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

Used in Conjunction Refer to system on page 40.

Approvals Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.



RP74



A nylon brush strip seal with a self adhesive aluminium carrier. 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.

Location Door bottoms, single, double or sliding and double acting.

Min/Max Gap Up to 13mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

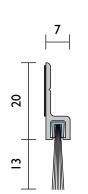
Seal Material Fine, dense, black nylon filaments, UV stabilised.

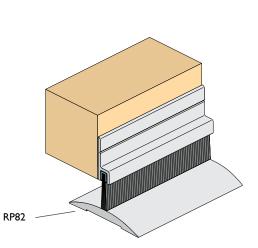
Fixing Method Self adhesive backing. Can screw fix.

Note: Contact surface must be clean, smooth and if painted, well cured. Used in Conjunction Raven threshold plates.

Approvals

Fire Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 Ferergy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





Nylon Filament

RAVEN



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.

Location Door bottoms, single, double or sliding and double acting, stiles of tilt-up doors.

Min/Max Gap Up to 13mm (user determined).

Seal Sizes Available in stock lengths.

Seal Material Fine, dense, black nylon filaments, UV stabilised with medium temperature fin.



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.

Location Door bottoms, single, double or sliding and double acting, stiles of tilt-up doors.

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

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. P.E. Paint (at extra cost, refer page 3).

Fixing Method Self adhesive backing. Can screw fix.

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

Used in Conjunction Raven threshold plates.

Approvals

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Seal Material Fine, dense, black

nylon filaments, UV stabilised.

Fixing Method Self adhesive

backing. Can screw fix.

Note: Contact surface

if painted, well cured.

Used in Conjunction

Raven threshold plates.

Energy Complies with NCC BCA

Pt. 3.12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

Approvals

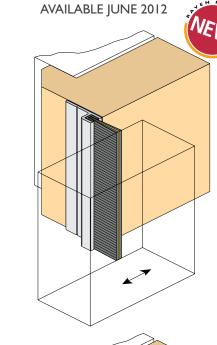
must be clean, smooth and

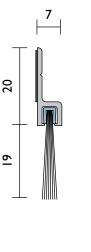


2

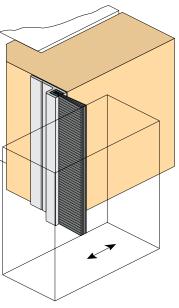
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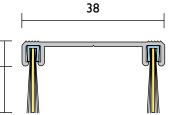
7



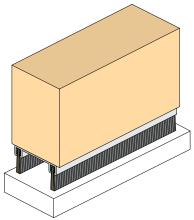


Door bottom brush strip seal.

Refer to page 57 for full details.







Intumescent Seals Fire and Smoke





Intumescent seals are seals that are predominantly used in door sets manufactured by fire door fabricators. Increasingly, manufacturers of door sets (the door leaf with frame) are incorporating Raven door sealing systems into their products prior to leaving the factory. For further performance details refer Intumescent Seals (fire and hot smoke) page 33.

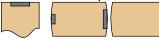
Intumescent fire seals should be fitted as shown in the following typical examples.

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

Single Door RP1004, RP76 or RP76 Si, UK/EU RP1504 Seals.



or RP76 Si seals UK/EU RP1504 seals. Fitted to head & jambs.



60 Minute - Fire Rated FD60, FRL-/60/-

Single door RP2004, RP3004 or RP63 for UK/FU 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 RP1004, RP76 or RP76 Si, UK/EU RP1504 & RP2004, RP3004 or RP63 Seals.



Pair of doors with square meeting

stiles RP2004, RP3004 or RP63

for UK/EU 3004 seals.

Pair of single doors

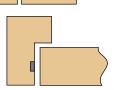
with RP2004, RP3004

or RP63 seals fitted

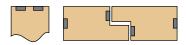
to head & jambs

for UK RP3004.

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

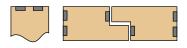


Pair of doors with rebated meeting stiles RP1004, RP76 or RP76 Si, UK/EU RP1504 Seals.



Note: In meeting stiles where seals are opposite each other, always fit an intumescent pile/fin smoke seal opposite a plain intumescent seal.

Pair of doors with rebated meeting stiles RP1004, UK/EU RP1504 seals.



Note: In meeting stiles where seals are opposite each other, always fit an intumescent pile/fin smoke seal opposite a plain intumescent seal.

RP63



A combined intumescent fire and smoke seal which is heat activated. It is unobtrusively set into a machined groove (30x7mm) around the perimeter of a timber frame or door edges.

There are a variety of trim selections available for the seal and it can be rebated in the latch area to allow the continuation of the fin section of the seal past the latch area. The smoke seal is achieved by a pair of silicon fins that seal between the door and the frame.

Dependent on application, fire ratings of one to two hours have been certified by fire door manufacturers using RP63 intumescent fire and smoke seal.

Location Morticed into the door or frame around stiles and head.

Min/Max Gap 3mm to 4mm.

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Seal Sizes 2100mm & 2400mm. Standard Finish Aluminium anodised 15 microns. Satin

Clear (Silver) finish.

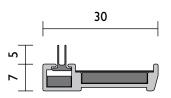
Seal Material Silicon Rubber (SE) (Grey). Intumescent infill.

Fixing Method Adhesive (by installer).

Used in Conjunction Raven Si rated door bottom smoke seals or brush strip seals for pivot doors.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22). Approved on fire rated doors up to



Trim Selection





Teak



Antique White

American Oak

Rosewood

FRL & FRR-/180/30 and FD180 🖑

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





RPI004

A rigid PVC cased Intumescent fire seal for use in fire resisting doors and door frames. RP1004 is set into a morticed groove. An aggressive self adhesive backing tape is standard.

Location Morticed into the door or frame stiles and head.

Seal Sizes 2100mm.

Standard Finish Brown or White.

Seal Material Intumescent infill with rigid PVC holder.

Fixing Method Self adhesive

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

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B.Approved to



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Standard colours are White and Brown, other colours, lengths and finishes available to special order.

Approved on fire rated doors up to FRL & FRR-/30/- and FD30 🖑 Certifier UK Approved.

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BS EN 1634-1 & BS 476 Pt. 20 & 22.

KF 1304	
Approvals Fire & Smoke AUS/NZ: FRL & FRR-/30/- ♥ UK/EU: FD30 ♥	Refer to RP1004 for all other specifications.
RP2004	

DDIEAA

Approvals Fire & Smoke AUS/NZ: FRL & FRR-/60/- 🕙 UK/EU: FD60 💞

RP2504

Approvals Fire & Smoke AUS/NZ: FRL & FRR-/60/- 🕙 UK/EU: FD60 划

RP3004

Approvals Fire & Smoke AUS/NZ: FRL & FRR-/60/- 🖑 UK/EU: FD60 🖑

RPI004F

A flexible PVC cased Intumescent fire seal for fire resisting doors and door frames. The seal is supplied coiled in a continuous length to minimise wastage when cutting to exact size. RP1004F can be set into a morticed groove or retrofitted to upgrade perimeter door frame margins that exceed the 3mm gap compliance (refer local standards). An aggressive self adhesive backing tape is standard.

Location Morticed into the door or frame stiles and head.

Standard Finish Brown or White.

Seal Sizes 150m coil.

RP2004F

Seal Sizes 100m coil.

Refer to RP1004 for all other specifications.

Refer to RP1004 for all

Refer to RP1004 for all

Refer to RP1004 for all

other specifications.

other specifications.

other specifications.

Seal Material Intumescent infill with flexible PVC holder.

Fixing Method Self adhesive

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

Used in Conjunction Raven Si rated door smoke seals or brush strip seals for pivot doors.

Approvals

Approvals

Fire & Smoke Approved on

fire rated doors up to FRL &

FRR-/120/30 and FD120 💞 Refer to RPI004F for all other specifications.

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2 & App. C6.1.1.



UK/EU: Conforms to Approved Document B.Tested to BS EN 1634-1 & BS 476 Pt. 20 & 22.





Fire and Smoke



RAVFN

RP1004S



A rigid PVC cased Intumescent fire and smoke seal for fire resisting doors and door frames. RP1004S is set into a morticed groove. An aggressive self adhesive backing tape is standard. Fire resistance level of 30 minutes FRL30, firesmoke doors FDS30. (FRL60 or FDS60 when two strips are used.)

Location Morticed into the door or frame stiles and head.

Min/Max Gap 3mm to 4mm.

Seal Sizes 2100mm.

RPI504S

Standard Finish Brown or White.

Seal Material Intumescent infill, polypropylene pile smoke seal and fin barrier with Rigid PVC holder.

Fixing Method Self adhesive

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

Used in Conjunction Raven Si rated door bottom smoke seals or brush strip seals for pivot doors.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Tested to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Tested to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/ NZS 1905.1. Meets requirements

of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS EN 1634-1 & BS 476 Pt. 20 & 22. Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 🖑 Certifier UK Approved. Energy Complies with NCC BCA Pt. 3.12.3.3 & [3.4 for Building Sealing and Energy efficiency.



Approvals Fire & Smoke AUS/NZ:	Refer to RP1004S for all other specifications.	4	15
FRL & FRR-/60/- 👹 UK/EU: FD60 👹	H	4	
Approvals Fire & Smoke AUS/NZ: FRL & FRR-/120/30 UK/EU: FD120	Refer to RP1004S for all other specifications.	4 4	
RP1004SA	Н		. 10
A rigid PVC cased Intumescent fire and smoke seal for fire resisting	Used in Conjunction Raven Si rated door bottom smoke seals or	—	

doors and door frames. RP1004S is set into a morticed groove. An aggressive self adhesive backing tape is standard. Fire resistance level of 30 minutes FRL30, firesmoke doors FDS30. (FRL60 or FDS60 when two strips are used.)

Location Morticed into the door or frame stiles and head.

Min/Max Gap Imm to 4mm.

Seal Sizes 2100mm.

Standard Finish Brown or White.

Seal Material Intumescent infill, PVC fin seal.

Fixing Method Self adhesive

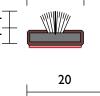
Note: Contact surface must be clean, smooth and if painted, well cured.

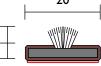
brush strip seals for pivot doors.

Approvals

Acoustic AUS/NZ: Conforms to NCC BCA Spec. F5.5. Tested to AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved Document E.Tested to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750 & BS 5821). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/ASI 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS EN 1634-1 & BS 476 Pt. 20 & 22. Approved on fire rated doors up to FRL & FRR-/120/30 and FD120 🖑

Certifier UK Approved. Energy Complies with NCC BCA Pt. 3. 12.3.3 & J3.4 for Building Sealing and Energy efficiency.

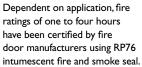






Fire and Smoke

RP1504SA	н	
Approvals Fire & Smoke AUS/NZ: FRL & FRR-/30/- 🖑 UK/EU: FD30 ∛	Refer to RP1004SA for all other specifications.	4 4 12 12
RP2004SA	Н	
Approvals Fire & Smoke AUS/NZ: FRL & FRR-/120/30 💞 UK/EU: FD120 💞	Refer to RP1004SA for all other specifications.	
RP3004SA	Н	30
Approvals Fire & Smoke AUS/NZ: FRL & FRR-/60/- 🖑 UK/EU: FD60 ∛	Refer to RP1004SA for all other specifications.	4
RP76	Н	4 6
👌 婿 🌈 🛄 ;	M	
A combined intumescent smoke and fire seal which is heat activated. It is unobtrusively set into a machined	Used in Conjunction Raven Si rated door bottom smoke seals or brush strip seals for pivot doors.	
groove (10x6mm) around perimeter of timber frame or door edges.	Approvals Fire & Smoke AUS/NZ: Meets	
Desendent en essliestion fins	NCC PCA Space C2.4 for fire	



Location Morticed into the door or frame stiles and head.

Min/Max Gap 3mm to 4mm.

Seal Sizes 2100mm.

Fixing Method Adhesive (by installer).

Seal Material Intumescent infill, polypropylene pile smoke seal Rigid PVC holder (Cranberry Red Colour).

RP76 Si



Min/Max Gap 4mm to 5mm.

Replacement Seal RP371 Si.

Refer to RP76 for all other specifications.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to ISO CD 5925-1 (similar to BS 476 Sec. 31.1). Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22). Approved on fire rated doors up to FRL & FRR-/240/60 and FD240 Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Approved on fire rated doors up to FRL & FRR-/240/60 and FD240 Gasket flammability index 1 when tested to AS 1530.2. Smoke Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.







Fire and Smoke

RP53



Intumescent seal for upgrading door perimeter gaps where the clearance exceeds the maximum 3mm specified by AS 1905.1.

Location Fitted to the door or frame stiles and head.

Min/Max Gap 2mm to 6mm Note: When exposed to heat, seal expands to fill in gap.

Seal Sizes 2.1m and 3m.

Standard Finish PVC (Brown, Grey or White). Can be painted.

Seal Material Intumescent infill with flexible PVC holder.

Fixing Method Self adhesive.

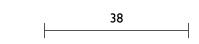
Note: Contact surface must be clean, smooth and if painted, well cured.

Used in Conjunction Raven Si rated door bottom smoke seals or brush strip seals for pivot doors.

Approvals

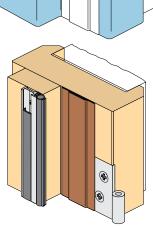
Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors.Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to FRL & FRR -/120/30 and FD120

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AVAILABLE JUNE 2012



RP114 H

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.

Min/Max Gap 14mm to 20mm (without Raven threshold plate).

Seal Sizes 820mm,915mm, 1220mm.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish.

Seal Material Intumescent infill, flexible PVC cover strip (SE) and finned gasket.

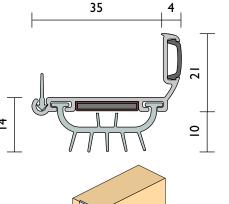
Fixing Method Simply cut seal to length. Zinc plated, cross recess S.T. screws of the appropriate size are supplied.

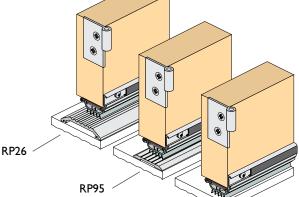
Used in Conjunction Approved Raven door frame seals and threshold plates.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2(a) & App. C6.1.1. UK/EU: Conforms to Approved Document B. (Tests above are similar to BS EN 1634-1 & BS 476 Pt. 20 & 22).

Approved on fire rated doors up to FRL & FRR-/240/60 and FD240





Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





RAVEN





An effective fire, smoke and acoustic seal for single action fire doors. RP121 is a twin section bullnose T bar aluminium astragal with an intumescent infill and smoke seal. RP121 is fitted to the meeting stiles of pairs of 47mm nominal thickness fire doors. When fitted correctly with proprietary fire door assemblies it complies with AS 1530.4 and conforms to NCC BCA specification C3.4.

Location Plain meeting stiles of single action fire doors.

Min/Max Gap 3mm to 5mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver).

Seal Material Concealed intumescent infill and RPI24 smoke seal.

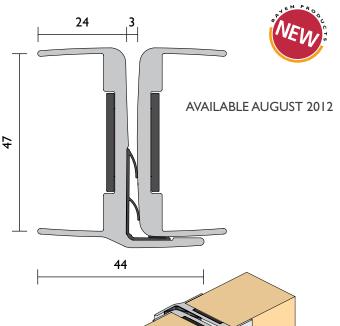
Fixing Method Zinc plated, cross recess CSK S.T. screws of the appropriate size and colour are supplied.

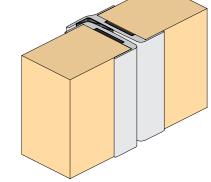
Approvals

Acoustic AUS/NZ: NCC BCA Spec. C3.4 Deemed-to-Satisfy. Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1). Approved on fire rated doors up to

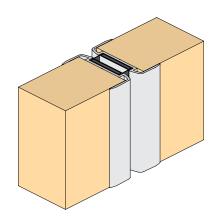
FRL & FRR-/120/30 and FD120

Approved for use on E-Core® brand fire doors. **Smoke** Tested to AS 1530.7, ISO 5925-1 & EN 1634-3 (similar to BS 476 section 31.1). Meets smoke leakage rates specified in AS 6905 & EN 13501-2 "Sa", "Sm". **Energy** Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.





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RPI22



seal for double action fire doors. RP122 is a twin section bullnose aluminium astragal with a rigid PVC cased intumescent infill and PVC sealing fin. RP122 is fitted to meeting stiles of pairs of 47mm nominal thickness fire doors.

Location Plain meeting stiles of single and double action fire doors.

Min/Max Gap 3mm to 5mm.

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver).

Seal Material Light grey rigid PVC case with intumescent infill and PVC sealing fins.

Fixing Method Concealed zinc plated, cross recess CSK S.T. screws of the appropriate size and colour are supplied and intumescent infill has self adhesive backing tape for fixing.

Approvals

Fire & Smoke AUS/NZ: Meets NCC BCA Spec. C3.4 for fire & smoke doors. Approved to AS 1530.4 & AS/NZS 1905.1. Meets requirements of NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1. UK/EU: Conforms to Approved Document B. Approved to BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).

Approved on fire rated doors up to FRL & FRR-/120/30 and FD120

Approved for use on E-Core® brand fire doors. **Energy** Complies with NCC BCA Pt. 3. 12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Silicon Weather Stripping - RP500 Series



Joinery Seals for Doors and Windows

Fitted into wooden kerfs, 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 strip 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.

For ease of maintenance, Raven silicon weather strip can be removed and reused. This feature is well appreciated by painters and maintenance people.

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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 page 43.

RP500 Series



A compression seal, made from silicon. Raven silicon has a high resistance to permanent set (memory). It will not absorb water and is resistant to ozone and ultra-violet light deterioration.

Seal Material Silicon Rubber.

RP500

Location Door and window frames (user determined).

Compression Imm to 3mm.

Reel Length 100m.

Colours RP500w (White), RP500b (Brown), RP500bk (Black).

RP510

Location Door and window frames (user determined).

Compression Imm to 2mm.

Reel Length 100m.

Colours RP510w (White), RP510b (Brown), RP510bk (Black).

Fixing Method 3.5mm x 5mm deep kerf groove, push-in locking fit.

RP520

Location Door and window frames (user determined).

Compression Imm to 3mm.

Reel Length 100m.

Colours RP520w (White), RP520b (Brown), RP520bk (Black).

Fixing Method 3.5mm x 5mm deep kerf groove, push-in locking fit.

kerf groove, push-in locking fit.

Acoustic AUS/NZ: Conforms to

AS 1191, AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved

BS EN ISO 140.3, BS EN ISO 717.1,

Acoustic AUS/NZ: Conforms to

AS 1191.AS 1045 & AS/NZS 1276.

BS EN ISO 140.3, BS EN ISO 717.1,

NCC BCA Sect. F5.5. Tested to

UK/EU: Conforms to Approved Document E. Tested to

BS 2750 & BS 5821.

NCC BCA Sect. F5.5. Tested to

Document E. Tested to

BS 2750 & BS 5821.

Approvals

Used in Conjunction Raven door

bottom seals and threshold plates.

Weather AUS/NZ: Conforms to

to AS 2047, AS 4055, AS 4420

Pt. 0 to 5 & AS/NZS 1170.

NCC BCA various sections. Tested

Approvals

Approvals

Fixing Method 3mm x 6mm deep

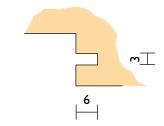
UK/EU: Conforms to Approved Document LI & L2. Tests above

are similar to BS 5368 & BS 7386.

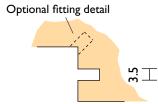
Pt. 3.12.3.3 & 3.4 for Building

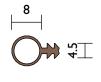
Sealing and Energy efficiency.

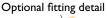
Energy Complies with NCC BCA

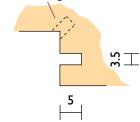












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Silicon Weather Stripping - RP500 Series

Approvals

Approvals

Used in Conjunction Raven door

bottom seals and threshold plates.

Energy Complies with NCC BCA

Acoustic AUS/NZ: Conforms to

AS 1191,AS 1045 & AS/NZS 1276. UK/EU: Conforms to Approved

BS EN ISO 140.3, BS EN ISO 717.1.

NCC BCA Sect. F5.5. Tested to

Fixing Method Slide fit into aluminium or rigid PVC groove.

Weather Tested to AS 4420

Pt. 0.4 & 0.5 for air infiltration and water penetration.

Document E.Tested to

BS 2750 & BS 5821.

Approvals

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Pt. 3. 12.3.3 & J3.4 for Building

Sealing and Energy efficiency.

Joinery Seals for Doors and Windows

RAVEN

RP500 Series



A compression seal, made from silicon. Raven silicon has a high resistance to permanent set (memory). It will not absorb water and is resistant to ozone and ultra-violet light deterioration.

Seal Material Silicon Rubber.

RP530

Location Door and window frames (user determined).

Compression Imm to 2mm.

Reel Length 50m.

Colours RP530w (White), RP530b (Brown), RP530bk (Black).

Fixing Method 4mm x 6mm deep kerf groove, push-in locking fit.

RP540

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

Compression Imm to 3mm.

Reel Length 100m.

Colours RP540bk (Black).

RP550

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

Compression Imm to 3mm.

Reel Length 100m.

Colours RP550w (White), RP550b (Brown), RP550bk (Black).

Fixing Method 2.7mm x 6mm deep kerf groove, push-in locking fit.

RP560

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

Compression Imm to 3mm.

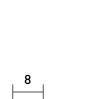
Reel Length 100m.

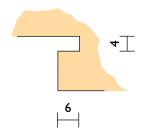
Colours RP560w (White), RP560b (Brown), RP560bk (Black).

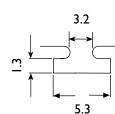
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Fixing Method 2.7mm x 6mm deep kerf groove, push-in locking fit.

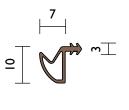
Approvals Weather Tested to AS 4420 Pt. 0.4 & 0.5 for air infiltration and water penetration.

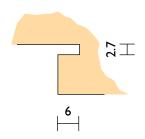


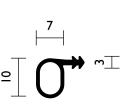


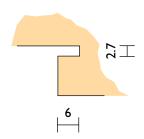


Recommended groove dimensions (Channel not supplied)







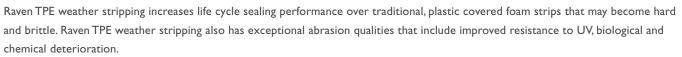


TPE Weather Stripping - RP600 Series

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.



When fitted correctly, Raven TPE weather stripping will not shrink and has a compliant flammability rating < 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 page 43.

RP600 Series



A compression seal, made from coextruded flame retardant TPE rubber.

Seal Material TPE Rubber.

Used in Conjunction Raven door bottom seals and threshold plates.

Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

Fire Flammability rating < 5 when

Approvals

tested to AS 1530.2.

RP600

Location Door and window frames (user determined).

Compression Imm to 3mm.

Reel Length 100m.

Colours RP600w (White), RP600b (Brown), RP600bk (Black).

RP610

Location Door and window frames (user determined).

Compression Imm to 2mm.

Reel Length 100m.

Colours RP610w (White), RP610b (Brown), RP610bk (Black).

Fixing Method 3.5mm x 5mm deep kerf groove, push-in locking fit.

RP620

Location Door and window frames (user determined).

Compression Imm to 3mm.

Reel Length 100m.

Colours RP620w (White), RP620b (Brown), RP620bk (black)

Fixing Method 3.5mm x 5mm deep kerf groove, push-in locking fit.

Fixing Method 3mm x 6mm deep kerf groove, push-in locking fit.

Approvals Weather Tested to AS 4420 Pt. 0.4 & 0.5 for air infiltration and water penetration.

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Weather Tested to AS 4420 Pt. 0.4 & 0.5 for air infiltration and water penetration.

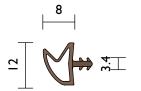
Approvals

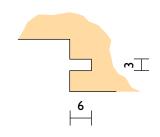
Approvals

Weather Tested to AS 4420

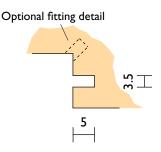
Pt. 0.4 & 0.5 for air infiltration

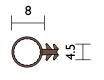
and water penetration.



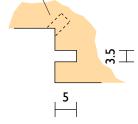








Optional fitting detail





TPE Weather Stripping - RP600 Series

Joinery Seals for Doors and Windows

RAVEN

RP600 Series



A compression seal, made from coextruded flame retardant TPE rubber.

Seal Material TPE Rubber.

Used in Conjunction Raven door bottom seals and threshold plates.

Approvals Fire Flammability rating < 5 when tested to AS 1530.2. Energy Complies with NCC BCA Pt. 3.12.3.3 & J3.4 for Building Sealing and Energy efficiency.

RP630

Location Door and window frames (user determined).

Compression Imm to 2mm.

Reel Length 50m.

Colours RP630w (White), RP630b (Brown), RP630bk (Black).

Fixing Method 4mm x 6mm deep kerf groove, push-in locking fit.

RP640

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

Compression Imm to 3mm.

Reel Length 100m.

Colours RP640bk (Black).

RP650

Location Door and window frames (user determined).

Compression Imm to 3mm.

Reel Length 100m.

Fixing Method Slide fit into aluminium or rigid PVC groove.



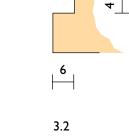
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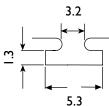
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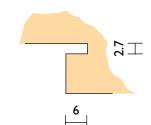


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Recommended groove dimensions (Channel not supplied)



RP660

Location Door and window frames (user determined).

Compression Imm to 3mm.

Reel Length 100m.

Colours RP660w (White), RP660b (Brown), RP660bk (Black).

Н

Fixing Method 2.7mm x 6mm deep kerf groove, push-in locking fit.

Colours RP650w (White), RP650b

Fixing Method 2.7mm x 6mm deep kerf groove, push-in locking fit.

(Brown), RP650bk (Black).

Approvals Weather Tested to AS 4420 Pt. 0.4 & 0.5 for air infiltration and water penetration.

RP670

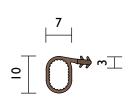
Location Door and window frames (user determined).

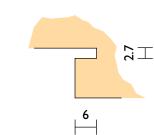
Compression Imm to 3mm.

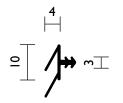
Seal Sizes Available in stock lengths.

Colours RP670bk (Black).

Fixing Method 2.7mm x 6mm deep kerf groove, push-in locking fit.







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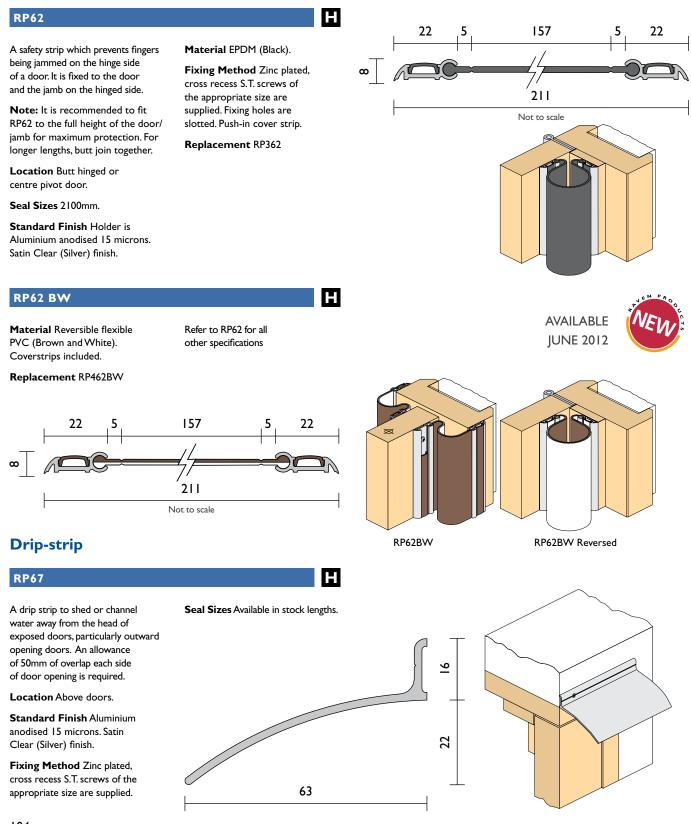
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Complementary Products

&RAVEN

Finger-pinch Protection

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.



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Complementary Products

RAVEN

Threshold Ramps

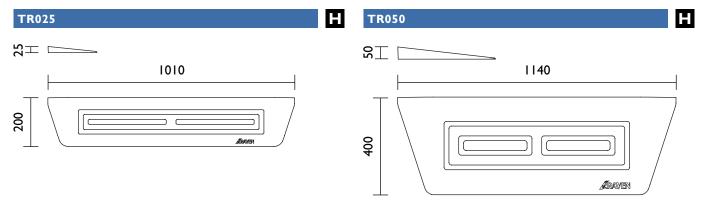
Raven Threshold Ramps are ideal for users of wheel chairs, walking frames, electric scooters and hand trolleys, anyone that regularly traverses tripping hazards at doorways or abrupt surface transitions around the home or in the work place.

Made from slip resistant recycled rubber, Raven Threshold Ramps will be welcomed by home owners, building occupiers, facilities 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 trades person, the use of messy cement, fabricated metal plate or plywood to make and install a threshold ramp. The new DIY alternative is Raven Threshold Ramp. Simply lay the ramp in place or permanently fix with builders adhesive. Raven Threshold 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).



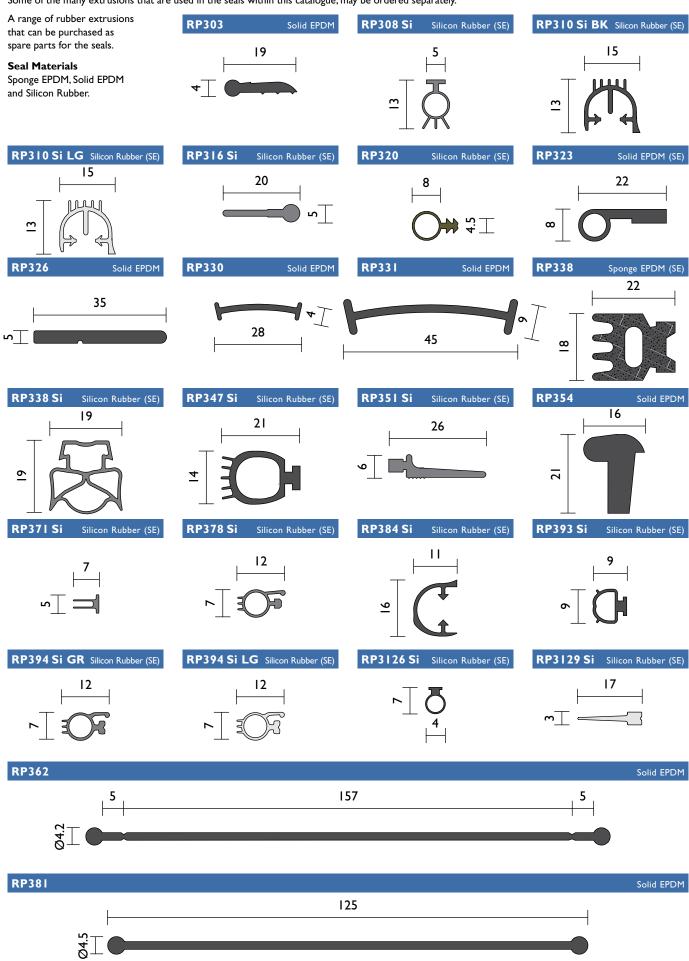




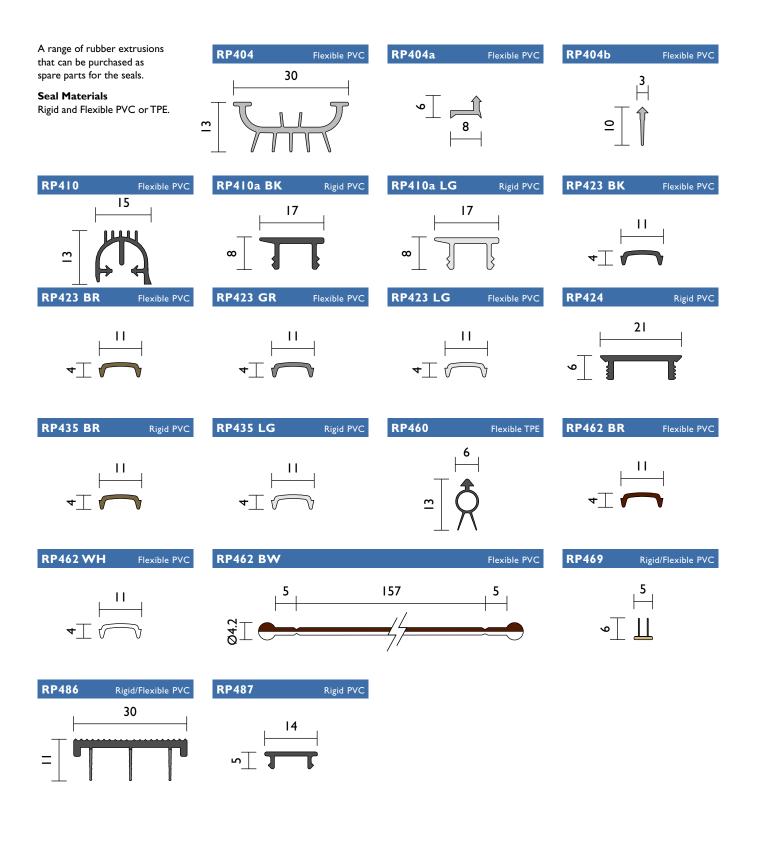
Replacement Components - RP300 Series

RAVEN

Some of the many extrusions that are used in the seals within this catalogue, may be ordered separately.



Replacement Components - RP400 Series



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