



Door & Window
Sealing Systems™



Product Catalogue

108

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

www.raven.com.au





FROM ITS BEGINNING IN 1950, RAVEN PRODUCTS HAS OWED ITS EXISTENCE AND CONTINUED SUCCESS TO INNOVATION, HIGH QUALITY AND EXCEPTIONAL SERVICE. SUCH ASPECTS ARE THE GOALS OF MOST COMPANIES, BUT FOR RAVEN THESE FORMED THE FOUNDATIONS OF ITS OPERATION, AND TODAY ITS PRODUCTS HAVE CONTRIBUTED TO THE INCREASED SAFETY, COMFORT AND MORE ENERGY EFFICIENT DESIGN OF PUBLIC, COMMERCIAL AND RESIDENTIAL BUILDINGS.



*FAR LEFT:
Raven building
Circa 1950.
LEFT:
Raven's 8,000m²
facility today.*

Raven has transformed the way builders, architects and manufacturers consider door sealing systems - incorporating them today into the overall design of components and the building itself.

A product which used to be considered last (or often not at all) is now seen - largely thanks to Raven's pioneering work - as a relatively inexpensive yet highly effective contributor to saving lives (in the case of smoke seals) and to a more sophisticated and comfortable lifestyle (in the case of acoustic and weather - energy seals).

When first released, the products set new standards for innovative design (winning world patents and design awards) but more

importantly - from the user point of view - simplicity of installation, outstanding performance and a high quality of finish. Since that time, Raven has further refined its operation and expanded its product lines. Today, it offers systems which customers from the areas of building, safety, design engineering and government have come to rely on.

A great deal of investment in research, monitoring and development has been made to maintain the company's leading position. Raven's success has been based on simple and highly effective objectives: the best product, at the best price, backed by the best service.

TODAY, RAVEN IS MARKET LEADER IN AUSTRALASIA AND IS INCREASINGLY IN DEMAND IN FOUR CONTINENTS, WHERE CUSTOMERS HAVE WELCOMED PRODUCTS WHICH ARE TAILOR MADE, IN MATCHING COLOURS, AND SUPPLIED OFTEN WEEKS AHEAD OF COMPETITORS'.



As a result, with its reputation spreading by a global network of satisfied customers, Raven sealing systems have been chosen for important public and commercial buildings as diverse as Changi Airport, Singapore; the Sydney Opera House and Australia's

Parliament House; Shatin Hospital in Hong Kong; Royal College of Music, London; the New Zealand Broadcasting Headquarters; Queen Sirikit National Convention Centre, Bangkok, and in Indonesia, the Indosiar Visual Mandiri Television Studios, Jakarta.



Raven's commitment to quality control is total, with specialist staff dedicated to maintaining international accreditation standards. Its new range of architectural fittings and building components highlights the company's rigorous endeavours to create

Raven's growth also relies on the commitment of its work teams to maintain high standards and build mutually beneficial relationships with its clients and customers. A measure of success is the fact that the majority of Raven's international orders come through personal recommendation. Raven welcomes inquiries concerning specific customer requirements and can allocate resources to provide customised products when necessary.

Despite the collection of Australian design awards - and a growing list of export customers - the drive for improvements, innovation and new products is constant. With its plan to become the world's best door-seal manufacturer, Raven has charted a course which has won international acclaim for its quality, service and innovation.

products which enhance comfort, energy efficiency and safety of a building. A product which began as a single, patented roller-door seal has expanded to a comprehensive range of specialised products comprising dedicated sealing systems and tailor-made products. All are made within surprisingly short timeframes to precise specification.



ABOVE: at Raven we listen to our customers – closely. Not only to fulfill their needs but also to hear any suggestions which may help improve our products or service.

LEFT: a family tradition

THE FIRST THING WHICH ARCHITECTS AND CUSTOMERS REMARK ON IS THE QUALITY OF FINISH, THE ABILITY TO COLOUR MATCH COMPONENTS AND DURABILITY. ALL THREE ASPECTS ARE CONTROLLED AT RAVEN'S MANUFACTURING FACILITY.



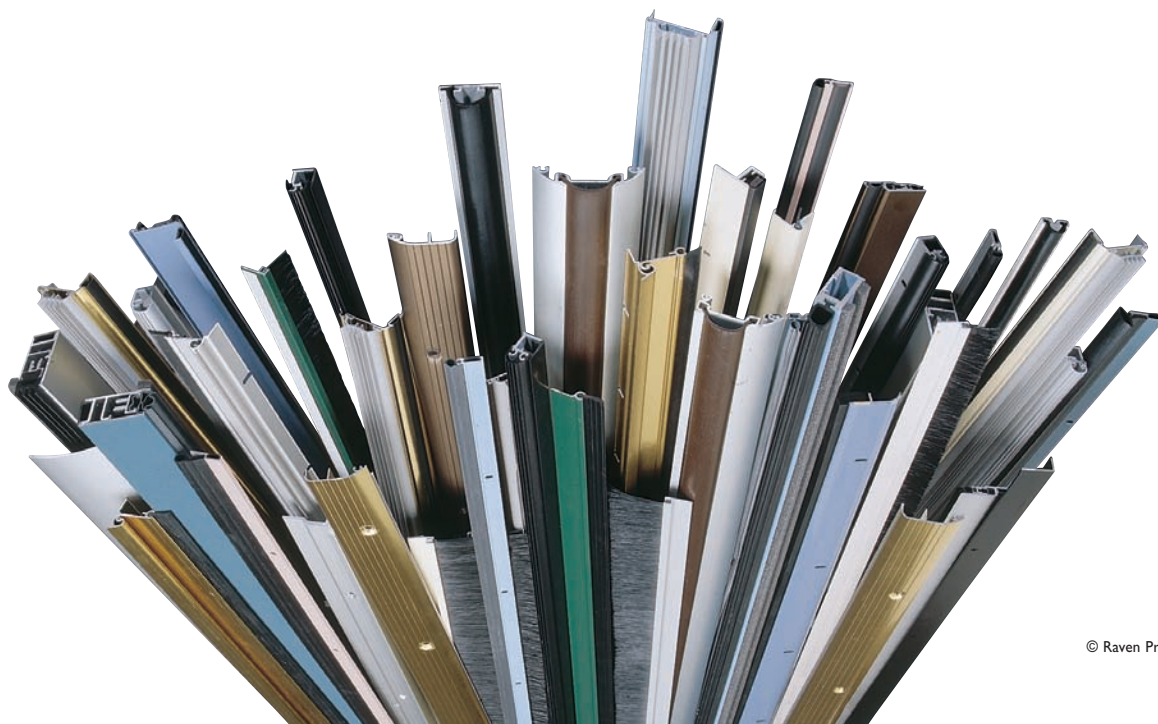
Raven can justifiably claim to have pioneered the development and introduction of innovatively-designed door sealing systems. It was also the first to introduce professional and universally-approved acoustic and smoke seals.

The move into this area came in 1973 at the direct request of architects. Research, development and testing services were commissioned through a specialist acoustic engineering company and sound and smoke tests were conducted by the University of Adelaide to international standards.

Raven's approach to product development is to identify where there's a need for a product or a problem in the industry - and to design a solution.

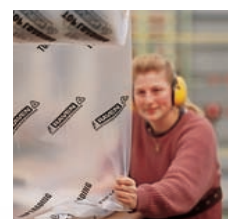
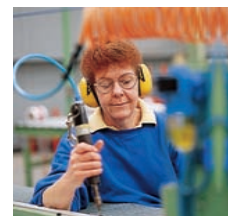
In its quest to achieve and improve on product quality, Raven maintains overall control of every aspect of its range.

Research, design and development teams work at one key site and every stage is overseen - from the prototype of the company's latest invention, to the testing, manufacturing and marketing of it.

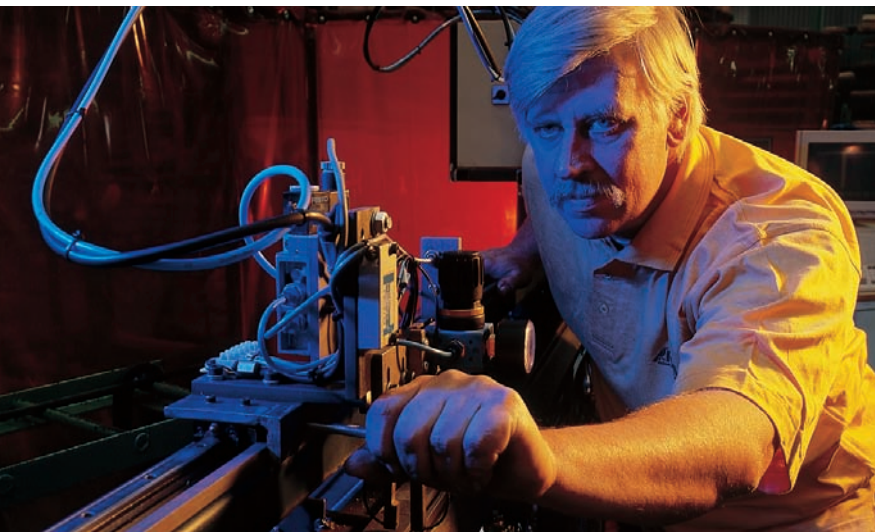


Raven also designs and makes its own specialist equipment for manufacturing its products. All exposed products are given an anodised finish for improved durability and style. Colour matching of aluminium sections - from one metre to one hundred thousand metres - is a standard service. Architectural products are chosen for a number of public, commercial and residential buildings and customers have access to extensive information on Raven systems via the

company's catalogue, data sheets and interactive web site. Many Raven customers use the products as an integral part of their own manufacture. For example, acoustic and fire door manufacturers supply their doors already fitted with Raven seals. With the world becoming a noisier place and with government authorities and public alike expecting greater safety and energy efficiency from buildings and homes, Raven is working to play a key role.



ACCREDITATION TO INTERNATIONAL QUALITY STANDARD ISO9001:2000 HIGHLIGHTS THE COMPANY'S DETERMINATION IN PROVIDING PRODUCTS PROVEN TO BE THE VERY BEST. CONSISTENCY OF MANUFACTURING STANDARDS, CONSTANT DESIGN IMPROVEMENT AND EXCEPTIONAL DELIVERY PERFORMANCE IS UNDERLINED BY THE WORK OF RAVEN'S QUALITY ASSURANCE MANAGER AND ITS ENGINEERS, WHO ARE DIRECTLY CONNECTED WITH THE DESIGN AND PRODUCTION PROCESS.



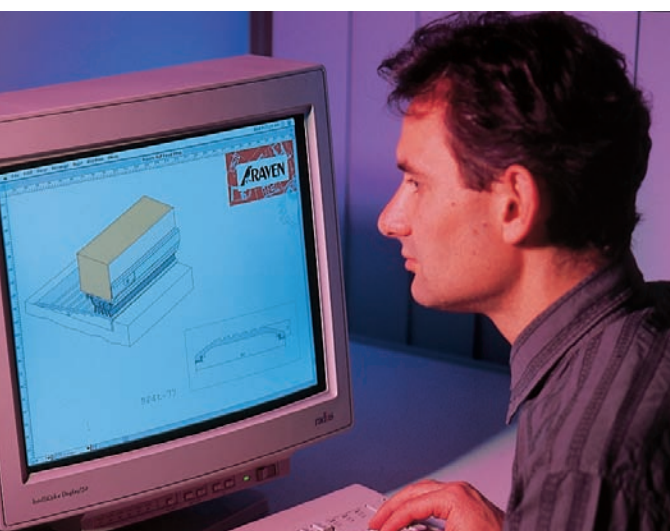
The company also strives to make the selection and assessment procedures for architects and specifiers easier. There is a constant two-way flow of information on product application requirements, modifications and recommended systems. Wherever possible, Raven liaises with the architect or builder to assist in improving overall design and safety, while reducing construction costs. For example, the effectiveness of Raven acoustic seals in hotel rooms has meant that builders have been able to reduce wall thicknesses - leading to lower building costs, bigger floor areas and thus bigger returns from increased accommodation. Such an approach is changing the way buildings are being designed. Raven follows the principle: 'if you want to make the best product, you've got to have the best environment'. This is reflected both in the purpose-built and technologically-advanced manufacturing facilities and its efficient, export-oriented workforce. The loyalty and pride in the company flows through into performance and product quality. A true team spirit pervades the plant and this, together with the computer-monitored production and despatch systems, has ensured that Raven is regarded as the leading supplier of product on a global basis.



A REAL TIME SYSTEM for processing orders is an essential aspect of our highly dependable delivery performance.

Raven designs and constructs its own professionally-approved jigs and testing booths for each product, and runs continuous monitoring procedures during all manufacturing stages. All products are designed to comply with most international building regulations and standards. Raven's free-call technical assistance is helping customers meet their specific objectives. For example, in the area of acoustic, fire or smoke-sealed doors, Raven works closely with door manufacturers to ensure improved system performance and the ability to supply a product which matches exactly the application and specification sought.





At its own factory, all key management and monitoring personnel are located in the heart of the production process, with Raven's Quality Engineer dedicated to maintaining ISO 9001:2000 standards - the Project Engineer developing new or improved machines to raise production efficiency, and the Purchasing and Production Managers overseeing stock and output on a live basis. The testing area conforms with international standards and is used on all Raven products - from retail to architectural. This applies right through, from light duty to heavy duty applications. Design Engineers routinely take seals off production lines for testing or to operate on-line test jigs - to be absolutely sure that they function as intended. Raven welcomes all customers to inspect its facilities. In Australia, product distribution is co-ordinated through architectural hardware merchants and builders' suppliers. Internationally, a large network of distributors handles Raven products, which are supplied by express air freight or shipping container - meaning customers receive specified components within agreed trading terms. It is this combination of quality products, fast delivery times and competitive pricing which is a hallmark of the company.



All production lines are permanently set up to respond immediately to orders. An integrated factory computer system monitors materials handling and stock control - which operates on the 'just in time' process - plus sales on a live basis. Raven prides itself on having a 100% picking rate in both retail and architectural stock lines - predicting exactly the times when certain volumes and types of orders will occur - meaning the customer can rely on year-round fast delivery. Raven's suppliers - from aluminium extruders to rubber seal manufacturers - are seen very much as part of the team, and the company works closely with their technical departments to improve quality and finish of these materials for a superior end product.

INNOVATION, research and the constant desire to improve products is a tradition within the Raven Company.

The Nature of the Problem

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

However, these gaps can also allow the intrusion of;

- sound
 - fire and smoke
 - rain
 - cold draughts, dust and embers
 - light
 - insects and vermin,
- and also the leakage of energy;
- 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 are frequently multi-purpose, sealing against a combination of these 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 System

Since the 1960's Raven has developed seals for door frames and when installed with complimentary seals for the threshold and meeting stiles, will produce optimum "Sealing Systems".

Raven have tested and proven these systems in the field and under laboratory conditions against sound, weather, smoke, and fire.

More information regarding these systems is listed under the relevant sealing section of this catalogue. The latest Raven Pdf interactive catalogue is also available for download from the web site.

Duty Levels

Raven seals have been designed to accommodate a variety of duty levels, classified in this catalogue as light, medium and heavy.

L Light duty seals include those typically used in residential applications or light traffic areas.

M Medium duty seals are used in commercial applications such as office spaces, shops, commercial accommodation or medium traffic areas.

H Heavy duty seals are designed for areas with a high level of use such as public hospitals, airports, factories, shopping centres or areas with a large through-flow of pedestrian and wheeled traffic.

Icons and Symbols

Throughout, icons and symbols have been used to readily identify and make product selection easier.

All seals are designed to meet most codes or standards and in many cases perform more than one function.



Acoustic - Noise



Ambient (cold) Smoke
up to 70°C



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



Fire & Hot Smoke
Fully developed fires
exceeding 600°C and
hot smoke beyond 200°C
(Intumescent Fire Seals)



Insects and Vermin



Weather



Energy, Draughts & Dust



Fire
(approved)



Access and Mobility



Light

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 as listed. (mm)

Single:	1x1000 2x2100
Double:	3x2100
Long Single:	1x1000 2x2750
Long Double:	1x2000 2x2750

Illustrations

The cross-section profiles in this catalogue are drawn to full scale. Note: Owing to slight variations in extrusions, minor differences may occur.

CAD

Detailed drawings and specifications of all Raven seals are available to registered users from the architectural link at our website 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 local regulatory authority standards. Refer [page 10](#).

The aluminium seals in this catalogue essentially consist of two parts: the aluminium carrier and a flexible seal insert.

Dependent on function, these inserts can be;

- solid and closed cell EPDM (synthetic rubber)
- flexible or rigid PVC
- nylon brush filaments
- polypropylene pile
- silicon rubber
- TPR (TPE) (Synthetic Rubber).

Many Raven seals also incorporate a cover strip which conceals the fasteners.

Materials

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

(See finishes [next page](#))

PVC

Raven proprietary grade PVC flexible & rigid extrusions: Highest quality available. Added UV inhibitors. Self Extinguishing grade. Service temperature - 5°C to 70°C.

Silicon Rubber

Raven proprietary grade extruded silicon rubber withstands very high temperatures. Conforms to **BCA Spec. C3.4**, "Smoke Doors 200°C for 30 minutes" Service temperature - 60°C to 230°C. S.E. (Self Extinguishing) where indicated.

E.P.D.M. (SE/B)

(Ethylene Propylene Diene Monomer) 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. The closed cell sponge Raven EPDM strips are extruded in separate dies and are not slit, thus giving a smooth, tough, non-porous skin. Where designated: Classified SE/B (self extinguishing / burn) rate to SAE J 369, ISO 3795 Service temp.- 40°C to 70°C.

TPR

(Thermo Plastic Rubber)

Also referred to as TPE (thermo plastic elastomer) Similar to and exceeds some performance characteristics of E.P.D.M. rubber. Added UV inhibitors. 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.

Mill finish

Mill finish is the raw finish of the aluminium (not anodised), as manufactured by the mill.

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 be ordered for aluminium and RIGID PVC extrusions.

Fixing

The majority of Raven seals are fastened using zinc plated, self tapping, cross recess head screws of the appropriate size. These are supplied with the product. 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 the normal use of the door?
- is it compatible with the construction of the door and other hardware?
- is it suitable for the projected level of use, ie. light, medium or heavy?

You may find that a door will be required to fulfil several functions at once, such as security, fire and weather control. 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 external, internal, residential, 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 only active leaf
- rebated or plain meeting stiles
- revolving
- sliding
- bi-fold
- pivot hung, single or double
- wood, metal, glazed
- roll-up garage door
- tilt-up garage door
- windows: casement, sash, hopper.

Ordering

Lengths

Raven seals are available in Stock lengths and Standard Door Set sizes.

Specify

Product number, Finish. Satin Clear or Medium Bronze anodise. 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 sealing 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. (Refer www.raven.com.au)

Returns and Allowances:

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

Ordering Enquiries

Refer back cover.

Index Contents & Applications

Refer **pages 95 - 96.**

Guarantee

Raven door seals are guaranteed for 2 years against defects in materials and workmanship, provided seals are fitted in accordance with manufacturer's specifications. Defective goods will be replaced. However, NO claim for work done thereon or damage incurred will be allowed.

All technical data and recommendations, although based upon our research and believed to be reliable, are given in good faith but without warranty. It is understood that users will independently determine the suitability of products shown herein for their purposes and as such Raven Products Pty Ltd accepts no liability.

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Raven Seals are designed to meet the most rigorous International Standards and Building Codes. Throughout, icons and symbols have been used to readily identify and make selection easier. Raven Seals, in the main, have been tested to British, ISO, Australian and New Zealand Standards, which in many cases are the same or similar to US Standards and Building Code requirements. Specifiers should determine the suitability of products shown or contact Raven's Technical Department for assistance.



AUS/NZ

States and Territories of Australia apply their own Building Control, Acts and Regulations. All States and Territories have adopted the Building Code of Australia (BCA). Like many overseas building codes, the Building Code of Australia (BCA), is increasingly a performance based building code. New Zealand Building Code is referencing NZ BIA (Building Industry Authority Approved Documents).



UK/EU

British requirements: Building Regulations for England & Wales, Scotland and Northern Ireland apply. Conformance for each area can be established by the relevant Approved Documents ie. *Approved Document B* (England & Wales), Scottish Technical Standards, *Technical Booklet E*, to the Building Regulations (Northern Ireland).



USA

Variation between States and County Councils exists. Mainly adopted are 2000 International Building Code and 2000 International Residential Code.

Weather - Energy



Class 2-9 Buildings
Health & Amenity. BCA Sect. F.
Damp & Weatherproofing FO1; FP1.4 Part F1.13
Bushfire Areas BCA Sect. G. Part G5
Energy Efficiency Installations Part I2.
Energy Efficiency - Building Sealing.
BCA Sect. J. JPI(f), Part J3. J3.4
Class 1 & 10 Buildings. Housing Provisions
Damp & Weatherproofing BCA Sect.2 Part 2. P2.2.2.
Fire Safety Part 2.3 **Bushfire Areas**;
P2.3.4 Part 3.7.4 Table 3.7.4.1 (external doors)
Energy Efficiency BCA 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 1939 (IEC529) protection/enclosures for electrical equipment IP Code,
AS 1530.7 Smoke control door and shutter assemblies.
NZ BIA Approved Document H (energy efficiency).

Building Regulations Approved Document L1 & L2, BS 7386, BS 8104, CIBSE TM 23:2002
Testing of building for leakage (Part L1 & L2 requirements),
BS 5368 Methods of testing windows (various parts - air permeability, watertightness, wind resistance),
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),

IBC 2000 International Building Code, Residential Code,
ANSI/ASHRAE/IESNA Standard 90 P Energy conservation in new building design Section 4,
ASTM E283 Rate of air leakage through exterior windows, curtain walls and doors.

Noise - Acoustic



Class 2-9 Buildings
Sound Transmission & Insulation;
BCA Sect. F. Part F. FO5, FP5.2, FP5.3 FV2.2 F5.0. F5.5 (b)
Class 1 & 10 Buildings. Housing Provisions
Health & Amenity BCA Sect.2;
Part 2.4. O2.4.6. **Sound Insulation**, F2.4.6, P2.4.6 V2.4.6
Health & Amenity BCA Sect.3.8. **Sound insulation**
3.8.6 (appropriate performance requirements (a) (b))
AS1191 (ISO 140.3) Acoustics - Measurements of airborne sound transmission loss etc.
AS1276 Acoustics - Rating of sound insulation in buildings etc.
AS2253 measurement of the reduction in airborne sound transmission in buildings.

NZ BIA
Approved **Document G** (airborne and impact sound)

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**)

IBC 2000 International Building Code, Residential Code,
ASTM E90 Standard method for laboratory measurement of airborne sound transmission loss of door panels and door systems (also **E1408**),
ASTM E413 Classification for rating sound insulation,
ASTM E 336 Standard test for measurement of airborne sound insulation in buildings.

Fire & Smoke



Class 2-9 Buildings
Fire Resistance **BCA** Sect. C., Part C3, C3.0 to C3.13., Spec.C2.5, Spec.C3.4, Part D. D2.6, D2.7, D2.11
Smoke Hazard Management, **BCA** Sect. Part E.
Bushfire Areas;
BCA Sect. G. Part G5
Class 1 & 10 Buildings. Housing Provisions
Performance Provisions **BCA** Sect.2.
Fire Safety Part 2.3 **Bushfire Areas**;
P2.3.4 Part 3.7.4. 3.7.4.1 (external doors)
Acceptable Construction Sect. 3. Part 3.6 glazing
AS1530.4 Fire resistance tests of elements of building construction,
AS/NZS1905.1 Components for the protection of openings in fire resistant walls,
AS1851-6 and **AS1851** Section 17 & 18 Maintenance of fire protection equipment,
AS1530.7 Smoke control door and shutter assemblies
AS1735.11 Lifts, escalators and moving walks - Fire rated landing doors.

NZ BIA Approved **Document C** (Fire Safety).

Building Regulations Approved Document B, ISO834 Fire resistance test - Elements of building construction (various parts),
ISO3008 Fire resistance test - Door and shutter assembly,
BS EN 1634-1 2000 Fire resistance tests for doors 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 Part 22 Methods for determination of the fire resistance of elements of construction of non-load bearing elements of construction,
BS 476 Section 31.1 Method for measuring smoke penetration through door sets & shutter assemblies,
BS 8214 Code of practice for fire door assemblies with non metallic leaves,
ISO CD5925-1 Fire test - Evaluation of performance of smoke control door assemblies; Part 1 Ambient and medium temperature test,
ISO DIS 12472 Fire resistance test - Determination of the efficiency of the intumescent seals with respect to the fire resistance of timber door assemblies.

IBC 2000 International Building Code, Residential Code,
NFPA 101 Life safety Code,
NFPA 105 Recommended practice for the installation of smoke and draft control door assemblies,
ASTM E 2074 Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side- Hinged and Pivoted Swinging Door Assemblies.
UL 108 Fire tests of door assemblies,
UL 10C Fire tests of door assemblies under positive pressure,
UBC 7.210 Smoke and draft control door assemblies,
UL 1784 Standard for safety for air leakage tests for door assemblies,
ASTM E 152 Methods of fire test of door assemblies,
NFPA 252 Standard method of fire tests of door 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**.

Access & Mobility



Class 2-9 Buildings
BCA Sect. D2, D3, Part D2., D2.15, Spec. D1.12 (f)
Class 1 & 10 Buildings. Housing Provisions
Performance Provisions:
BCA Sect.2, Part 2.5 (thresholds at door ways)

AS 1428 Design for access & mobility
AS1735.12 Lifts escalators & moving walks - Facilities for person with disabilities,

NZ BIA Approved **Document D** (Access routes)

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 2001 Design of buildings and their approaches to meet the needs of disabled people. Code of Practice.

IBC 2000 International Building Code, Residential Code & **ADAAG**
ANSI 117 Building access for people with disability,



Associate Member



A service to specifiers in the UK.



Architectural Hardware Industry Association Inc.



Architectural and Specialist Door Manufacturers Association



STANDARDS AUSTRALIA

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Glossary of Terms



Active Door

(in a pair of doors)
The leaf that opens first and the one to which the lock is applied.

Astragals

A member or combination of members applied to one or both doors of a pair at their meeting edges (meeting stiles). The astragal closes the clearance gap for the purpose of either providing a weather seal, minimising the passage of light between the doors, or retarding the passage of smoke or flame during a fire. Also known as "Meeting Stile Seals". Astragal is a term used for the seal that seals the central join of two swinging doors.

Backset (of a lock)

A term used in referring to the horizontal distance from the face of the lock to the centreline of the cylinder, keyhole or knob hub.

Broad Butt Hinge

A wider version of the butt hinge.

Butt Hinge (or Butt)

A hinge morticed into both the door and frame.

Centre Pivot

A special type of hanging device for heavy-duty doors that usually swing both ways (double acting).

Door Closer

A device attached to the top of the door, either on the surface (or Door Check) or morticed to regulate and control the operation of the door.

Door Stop

A device to limit the opening swing of a door. Also, that part of a door frame against which the door closes.

Double-Acting Door

A door equipped with hardware that permits it to swing to either side of the plane of the frame.

Escutcheon (Plate)

An elongated plate, either protective or ornamental.

Hinge Jamb

Vertical member of a door frame to which the hinges are applied.

Hinge Stile (of the door)

The door stile to which the hinges are attached.

Jamb

The vertical member forming the side of a door, window or wall opening frame. The hinge jamb is the jamb to which the hinges and pivots are installed. The strike jamb is the jamb in which a strike may be installed and away from which the door or window swings. A blank jamb is one that has not been prepared to receive hardware.

Labelled Door (or Frame)

A door or frame that conforms to all the applicable requirements, in respect to fire resistance, of nationally recognised testing authority, and bears a label designating that fire rating. Also known as Fire Rated Doors.

Latchbolt

A lock component having a bevelled end that projects from the lock front, but may be forced back into the lock case by end pressure or drawn back by action of the lock mechanism. When the door is closed, the latchbolt projects into a hole provided in the strike, holding the door in a closed position.

Leaf (of a pair of doors)

One of the two doors forming a pair or a double door.

Lock Stile (of a door)

The vertical member of a door to which the lock mechanism is applied, as distinguished from the hinge stile.

Meeting Stile

The vertical edge of a door or window, in a pair, which is adjacent to the other door or window.

Mortice

An opening, recess or cutout made to receive a lock or other hardware. Also the act of making such an opening.

Rebate

A term used to define that portion of the door frame into which the door fits. Also a term used to describe the abutting edges of a pair of doors or windows so shaped as to provide a tight fit. One half of the edge projects beyond the other half, usually by 13mm.

Sequence Closer

A door closer that automatically closes a pair of fire rated doors in sequence, so as to ensure correct latching.

Sill

The stone or wood member across the bottom of the door or window opening. Also the bottom member on which a building frame rests (sill plate).

Stile

The vertical members of a door to the lock and hinges are applied.

Threshold Plate

A strip fastened to the floor beneath a door. May be required to cover the joint of two types of floor materials where they meet.

Weather Strip

Narrow strips made of metal, or other material, designed so that when installed at doors or windows, it will retard the passage of air, moisture or dust around the door or window sash.

Acoustic Door Seals

Helping reduce the amount of sound that passes through a doorway 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. Raven acoustic seals provide an excellent barrier to airborne sound and help ensure that the acoustic attenuation provided by a doorset (the frame and doorleaf along with the seals) is, in many cases, equivalent to the wall or partition into which it is installed.

Raven acoustic seals also help

isolate buildings from external noise, for example, from 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, creches, 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: **BCA Sect. F 5.5** 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.

The performance of Raven door seals are routinely tested by internationally accredited organisations.

Acoustic Door Fabricators

Increasingly use Raven Door sealing systems in their door sets to achieve and maintain high ratings. Some are detailed on [pages 19 and 20](#).

Techwide Engineering LTD Manufacturing Acoustic rated doors featuring Raven seals, which have been independently tested and certified to **STC 47**.

Performance / Testing

Raven acoustic sealing systems are tested in accordance with **AS1191 (ISO 140.3)** and rated to **AS 1276.1 (ISO 717.1)** by N.A.T.A. accredited Vipac Engineers and Scientists Ltd.

The tabulated results are presented as the Sound Transmission Loss (STL) in one

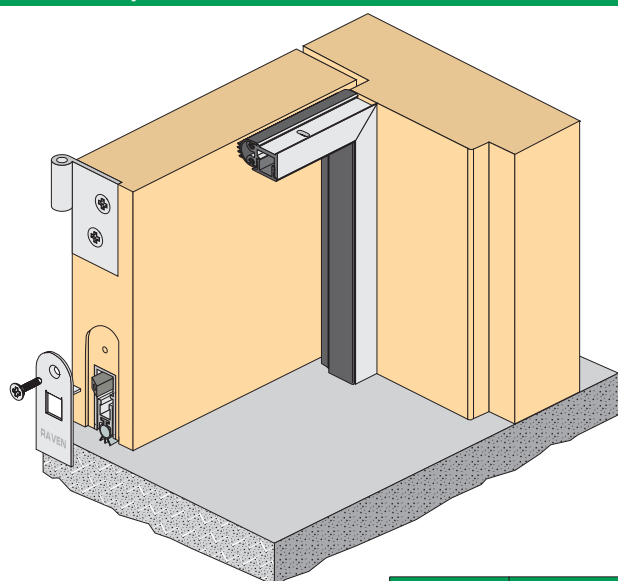
third octave bands and the Weighted Sound Reduction Index (Rw) for each of the door/seal combinations.

Note: Higher acoustic values of up to **STC 47** 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. 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.

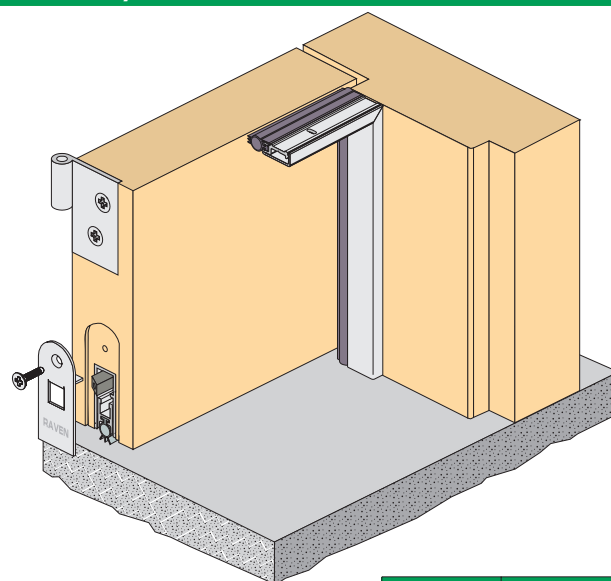
RP8 Si Fully Morticed & RP10



	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP8 Si fully morticed/RP10	30	30	28.0	32	32	29.6

		Frequency (Hertz) vs STL (dB)															
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
35mm door (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	34.8
44mm door (dB)		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	35.5

RP8 Si Fully Morticed & RP94 Si



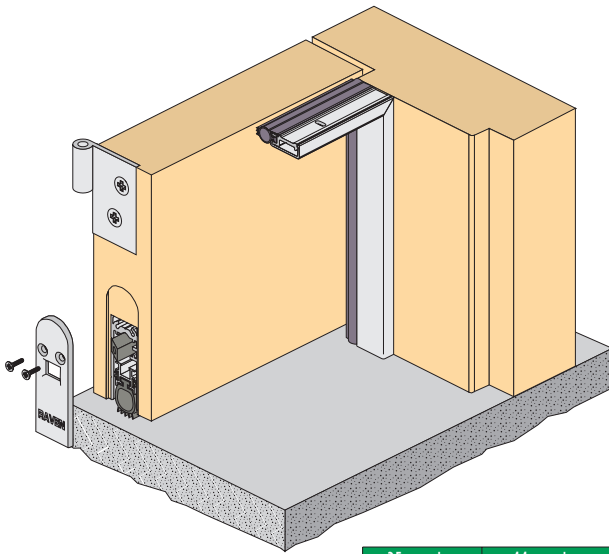
	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP8 Si fully morticed/RP94 Si	29	29	27.3	30	30	28.6

		Frequency (Hertz) vs STL (dB)															
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
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	33.1	34.5
44mm door (dB)		21.3	20.4	23.7	25.9	25.1	27	28.6	28.3	26.5	30.2	29.2	28.9	30.3	31.1	33.8	34.7

Acoustic Sealing Single Door's



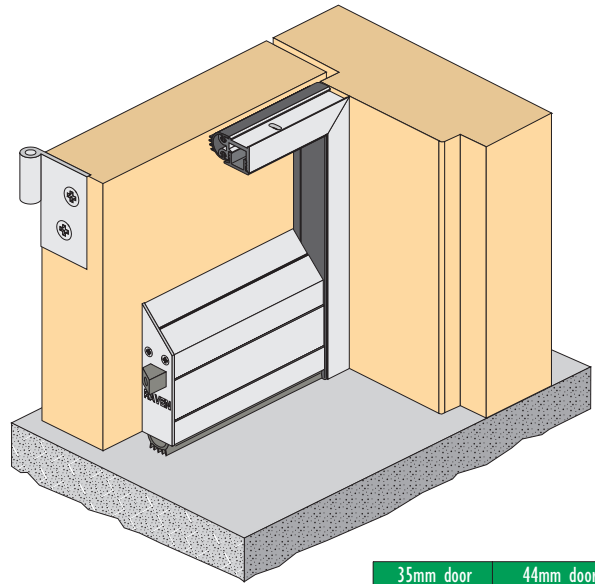
RP99 Si Fully Morticed & RP94 Si



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si fully morticed/RP94 Si	28	28	26.8	30	30	28

Frequency (Hertz) vs STL (dB)																
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500
35mm 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	30.6
44mm 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

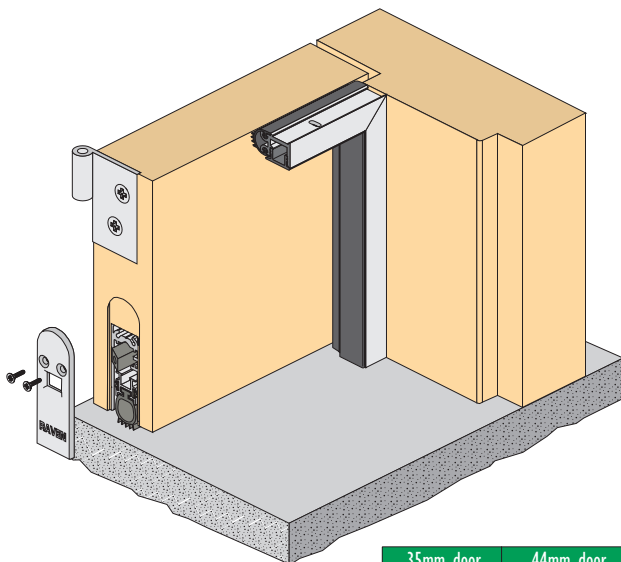
RP99 Si Face Mounted & RP10



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si face mounted/RP10	30	30	28.7	32	32	30.4

Frequency (Hertz) vs STL (dB)																
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500
35mm door (dB)		20.7	21	20.4	26.8	22.2	26.7	24.4	25.3	27.9	28.4	28.9	30.2	31.9	34.1	35.5
44mm 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	35.2	36.8

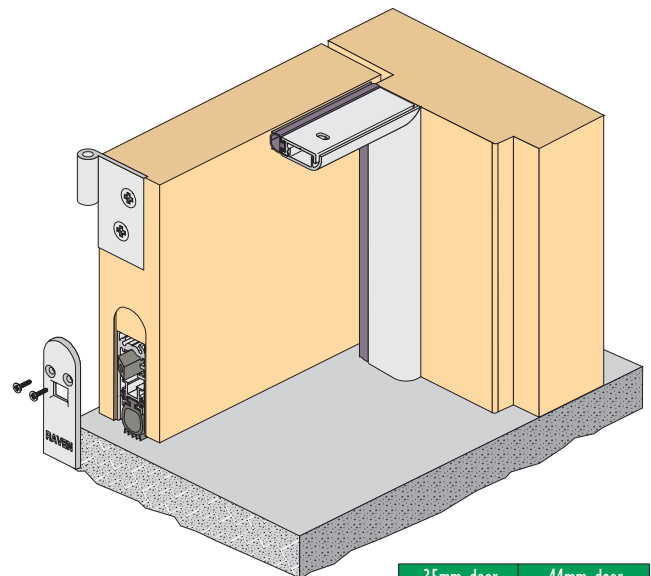
RP99 Si Fully Morticed & RP10



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si fully morticed/RP10	30	30	28.7	33	32	30.4

Frequency (Hertz) vs STL (dB)																
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500
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
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	36.9

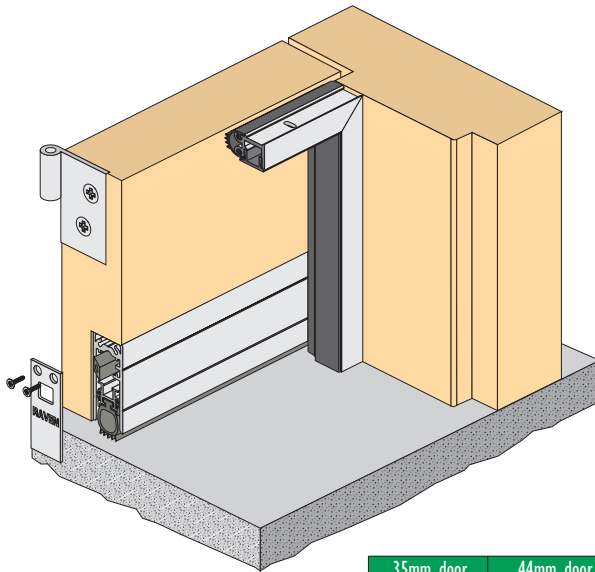
RP99 Si Fully Morticed & RP93 Si



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si fully morticed/RP93 Si	30	30	28.7	32	32	30.4

Frequency (Hertz) vs STL (dB)																
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500
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
44mm door (dB)		21.5	20.6	23.7	26	25.2	27.5	29	29.2	29.1	30.5	31	31.8	33.7	35.5	36.8

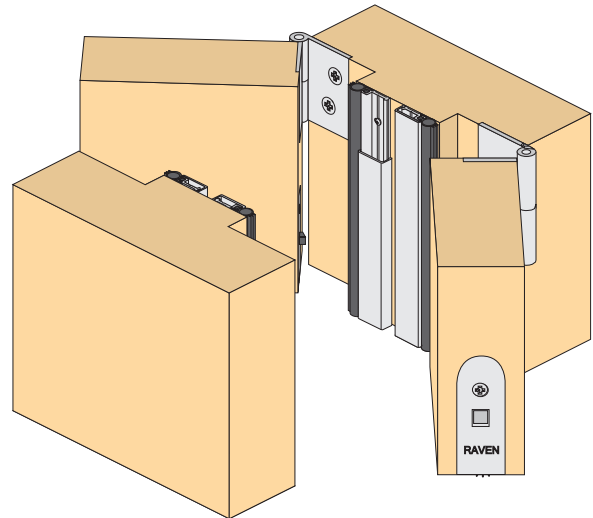
RP99 Si Semi Morticed & RP10



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si semi morticed/RP10	30	30	28.6	32	32	30.3

		Frequency (Hertz) vs STL (dB)															
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
35mm door (dB)		20.4	21	20.6	26.7	22.2	26.7	24.4	25.3	27.9	28.4	28.9	30	31.9	34.3	35.5	37.2
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

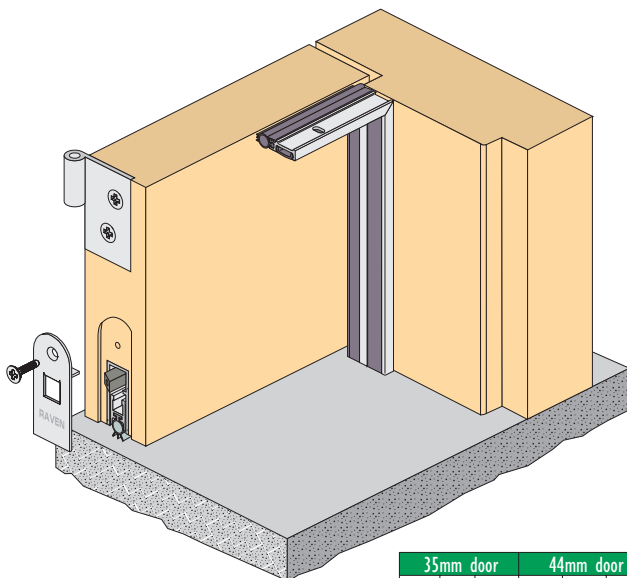
RP8 Si x 2 & RP94 Si x 2



	40mm door		
	STC	R _w	STL(dB)
No seals	24	28	24.5
Fully caulked door	40	40	35.8
RP8 Si x 2/RP94 Si x 2	38	38	35.7

		Frequency (Hertz) vs STL (dB)															
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
35mm door (dB)		25.5	22	28.5	35.5	34	37.5	40.5	35	34.5	36	38	N/A	37	39.5	41	41.5
44mm door (dB)		25.5	22	28.5	35.5	34	37.5	40.5	35	34.5	36	38	N/A	37	39.5	41	41.5

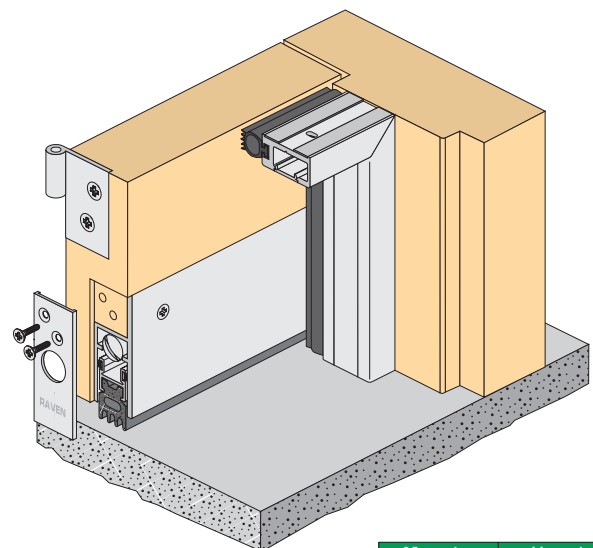
RP8 Si Fully Morticed & RP78 Si



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP8 Si fully morticed/RP78 Si	30	30	28.1	32	32	29.6

		Frequency (Hertz) vs STL (dB)															
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
35mm door (dB)		20.7	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	35.1
44mm door (dB)		21.6	20.6	23.2	26	25.2	27.1	29.1	29.9	28.3	30.5	30.8	30.9	32.1	33.2	35	35.6

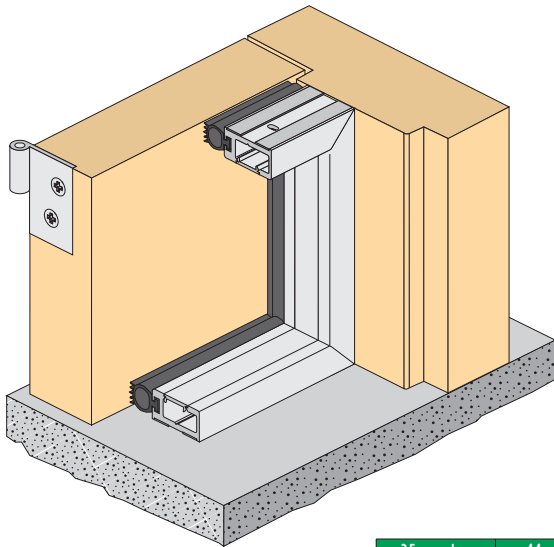
RP38 Semi Morticed & RP47



	35mm door			44mm door		
	STC	R _w	STL(dB)	STC	R _w	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP38 semi morticed/RP47	30	30	28.6	32	32	30.3

		Frequency (Hertz) vs STL (dB)															
	Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
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	35.3	37
44mm door (dB)		21.5	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

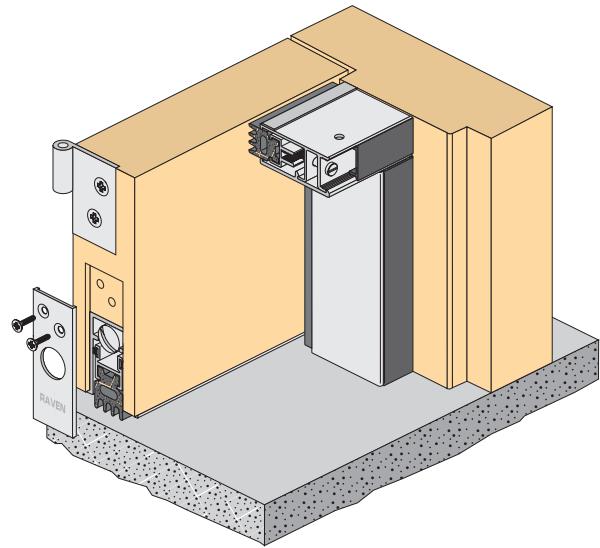
RP47 All around (bulk head)



	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP47 all around (bulk head)	30	30	28.6	32	32	30.2

Frequency (Hertz) vs STL (dB)																
Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
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
44mm door (dB)	21.5	20.5	23.2	26	25.2	27.4	29	29.9	29.4	30.5	31	31.6	32.7	34.8	36.5	37.5

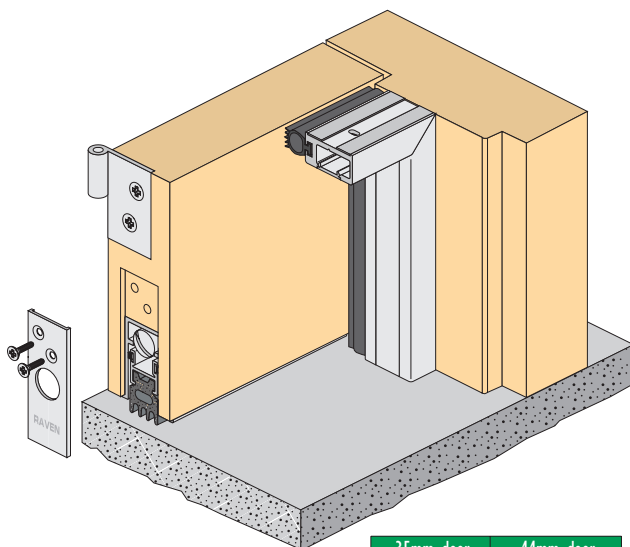
RP70 Fully Morticed & RP24



	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP70 fully morticed/RP24	29	30	27.4	31	32	28.9

Frequency (Hertz) vs STL (dB)																
Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
35mm door (dB)	20.7	21	20.4	26.8	22.2	26.3	24.3	25.2	27.9	28.4	28.8	30	31.2	33.1	33.8	31.8
44mm door (dB)	21.6	20.6	23.2	26	25.2	27	28.8	29.9	29.6	30.5	31	31.6	32.3	34	34.6	32

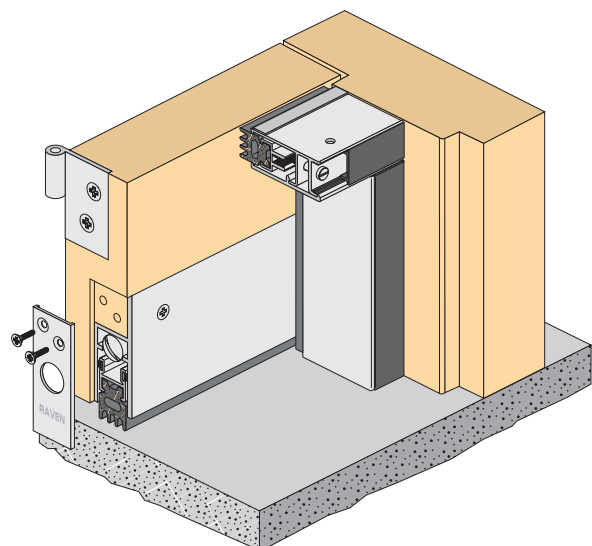
RP70 Fully Morticed & RP47



	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP70 fully morticed/RP47	30	30	28.0	32	32	29.5

Frequency (Hertz) vs STL (dB)																
Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
35mm door (dB)	20.7	21	20.2	26.6	22.1	25.8	24.1	25.1	27.7	28.4	28.8	30.2	30.8	32.3	33.8	35.4
44mm 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

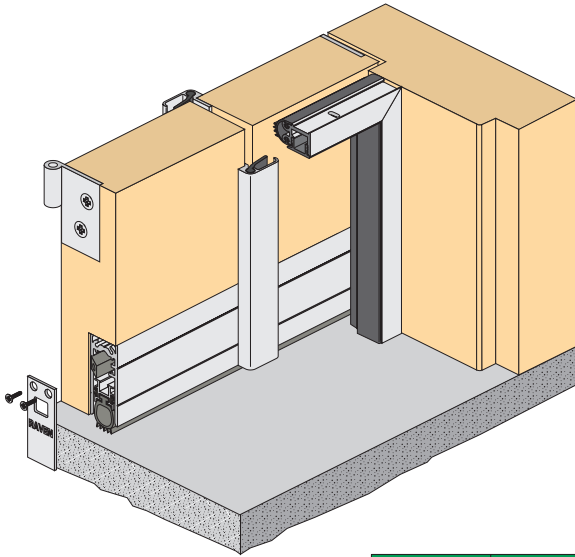
RP38 Semi Morticed & RP24



	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP38 semi morticed/RP24	30	30	28.7	33	32	30.3

Frequency (Hertz) vs STL (dB)																
Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
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
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	37.8

RP99 Si Semi Morticed x 2 & RP10 & RP16 x 2

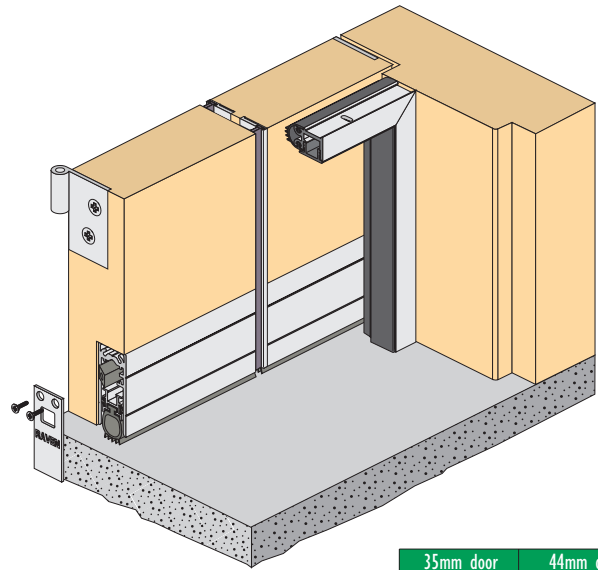


	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si semi morticed x 2 / RP10 & RP16 x 2	30	30	28.6	32	32	30.2

Frequency (Hertz) vs STL (dB)

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
35mm door (dB)	20.5	20.8	20.7	26.7	22	26.6	24.3	25.3	27.9	28.5	28.8	30.1	31.8	34.1	35.3	36.8	36.9	36.8
44mm 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

RP99 Si Semi Morticed x 2 & RP10 & RP71 Si x 2

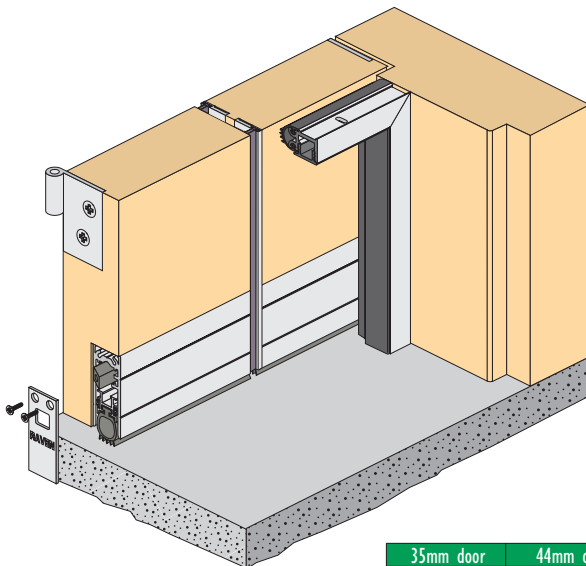


	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si semi morticed x 2 / RP10 & RP71 Si	30	30	28.5	32	32	30.1

Frequency (Hertz) vs STL (dB)

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
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

RP99 Si Semi Morticed x 2 & RP10 & RP71 x 2

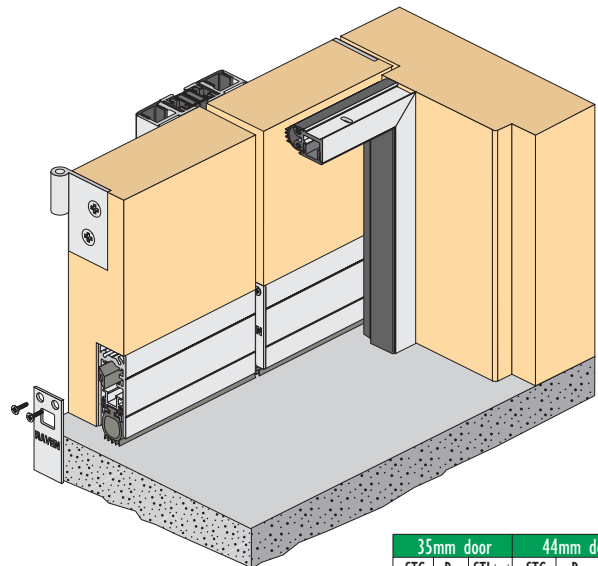


	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si semi morticed x 2 / RP10 & RP71 x 2	30	30	28.7	32	32	30.3

Frequency (Hertz) vs STL (dB)

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
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

RP99 Si Semi Morticed x 2 & RP10 & RP85 x 2

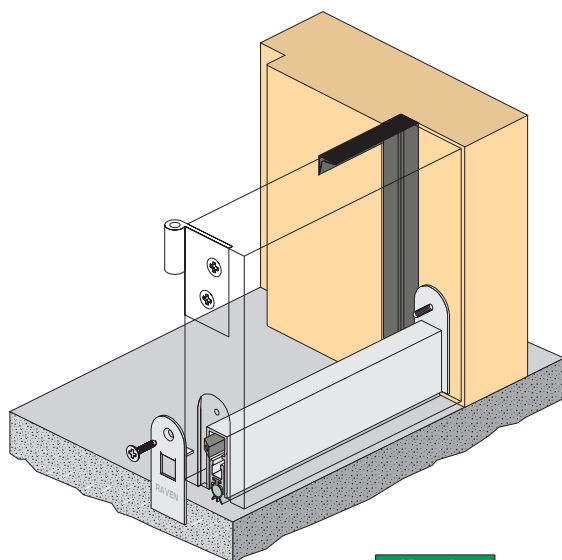


	35mm door			44mm door		
	STC	Rw	STL(dB)	STC	Rw	STL(dB)
No seals	17	18	17.2	15	16	15.5
Fully caulked door	30	30	28.8	33	33	30.5
RP99 Si semi morticed x 2 / RP10 & RP85 x 2	30	30	28.5	32	32	30.1

Frequency (Hertz) vs STL (dB)

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
35mm door (dB)	20.3	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)	21.1	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

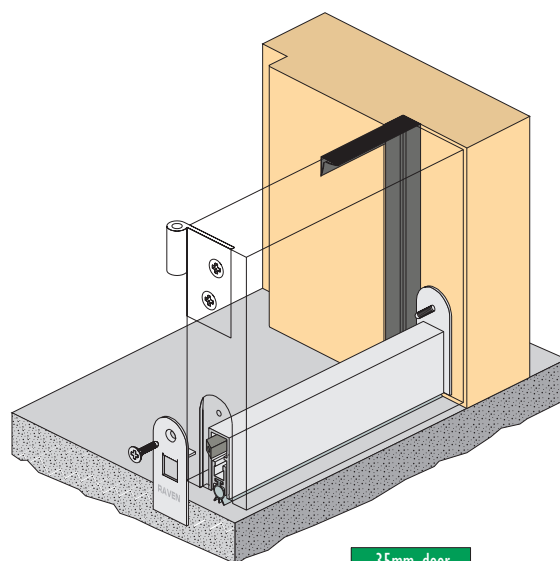
RP8 Si Fully Morticed & RP120



35mm door			
	STC	Rw	STL(dB)
No seals	23	23	21
Fully caulked door	33	33	30.4
RP8 Si fully morticed/RP120	31	31	29.7

Frequency (Hertz) vs STL (dB)																		
Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
44mm door (dB)	19.5	23.9	28	29.5	30.5	30.5	31.9	31	29.8	28	28.2	30	31.8	33.3	34.1	35.2	37	38.5

RP8 Si Fully Morticed & RP150



35mm door			
	STC	Rw	STL(dB)
No seals	23	23	21
Fully caulked door	33	33	30.4
RP8 Si fully morticed/RP150	31	31	30.3

Frequency (Hertz) vs STL (dB)																		
Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
44mm door (dB)	23.3	24.1	26.8	29.7	29.8	31.2	32.4	32.7	32.6	29.2	29.2	29.9	32.0	31.9	32.6	33.4	34.1	35.8

Acoustic Heavy Duty
Fully Adjustable Door Sealing System

An effective combination of seals for solid core broad 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;

Door Frame
RP24

page 56

Door Bottom Seal
RP38
(plain meeting stiles)

page 34

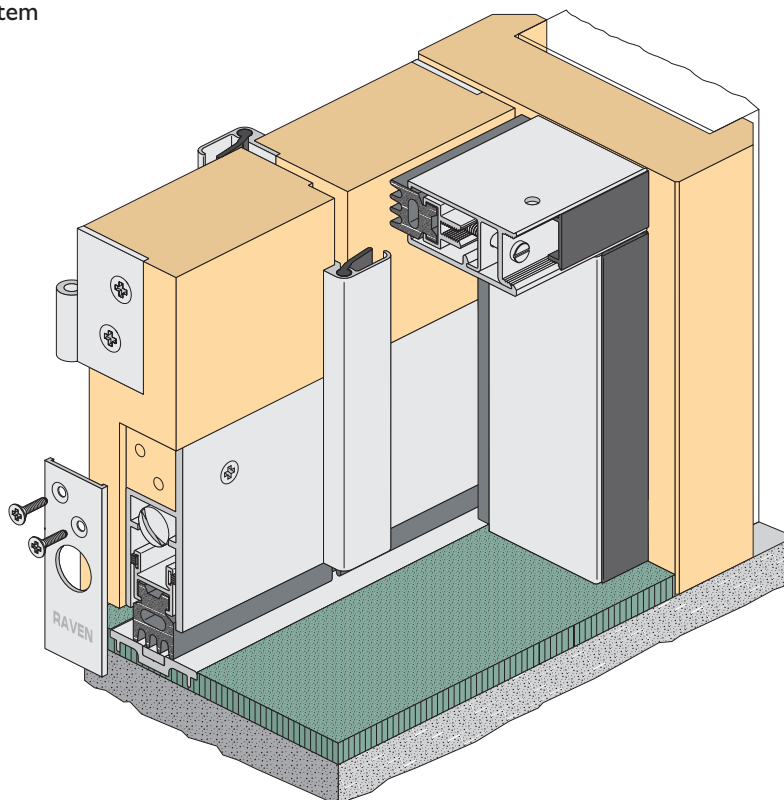
Astragal
RP16 Si or
RP71
(if both leaves are active)

page 66

page 67

Threshold Plate
RP66 recommended

page 50



Acoustic Heavy Duty

Door Sealing System

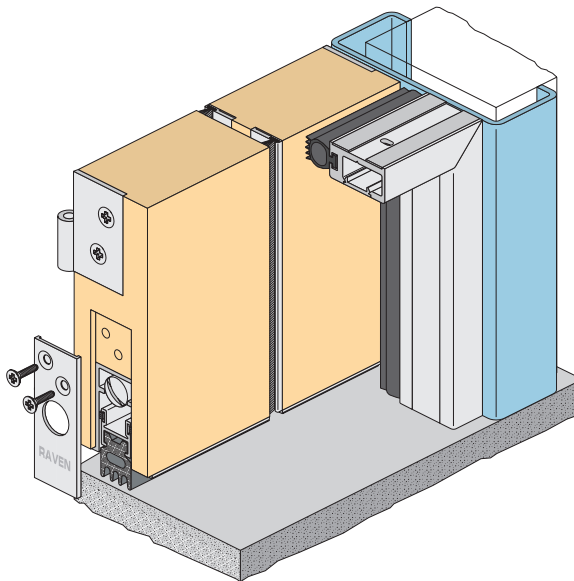
An effective combination of seals for solid core broad butt hinged doors is;

Door Frame
RP47 Si page 58

Door Bottom Seal
RP70 or page 36
RP99 Si (morticed) page 38

Astragal
RP71 page 67
(if both leaves are active)
or **RP16 Si** page 66
(plain meeting stiles)

Threshold Plate
RP66 optional page 50
(not illustrated)



Acoustic Medium Duty

Door Sealing System

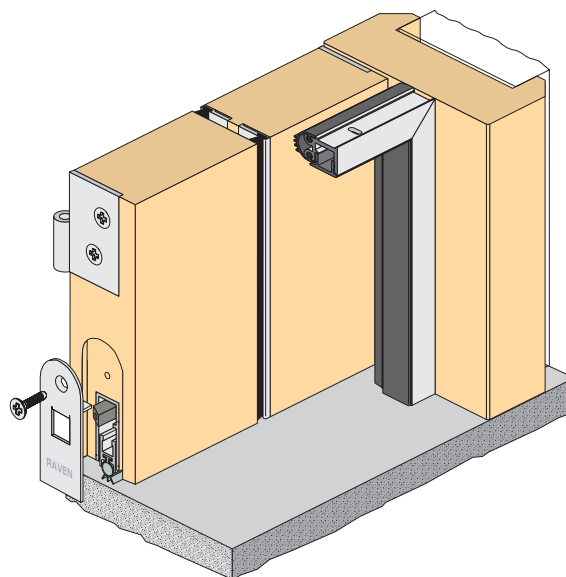
An effective combination of seals for solid core broad butt hinged doors in situations such as offices, school rooms, hotel rooms and consulting rooms is;

Door Frame
RP10 page 55

Door Bottom Seal
RP8 Si page 33

Astragal
RP71 or page 67
RP16 Si page 66

Threshold Plate
RP66 optional page 50
(not illustrated)



Clean Room (Acoustic)

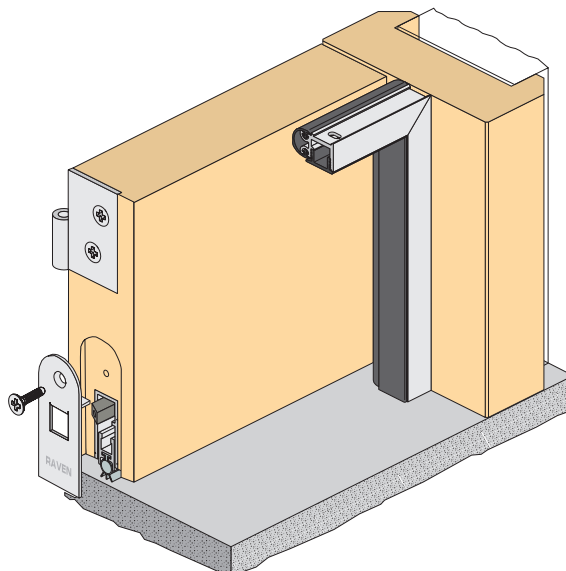
Door Sealing System

An effective combination of acoustic seals for a clean room, broad butt hinged door is;

Door Frame
RP84 Si page 60

Door Bottom Seal
RP8 Si page 33

Threshold Plate
RP96 (optional) page 51
(not illustrated)



Acoustic Seals

for Acoustically Designed Doors



Acoustic Door

Fabricators

Acoustic Door Fabricators increasingly use Raven Door sealing systems in their door sets to achieve and maintain high ratings.

Some are detailed below

Techwide Engineering LTD Manufacture Acoustic rated doors featuring Raven seals, that have been independently tested and certified to STC 47 (Rw47).

NCO HOKLAS CERTIFIED TIMBER AND METAL ACOUSTIC DOORS.

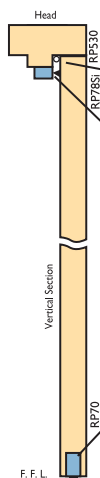
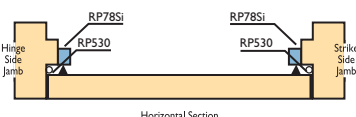
The acoustic tests below have been carried out in a HOKLAS Accredited laboratory registered by the Hong Kong Accreditation Service, recognised by The National Association of Testing Authorities.(NATA)

These acoustic tests have been conducted to **BS EN ISO 140-3 = 1995(E)** to which the laboratory is registered, in accordance with the terms of H.K.A.S.

DATA REPRODUCED BY COURTESY OF Techwide Engineering LTD. (Hong Kong)

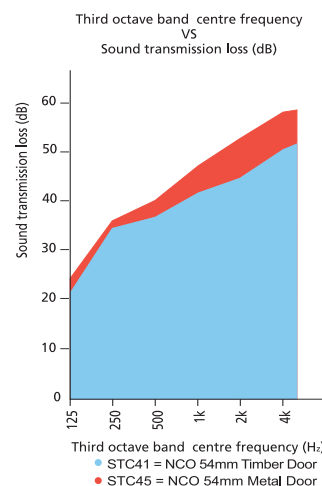
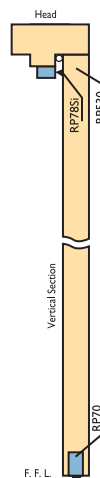
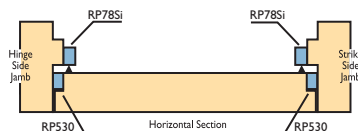
STC 41 TIMBER DOOR

Single Leaf 54mm thick
Perimeter Frame: Double Seal
Raven RP78Si
and RP530
Door Bottom Seal Raven RP70



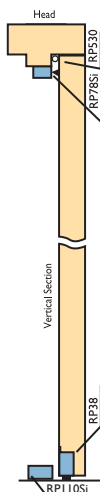
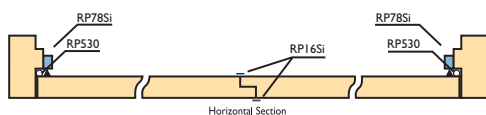
STC 45 METAL DOOR

Single Leaf 54mm thick
Perimeter Frame: Double Seal
Raven RP78Si
and RP530
Door Bottom Seal Raven RP70



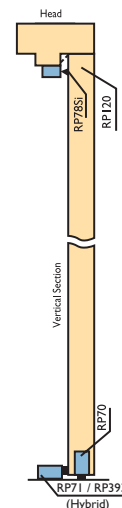
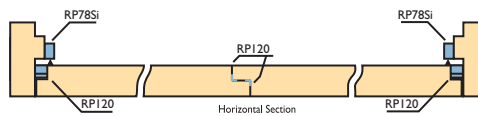
STC 41 TIMBER DOOR

Double Leaf 54mm Thick
Perimeter Frame: Raven RP530, RP78Si
Door bottom seal Raven RP38
Meeting Stile: Raven RP16Si f.f.*
Raven RP16Si r.f.*



STC 45 DOOR

Double Leaf 54mm thick
Perimeter Frame: Double Seal
Raven RP78Si
and RP530
Door Bottom Seal Raven RP70, RP71/RP393 (Hybrid)
Meeting Stile: Raven RP120 f.f.*
Raven RP120 r.f.*



*f.f = Front Face
*r.f = Rear Face

Refer "Full Test Data" next page.

NCO HOKLAS CERTIFIED TIMBER AND METAL ACOUSTIC DOORS.

Raven Door Seal					Frequency (Hertz) vs STL (dB)																			
Door Bottom	Perimeter		Threshold Seal	Meeting Stile	STC	RW	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
100mm thick brick wall																								
NO OPENING					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
50mm thick Single Leaf Solid Timber Core Door																								
NO DOOR SEAL					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	23.1	21.6	23.0	21.9
*FULLY CAULKED					34.0	35.0	17.2	26.0	28.4	27.0	29.6	30.5	30.5	27.9	31.2	31.2	33.1	33.0	36.8	39.1	39.3	41.1	43.1	45.1
RP70	RP530	--	--	--	33.0	33.0	17.5	27.9	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	35.1	36.0	36.7
RP38	RP530	--	--	--	33.0	33.0	25.2	28.0	27.3	31.9	28.4	29.6	29.0	31.0	31.0	30.7	30.3	31.8	33.5	36.1	36.4	37.1	36.8	34.6
RP70	RP120	--	--	--	33.0	34.0	20.4	27.5	22.9	30.8	27.0	27.7	29.3	31.0	30.4	31.7	30.5	31.4	34.7	37.1	39.1	39.2	40.2	40.5
RP70	RP530	--	RP110Si	--	34.0	34.0	19.4	27.4	28.8	31.4	30.3	31.4	30.4	29.0	30.8	31.2	32.3	31.8	35.4	37.3	37.9	38.1	38.5	38.6
RP70	RP530	RP78Si	--	--	33.0	34.0	22.2	25.0	23.0	29.2	27.2	27.1	29.0	31.9	31.4	31.9	31.8	31.6	34.4	38.1	39.5	39.7	41.0	40.9
RP70	RP530	RP78Si	RP117Si	--	35.0	34.0	25.8	29.9	26.1	29.9	30.6	30.4	29.5	30.2	33.6	33.6	32.7	34.5	36.1	39.1	39.8	40.4	41.6	42.4
53mm thick Single Leaf Proprietary Acoustic Timber door (High Density Core)																								
RP70	RP530	RP78Si	RP117Si	--	37.0	38.0	18.3	30.0	31.7	32.9	31.2	32.2	33.9	33.2	34.0	34.1	35.0	36.0	38.2	42.2	43.7	43.9	45.4	47.8
RP70	RP120	RP78Si	--	--	38.0	39.0	24.3	29.0	29.9	32.2	31.0	31.4	31.0	31.5	33.6	35.0	37.5	41.4	44.8	48.6	50.6	51.3	51.7	51.8
RP70	RP120	RP78Si	RP117Si	--	39.0	40.0	25.9	33.2	34.7	33.9	33.5	33.7	33.1	33.6	34.6	35.3	38.0	41.7	46.5	50.2	52.0	52.6	53.5	54.1
54mm thick Single Leaf Proprietary Acoustic Timber door (Composite Core #1)																								
RP70	RP530	RP78Si	--	--	41.0	41.0	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
54mm thick pair (Double Leaf) Proprietary Acoustic Timber door (Composite Core #2)																								
RP38	RP530	RP78Si	RP110Si	RP16Si	40.0	41.0	26.8	31.7	28.6	33.4	34.0	34.2	33.2	35.4	37.9	41.5	42.0	43.5	45.3	45.1	42.1	41.0	42.8	47.3
54mm thick Single Leaf Proprietary Metal door (Composite Core #2)																								
RP70	RP530	RP78Si	--	--	45.0	45.0	19.6	32.0	34.5	37.6	36.1	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
54mm thick Single Leaf Proprietary Acoustic Metal door (Composite Core #3)																								
RP70	RP120	RP78Si	RP71+393	--	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
54mm thick Single Leaf Proprietary Acoustic Metal door (Composite Core #4)																								
*FULLY CAULKED					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	53.1	53.4	55.5	57.5
RP70	RP120	RP78Si	RP71+393	--	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
Paired Doors																								
54mm Double Leaf Metal door (Composite Core #1)							100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
RP70	RP530	RP78Si	RP110Si	--	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	49.1	49.1	54.2	56.4	53.6	53.5	56.5
RP70	RP530	RP78Si	--	--	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
54mm Double Leaf Metal door (Composite Core #2)																								
RP70	RP120	RP78Si	RP71+393	RP120	45.0	45.0	32.4	30.4	32.1	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
Interconnecting Doors																								
50mm thick Solid Timber Core x 2 sets							100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
RP70	RP530	--	--	--	44.0	44.0	22.7	34.0	36.0	39.1	35.9	36.9	35.9	38.5	42.4	43.5	45.1	44.8	50.6	54.4	57.7	60.9	62.4	63.5
50mm thick Single Leaf Proprietary Acoustic Metal door (Composite #3) x 2 sets																								
RP70	RP120	RP78Si	RP71+393	--	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

*Theoretical maximum achievable.

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 = 1995(E)** and **BS EN ISO 717-1 = 1996**. 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.

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.

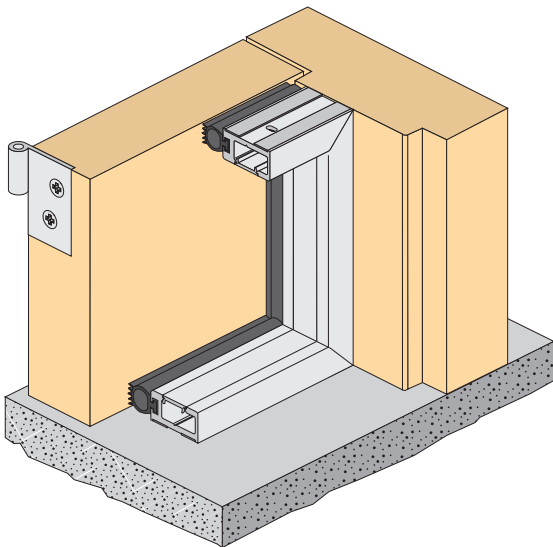
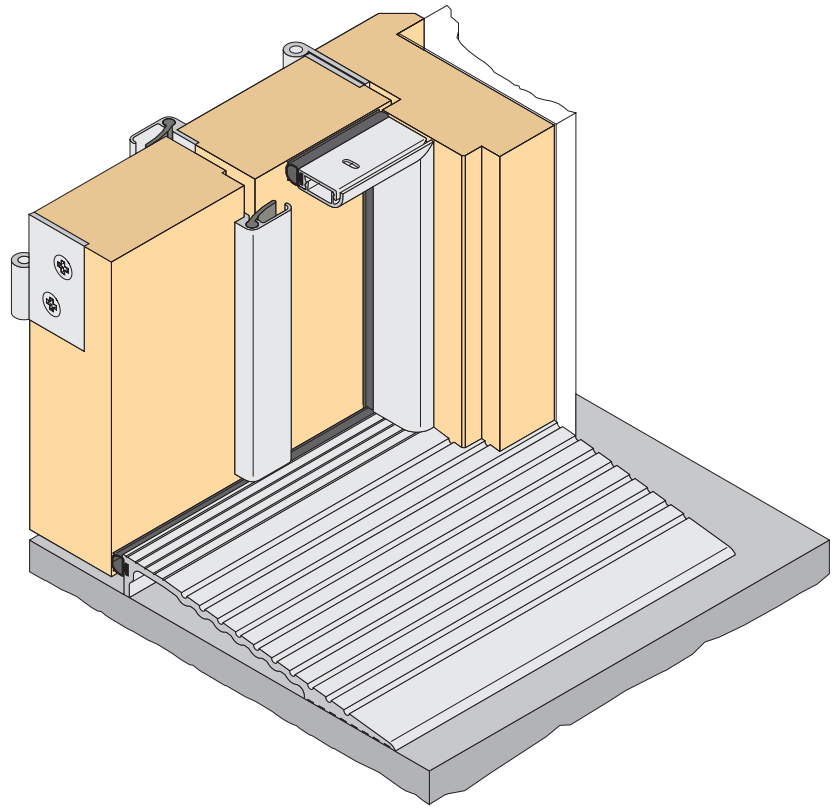
Note: Wide broad butt hinges should be specified.

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

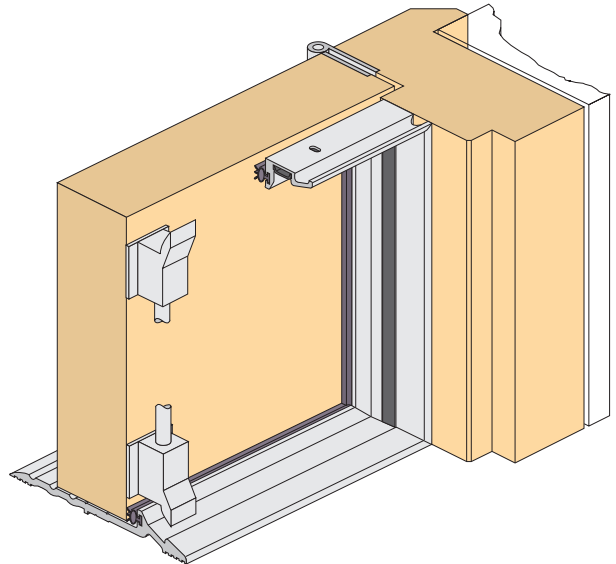
Door Frame Seal
RP93 Si page 61

Threshold Plate Seal
RP97 Si or page 44
RP110 Si page 45

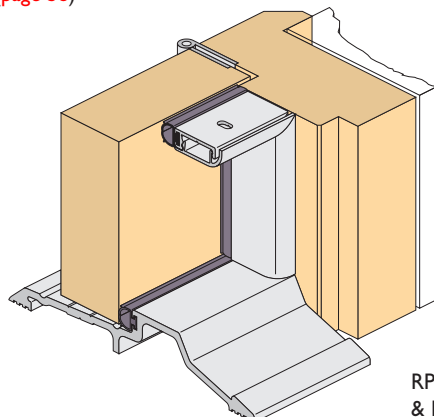
Astragal
RP16 Si or page 66
RP71 Si if both leaves page 67
are active



RP47 Si (page 58)



RP118 Si Door Frame Seal (page 63) &
RP117 Si Threshold Plate Seal (page 46)



RP93 Si Door Frame Seal (page 61)
& RP110 Si Threshold Plate Seal (page 45)



Fire (Labelled Fire Doors)

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 [pages 25 - 27 & 77 - 80](#).

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.

To determine a fire door rating, the door & seal assemblies are tested to **AS 1530 Part 4**, which is similar to **BS 476 part 20 & 22** or **BS EN 1634-1**.

Compliance is stipulated in **AS 1905-1** & in the **BCA** or the UK **Approved Document B**, **BS 5588**.

Smoke Seals (Smoke Doors & Labelled Fire Doors)

Smoke seals are designed to contain smoke within a room or corridor and can be a combination of mechanical and compression seals. For best smoke sealing performance, Raven recommend broad butt hinged doors to be used where possible, if regulatory codes are to be met.



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.



Medium Temp. Smoke M 200°C

Smoke doors require seals to withstand greater temperatures (200 degrees Celsius) to conform to Building Code of Australia **BCA Spec. C3.4** requirement, for "smoke doors". Sealing components are generally made from extruded silicon, and in the case of brush strip seals, nylon. Seals must resist a temperature of 200°C for 30 minutes as a smoke door seal.



High Temp. Smoke (hot) H

Presently there is no testing regime or regulation requirement for hot smoke above 200 degrees celsius. Refer (intumescent seals) these 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 **BCA Spec. C 3.4**, or UK **Approved Document B**.

Smoke Seal Testing

The performance of Raven door seals are routinely tested. The tests performed depend on the seal's intended use.

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. One criterion for smoke door leakage in the UK is 3 cubic metres per hour at an atmospheric pressure of 25Pa/Lm. Raven Seals easily exceed this criteria at ambient (cold) and medium temperature (200°C).

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".

Raven "smoke door seals" have been fire tested on a range of different door types including "fire resistant doors" to **AS 1530.4** and **BS 476: Pt. 22 EN 1634-1**. The Australian **BCA** defines the "fire door" rating requirements for such door assemblies which must be appropriately marked (labelled) according to Standards **AS/NZS 1905.1 & AS 1530.4**. This is similar to the UK **Approved Document B** and testing to **BS 476 Pt. 22**. (Similar to **BS EN 1634 Pt. 1**.) Fire doors are not a structural member of the building therefore fire resistance levels are identified by their fire insulation rating for Integrity and Insulation, but not structural adequacy. For example in Australia/NZ a fire rating of 30 minutes for integrity and 30 minutes for insulation is referred to as **FRL -/30/30** or in the UK as **FD30** or in Europe as **IE30**.

Fire and smoke related

standards and codes

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

UK/EU

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

For further details, refer to Reference Standards & Authorities on [page 10](#).

Aust/NZ

Requirements are noted in *Australian Building Code (BCA)* **New Zealand (NZ BIA Doc. C)**

For further details, refer to Reference Standards & Authorities on [page 10](#).

USA

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

For further details, refer to Reference Standards & Authorities on [page 10](#).

The following is a sealing system designed specifically for the containment of **200°C medium temperature** smoke.

An effective smoke sealing system for 'Smoke Door' rated broad butt hinged doors and double acting centre pivot timber doors that conform to **BCA Spec. C3.4 NZ BIA Doc. C** and **UK Approved Document B** is:

Door Frame

RP78 Si page 60

Door Bottom Seal

RP38 Si Semi Morticed page 35

(plain meeting stiles) or
RP8 Si Morticed (rebated page 33
meeting stiles)

Astragal

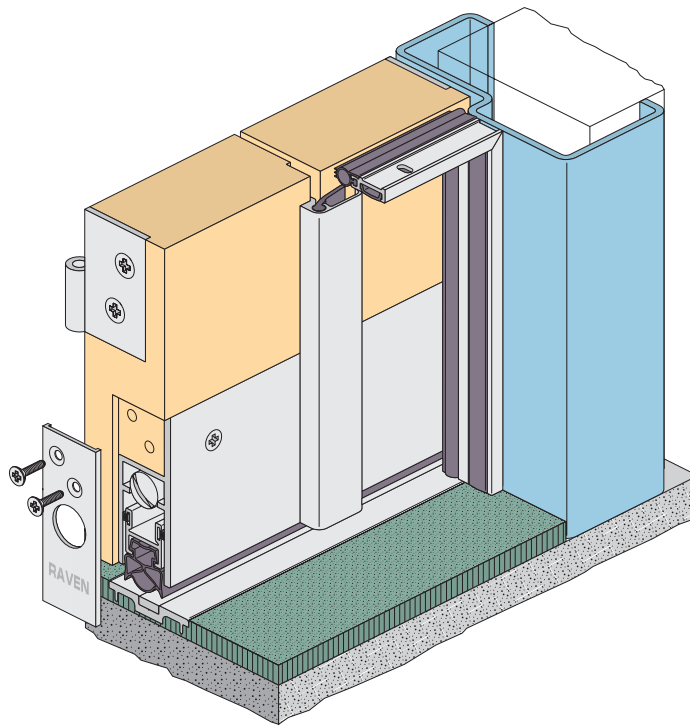
RP16 Si (single leaf page 66
active only) or

RP71 Si (active leaves) page 67

Threshold Plate

RP66 (if carpeted) or page 50

RP95 or **RP 96** page 51
(non-carpeted)



Pivot Doors

Door Frame

RP71 Si x2 page 67
(Head, Frame, Stiles)

Door Bottom Seal

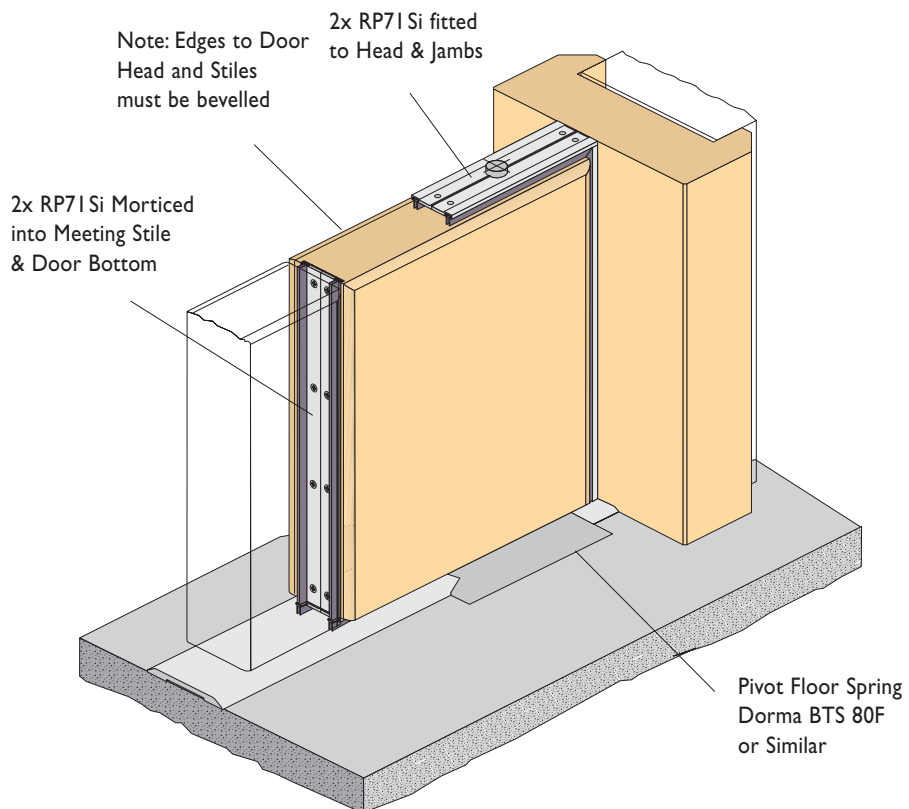
RP71 Si x2 page 67

Astragal

RP71 Si x2 (one leaf only) page 67

Threshold Plate

RP96 or **RP95** page 51



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

Door Frame

RP78 Si	page 60
RP93 Si	page 61
RP24 Si	page 56
RP94 Si	page 62
RP10 Si	page 55

Door Bottom Seal

RP99 Si (face mounted or fully morticed) or	page 38
RP38 Si (face mounted or semi morticed) or	page 35
RP8 Si (fully morticed)	page 33

Astragal

Generally incorporated in door manufacture (by fabricator). See also RP16 Si & RP71 Si and intumescent seals [page 77-80](#).

Threshold Plate

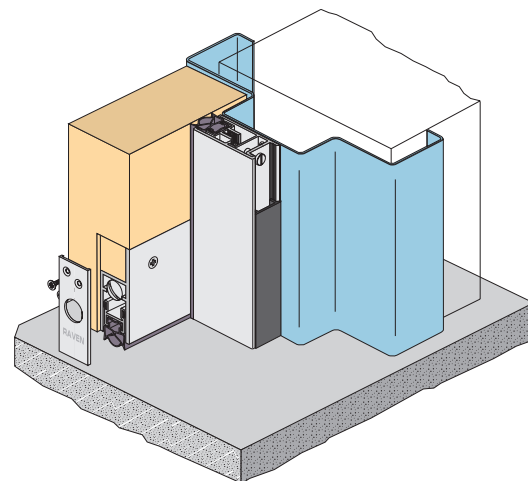
RP66 if carpeted.	page 50
RP29	page 49
RP95	page 51
RP115	page 53

Seals have been fire tested to **AS 1530.4**, similar to **BS EN 1634-1** and **BS 476 Pt 22**.

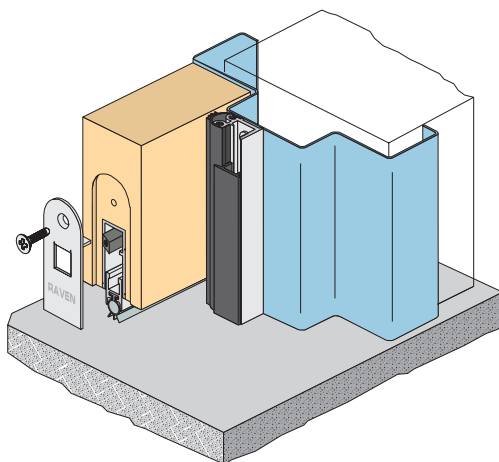
Seals conform to **BCA Spec.C3.4**
"Smoke doors" 200°C for 30 minutes, NZ
BIA Doc. C and UK **Approved Document B**, Standard **BS 5588**.

*Seals smoke tested to **AS/NZS 1530.7 & ISO CD 5925-1**.

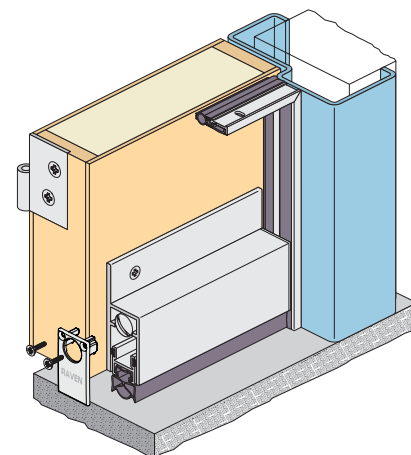
The acoustic properties of Raven smoke seals have been tested in accordance with **AS 1191 & ISO 140.3, AS 1276, AS 1045** (similar to **BS 2750** and **ISO 717.1**) refer to acoustic section [page 12](#).



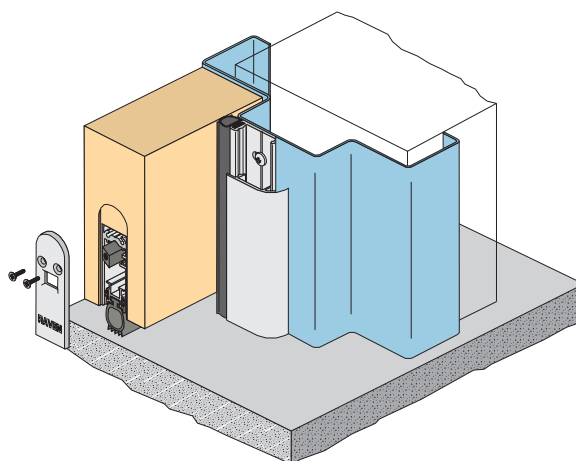
* RP38 Si with * RP24 Si



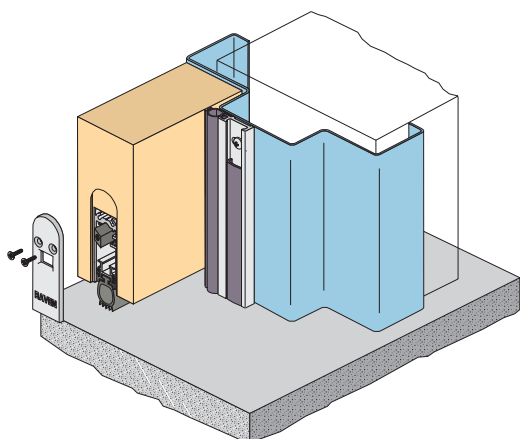
* RP8 Si with * RP10 Si



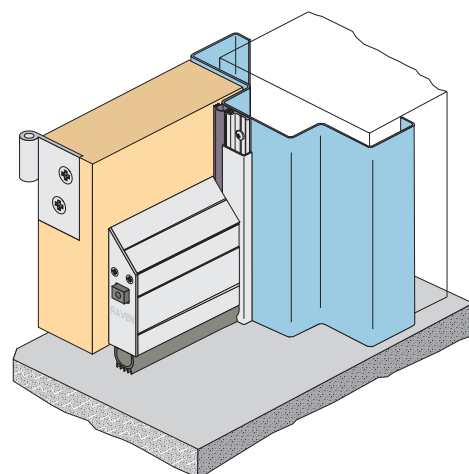
* RP38 Si with * RP78 Si



* RP99 Si with RP93 Si



* RP99 Si with * RP78 Si



* RP99 Si with RP94 Si

Intumescent Seals

Fully developed fires exceeding 600°C
and 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 up to **25 times** 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 to **Australian Standard 1530.4 1997, AS/NZS 1905.1 1997** and **British Standard 476 part 22 1987** (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 part 22-1987, Approved Document B**.

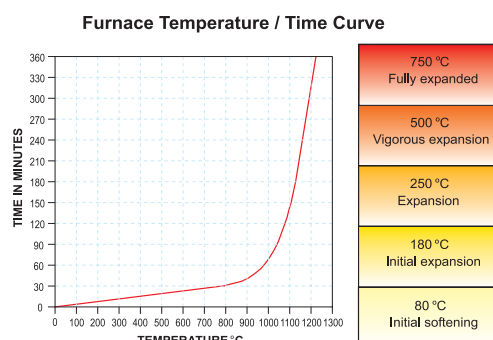
Seals have also been tested to **AS 1530.4, AS 1905.1**.

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 part 31.1**.

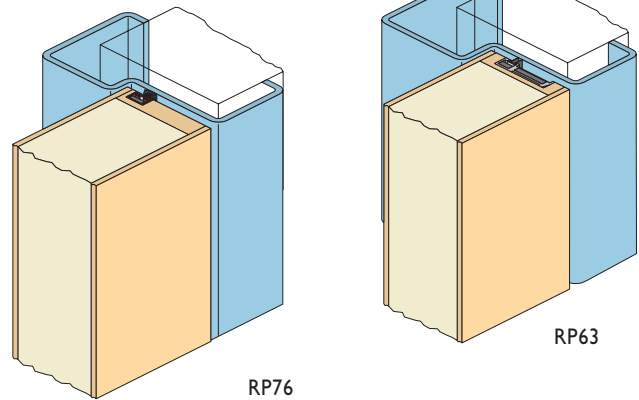
All Raven Medium temperature smoke seals and Intumescent smoke seals conform to the **BCA requirement Spec. C3.4 200°C for 30 minutes, NZ BIA Doc. C** and **UK Approved Document B**.

Intumescent performance and sealing effectiveness are determined by increases in temperature. Changes in product characteristics are illustrated in the table below.

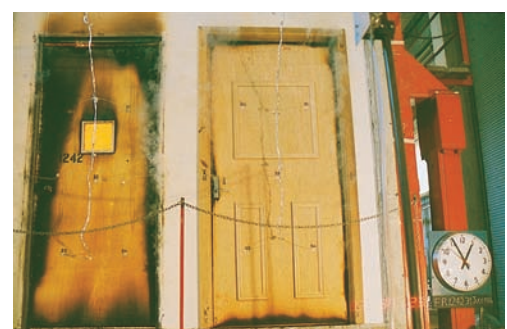
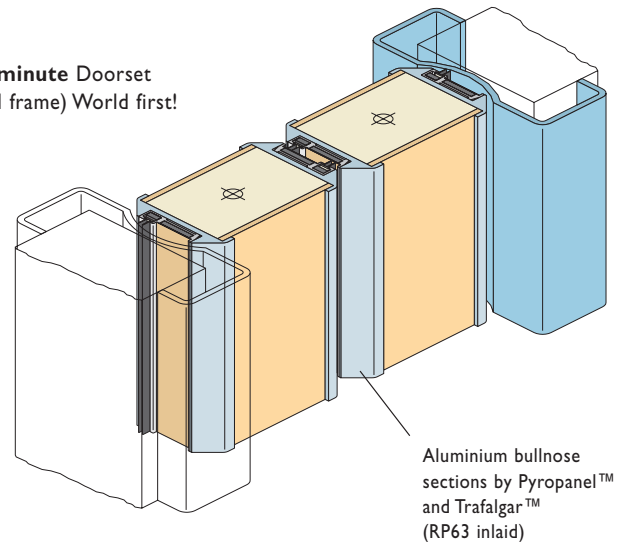
Intumescent sealing effectiveness commences at approximately 180°C. **Note:** Raven recommend the use of Medium Temperature Smoke Seals in order to maintain smoke sealing integrity from Ambient (cold) through to medium temperature smoke at 200°C, thereby providing a safer performance margin of smoke sealing until intumescent sealing takes full effect.



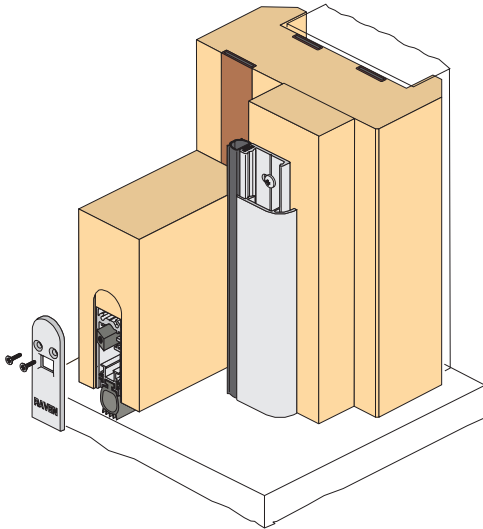
240 minute doorset
(steel frame)



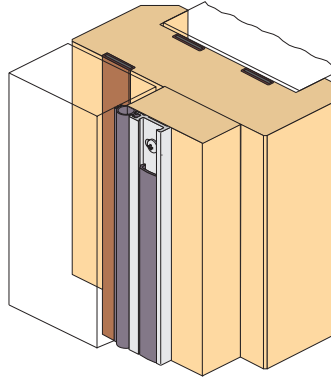
120 minute Doorset
(steel frame) World first!



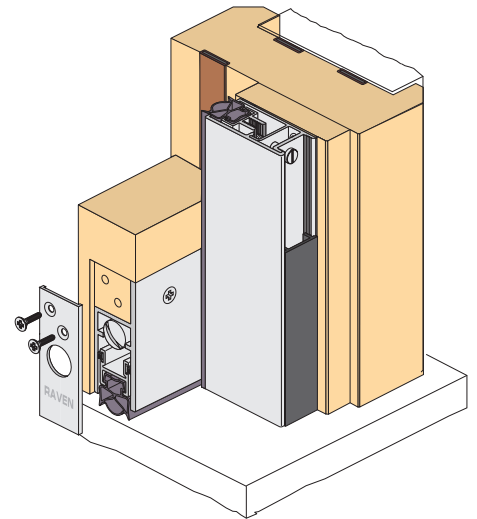
60 minute fire resisting door sets (timber frame)



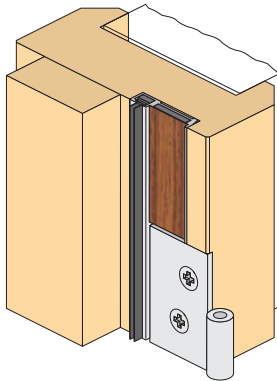
RP2004 (page 78) with RP99 Si
and RP93 Si



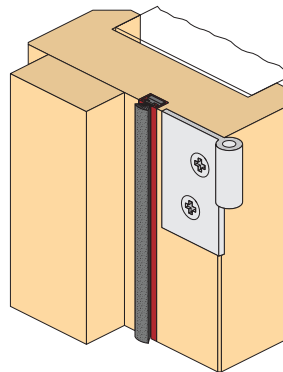
RP2004 with RP78 Si



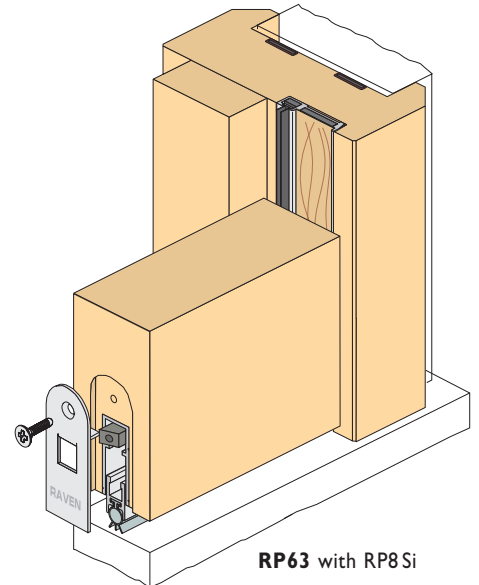
RP2004 with RP38 Si and RP24 Si



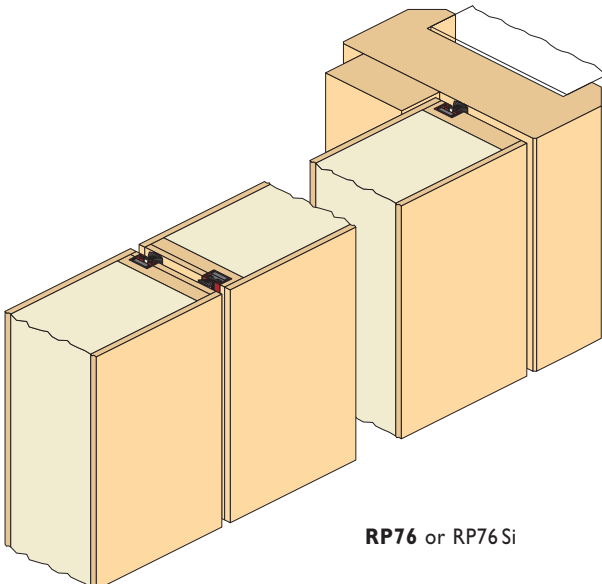
RP63 (page 77)



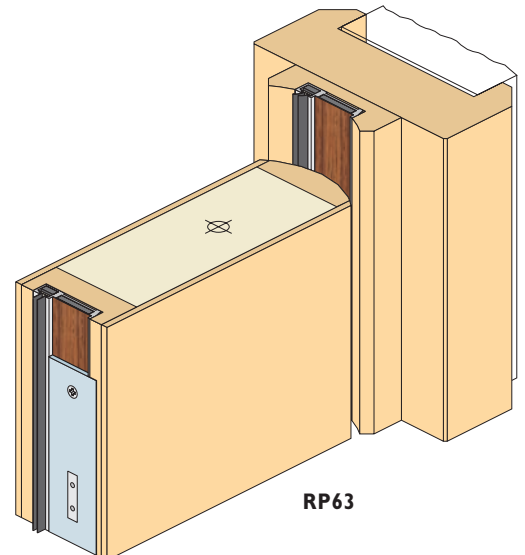
RP76 (page 77) or RP76 Si



RP63 with RP8 Si

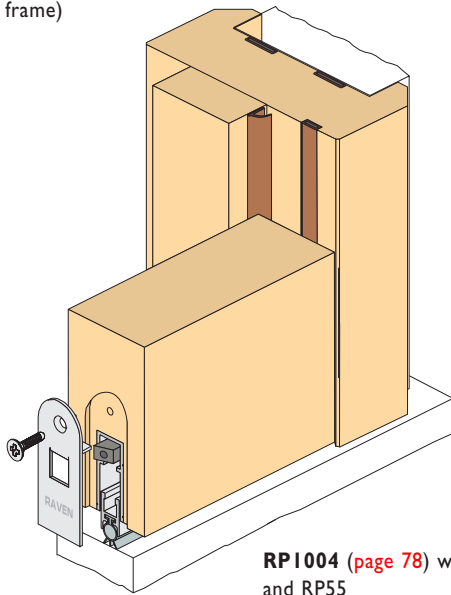


RP76 or RP76 Si

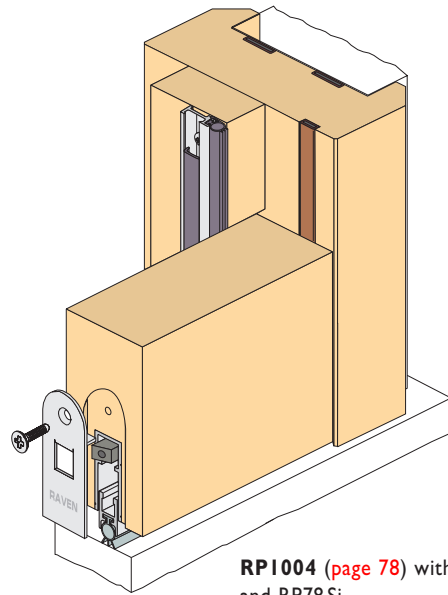


RP63

30 minute fire resisting door
sets (timber frame)

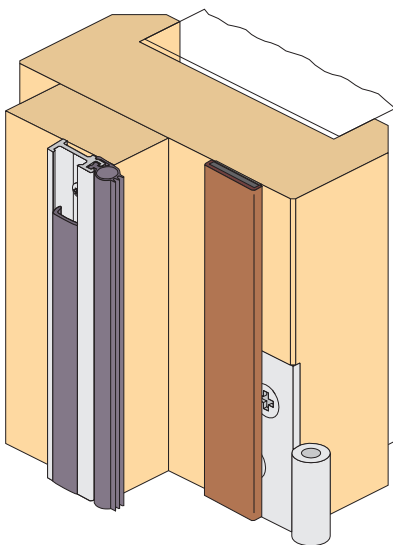


RP1004 (page 78) with RP8Si
and RP55

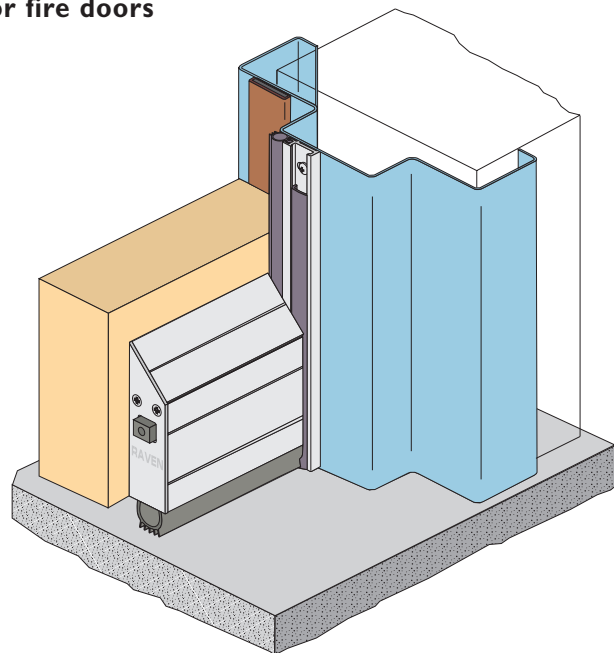


RP1004 (page 78) with RP8Si
and RP78Si

Retrofit seals for fire doors



RP2004F (page 78) with RP78Si



RP2004F (page 78) with RP99Si and RP78Si

Weather - Energy Sealing System

Broad butt hinged doors

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 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 related standards and codes

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

UK/EU

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

For further details, refer to Reference Standards & Authorities on [page 10](#).

Aust/NZ

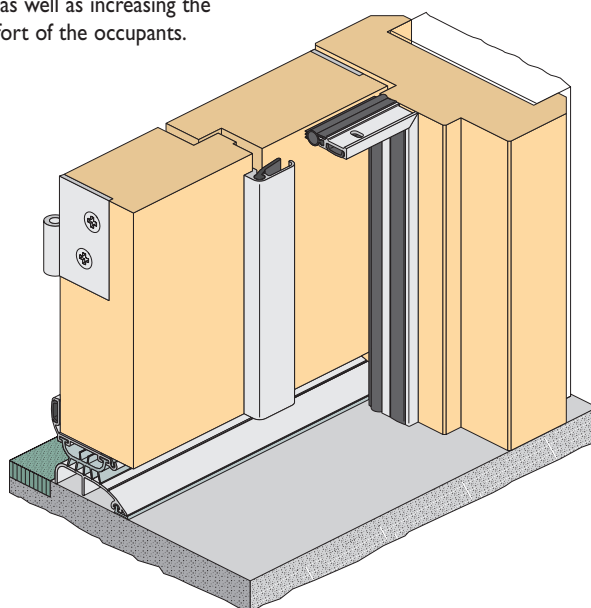
Requirements are noted in *Australian Building Code (BCA)* *New Zealand (NZ BIA Doc. H)*

For further details, refer to Reference Standards & Authorities on [page 10](#).

USA

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

For further details, refer to Reference Standards & Authorities on [page 10](#).



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

Door Frame

RP78 Si or [page 60](#)
RP94 Si or **RPI13** [page 62](#)
 Refer Silicon Weather Strip [81- 82](#)

Door Bottom Seal

RP4 or [page 39](#)
RP86 [page 43](#)

Astragal

RP16Si or [page 66](#)
RP71 [page 67](#)

Illustration shows inward opening door configuration.

Weather - Energy Sealing

Commercial Shop Front -
broad butt hinged doors

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

Door Frame Seal

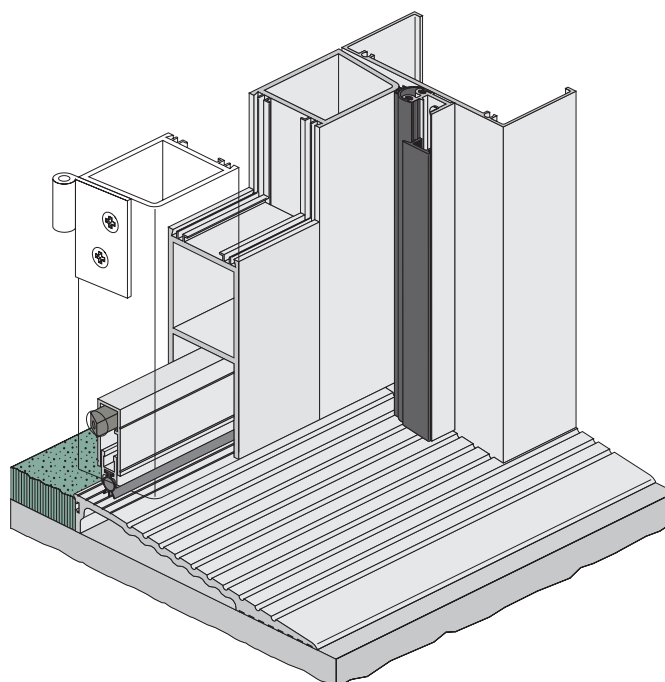
RP10 (Fitted to plain frame) [page 55](#)

Door Bottom Seal

RP8 Si (Installed by fabricator) [page 33](#)

Threshold Plate

RP98 or [page 52](#)
RP77 [page 50](#)



Weather - Energy Sealing

Double Acting Centre Pivot Doors
(Timber)



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 practical. The same applies to the head of the door.

Sweep seals being the most effective. They take the form of brush strips, woven pile or PVC blades.

An effective combination of seals for this application is;

Door Frame

Plain frame with or without concave hinge jamb to suit arc of bullnose door stiles (by others)

Door Stiles

RP2B (brush only) page 72

Astragal

RP2B (brush only)

Door Bottom & Head Seal

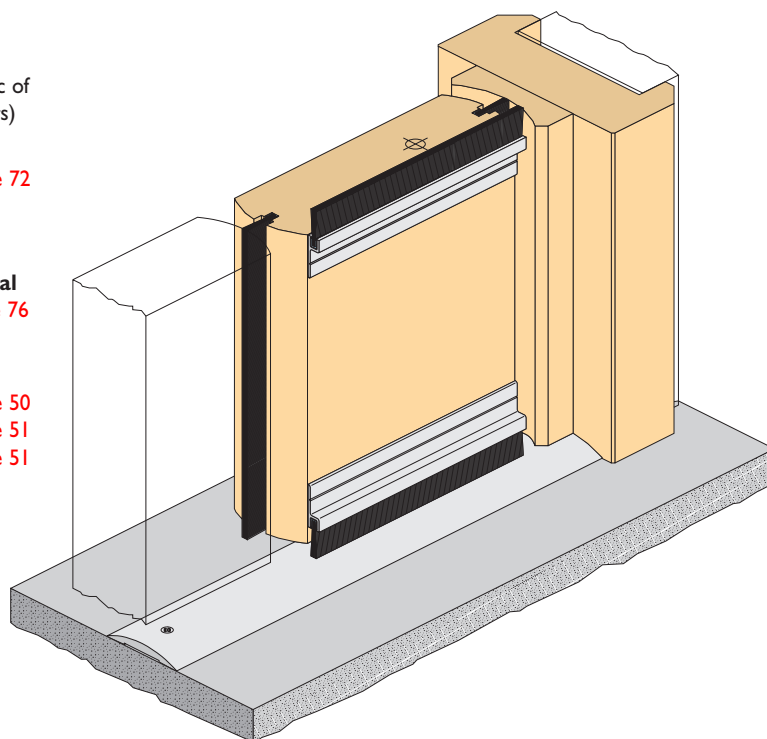
RP74 (inside or outside face) page 76

Threshold Plate

RP82 (optional) or page 50

RP95 (optional) page 51

RP96 (optional) page 51



An effective combination of seals for this application is;

Door Frame*

Two seals incorporated into door stile by aluminium door fabricator

Door Bottom Seal

RP75 (inside and outside face) or page 76

RP89 (New) page 91

Door Head Seal

RP74 (inside and outside face) or page 76

RP89 (New) page 91

Astragal*

Two fringe seals incorporated into meeting stiles by aluminium door fabricator.

Threshold Plate (Optional)

RP19, **RP18**, **RP28** page 48-50

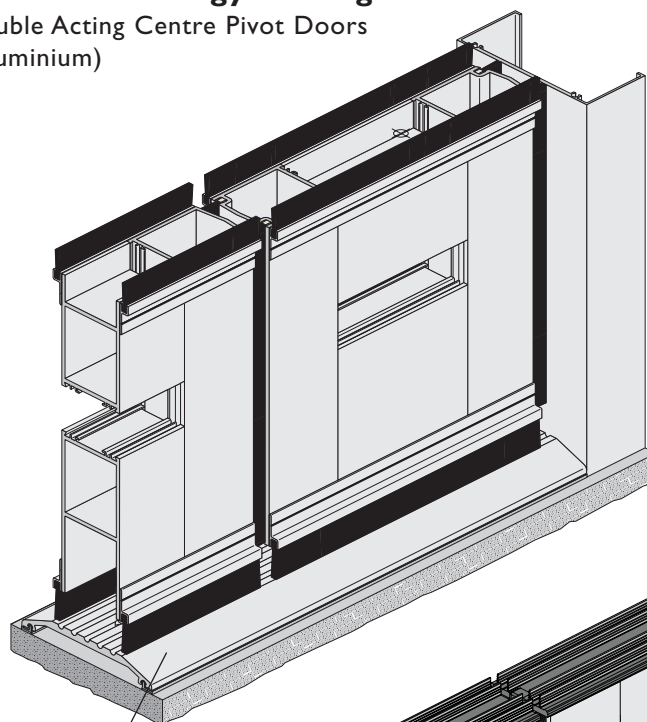
(**RP77** as a two way ramp) or

RP15, **RP116** page 53

*Aluminium proprietary door suites incorporating a pile weatherstrip to all vertical stiles. Raven recommends that all suites chosen should have two rows of premium quality pile weatherstrip (supplied by fabricator, pages 83 - 86).

Weather - Energy Sealing

Double Acting Centre Pivot Doors
(Aluminium)

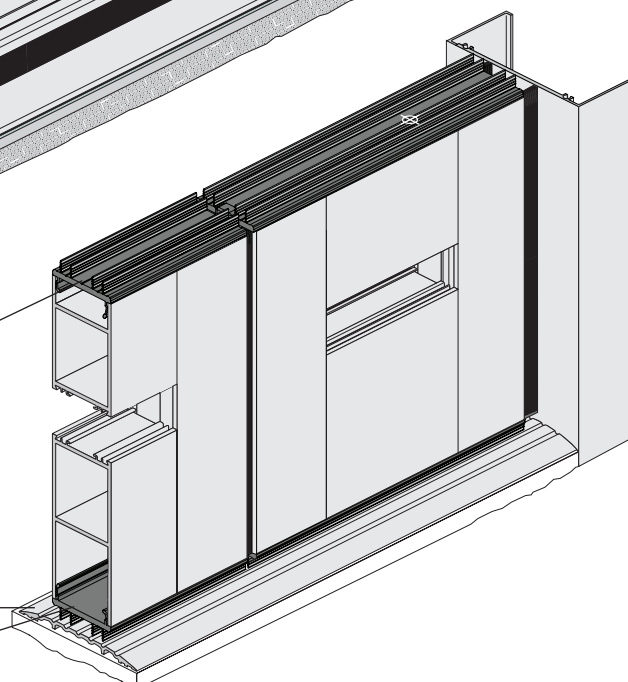


RP19

RP89

RP116

RP89

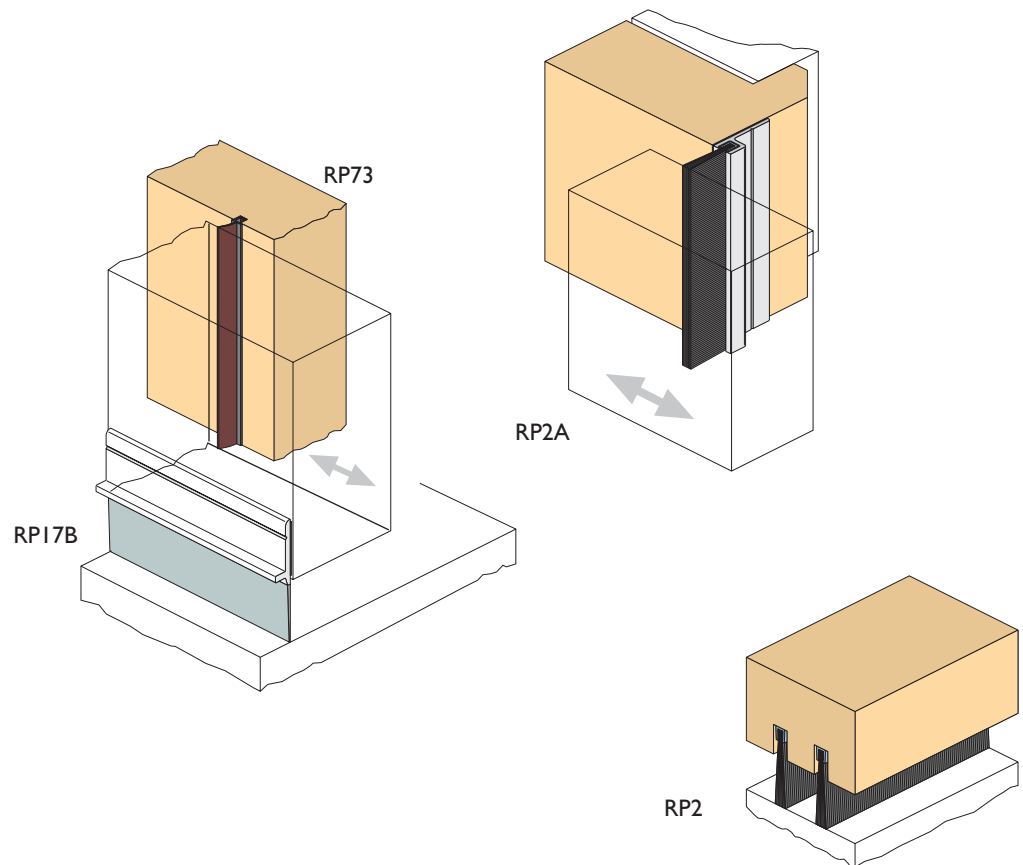


Sliding doors present many different sealing problems due to the various types and configurations, from residential to industrial. Effective seals for these applications are brush strip seals, sweep seals and threshold plates.

RP17B page 40
RP73 page 59
RP2A page 72
RP2 page 72

Also refer:

RP2B page 72
RP15 page 73
RP81 page 42



Weather - Energy Sealing System

For Roll-Up Doors

Weather sealing roll-up doors presents 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 Head (Lintel)

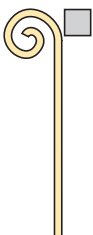
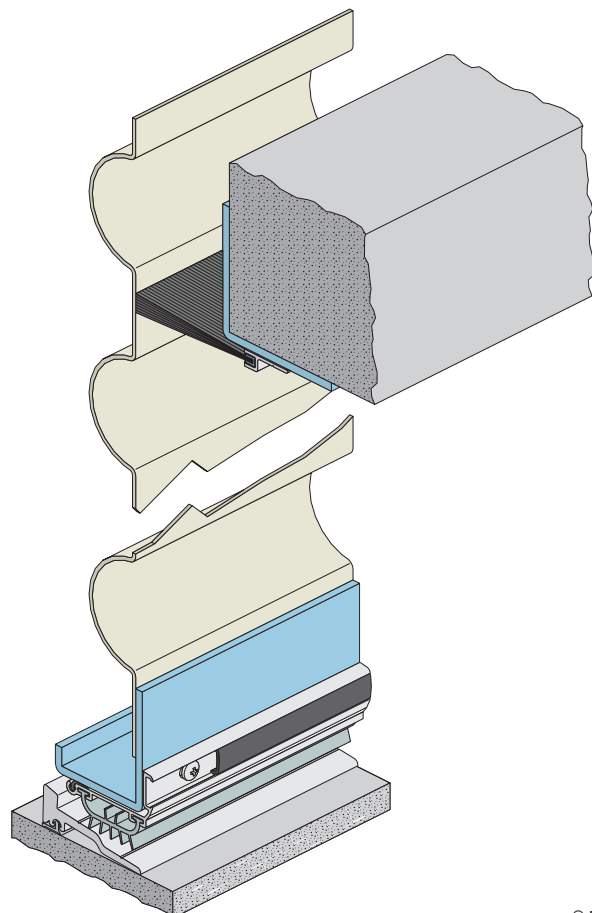
RP41 page 74
RP57 or RP58 page 75

Door Bottom Seal

RP4T page 39

Threshold Plate

RP91 or page 51
RP29 page 49



An effective combination of seals for weather sealing tilt-up doors is;

Door Bottom Seal

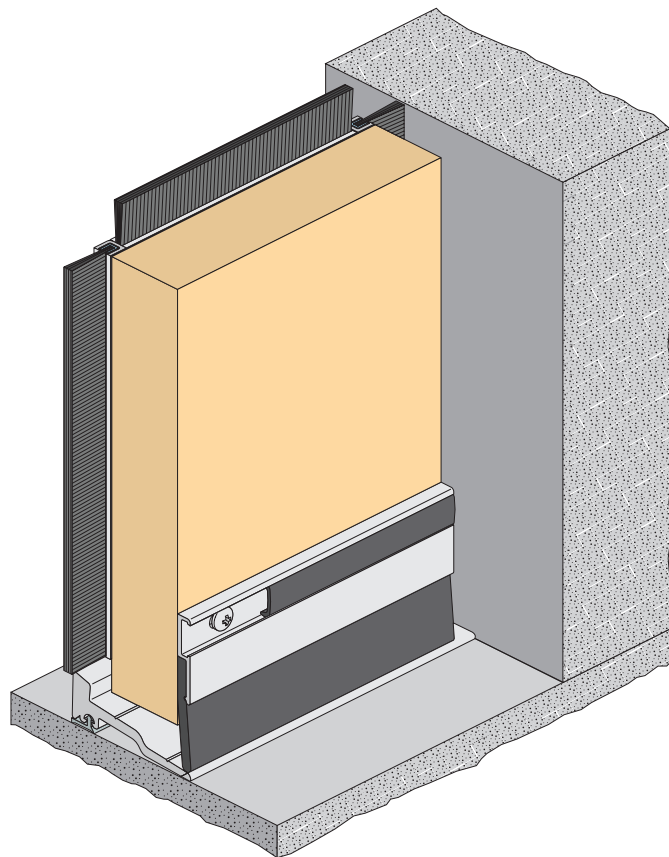
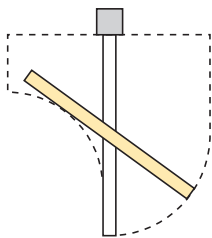
RP26 or **RP5** page 41
page 40

Threshold Plate

RP91 or **RP29** page 51
page 49

Door Stiles

RP75 or **RP5** page 76
page 40



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 matt 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 broad butt hinged door in a new installation is:

Door Frame Seal
RP10 page 55

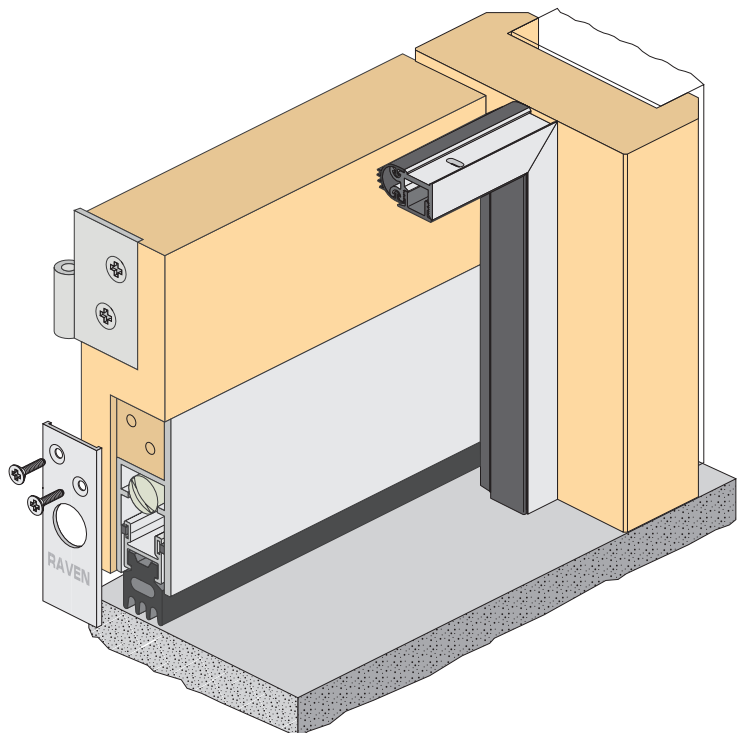
Door Bottom Seal
RP38 (semi morticed) page 34

In a retrofit situation Raven recommends:

Door Frame Seal
RP78Si page 60

Door Bottom Seal
RP74 page 76

inside & outside door bottom



Seals that are designed to fill the gap between the bottom of a door and the floor 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.

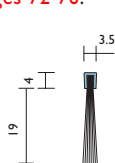
The automatic door bottom seal lifts automatically as the door is opened and conversely lowers to seal as the door is closed. This ensures that the seal does not impede the normal function of the door, allowing the seal to lift clear of carpets and other obstacles. They look neat if face mounted to the 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. The seals are often made of a strip of flexible PVC (rubber or brush) mounted into an aluminium holder.

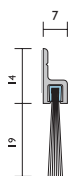
Note: Ensure that the floor surface is lower than the sealing surface of the threshold plate to avoid sweep seal from fouling.

Brush Strip Seals

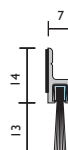
refer to [pages 72-76](#).



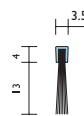
RP2



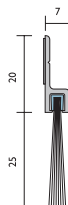
RP2A



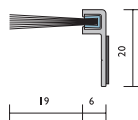
RP2B



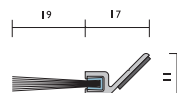
RP2B (BRUSH ONLY)



RP15



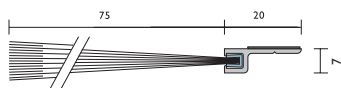
RP49



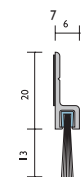
RP50



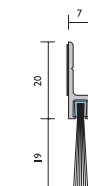
RP57



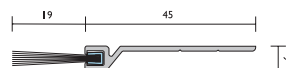
RP58



RP74



RP75



RP41

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 D.I.Y. 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) single door only.

Min/Max Gap Up to 16mm.

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

Standard Finish Alluminium anodised 15 microns with either a Satin Clear, Bronze or Bright Gold finish.

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

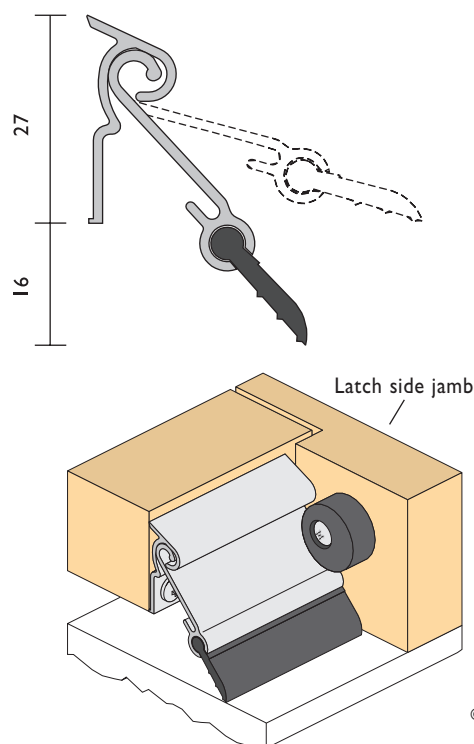
Seal Material EPDM or TPR (black).

Replacement Seal RP303.

Used in conjunction with Raven threshold plates.

Approvals

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



RP8 Si (REPLACES RP8)



A concealed, acoustic automatic door bottom seal. RP8 Si has the addition of an extruded silicon sealing gasket for medium temperature smoke/fire door applications.

RP8 Si is spring loaded to lift clear of the floor as soon as the door leaf is opened by a few millimeters. Mounted into a 15mm x 34mm groove that has been mortised 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/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.

Escutcheon Plate

Dimensions

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

Approvals

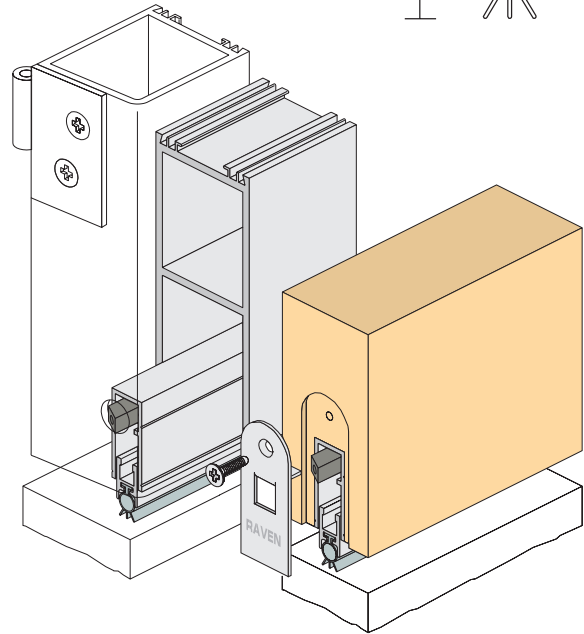
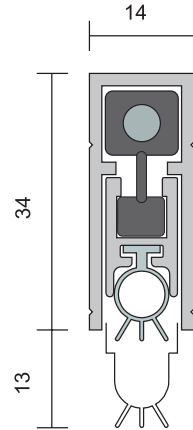
Acoustic AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

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: Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7. UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS EN 1634.1, BS 476 Part 20 & 22, Sec. 31.1).

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



RP35 Si



RP35 Si is a medium duty automatic door bottom seal which is spring loaded to lift clear of 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.

Min/Max 1mm/13mm.

Location Solid core single and double, broad butt hinged doors.

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.

Fixing Method

Zinc plated, cross recess head S.T. screws and colour matched escutcheon plates supplied.

Adjustment Has adjustment strike block screw for sealing action adjustment.

Seal Material

Silicon rubber (SE) (grey) with rigid PVC cover strip (grey).

Replacement Seal RP308 Si.

Approvals

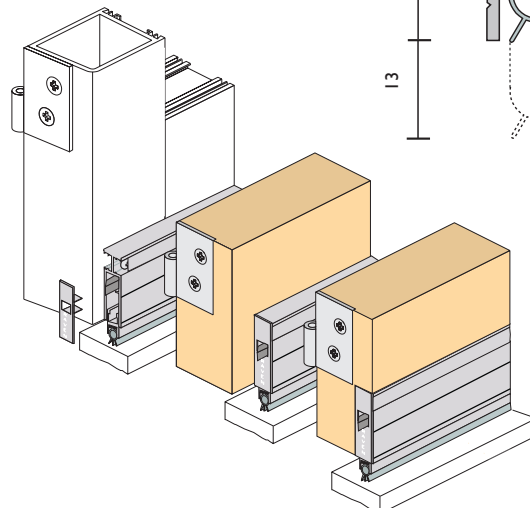
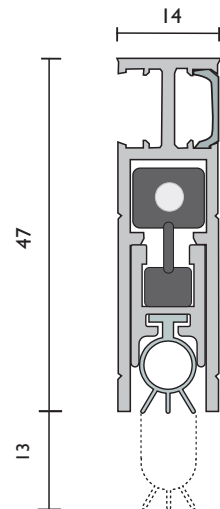
Acoustic UK/EU: Conforms to Approved Document E. Tested to BS EN ISO 140.3, BS EN ISO 717.1, BS 2750, BS 5821.

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7.

UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS EN 1634.1, BS 476 Part 20 & 22, Sec. 31.1).

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



RP38



A heavy duty automatic door bottom seal which is spring loaded to lift clear of 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.

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.

When semi morticing RP38 into double doors that require rebated meeting stiles, specify 50mm minimum door thickness. With plain meeting stiles, specify 40mm minimum thickness.

Location Single and double butt hinged door bottoms.

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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied. Semi morticed or face mount option. Escutcheon plates supplied.

Seal Material EPDM Sponge (SE) (black).

Replacement Seal RP338.

Adjustment Has screw for sealing action adjustment.

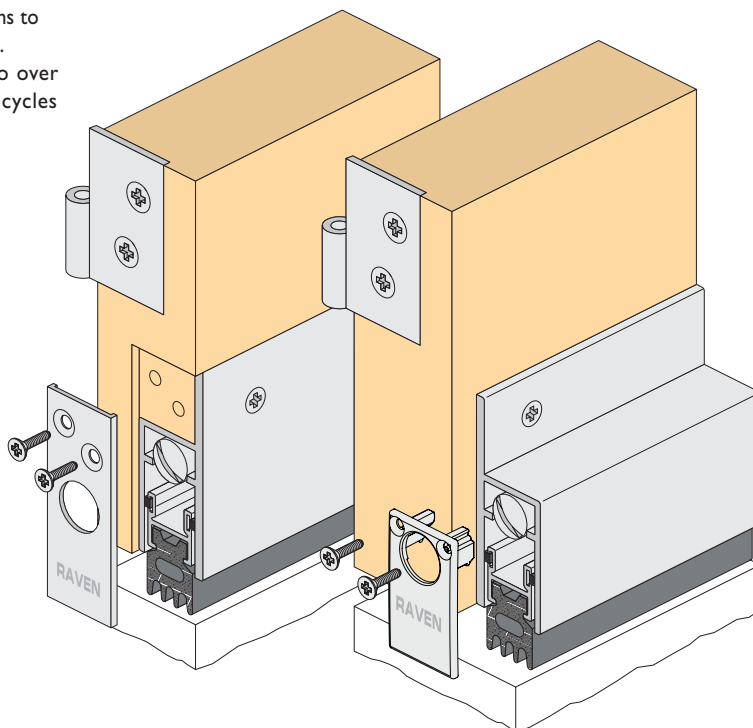
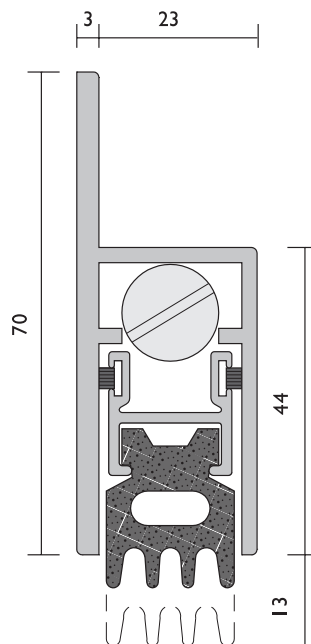
Approvals

Acoustic AUS/NZ: Conforms to BCA Sec. 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: Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 UK/EU: Conforms to Approved Document B.

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



RP38 Si



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 of 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.

RP38Si can be face mounted or semi morticed in proprietary fire doors. It is adjustable for left and right handed operation.

When semi morticing RP38Si into double doors that require rebated meeting stiles, specify 50mm minimum door thickness. With plain meeting stiles, specify 40mm minimum thickness.

Location Single and double butt hinged door bottoms.

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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied. Semi morticed or face mount option. Escutcheon plates supplied.

Seal Material Silicon Rubber (SE) (charcoal colour).

Replacement Seal RP38Si.

Adjustment Has screw for sealing action adjustment.

Approvals

Fire & Smoke AUS/NZ:

Conforms to BCA Spec. C3.4.

Tested to AS 1530.4, AS/NZS

1905.1 & AS/NZS 1530.7.

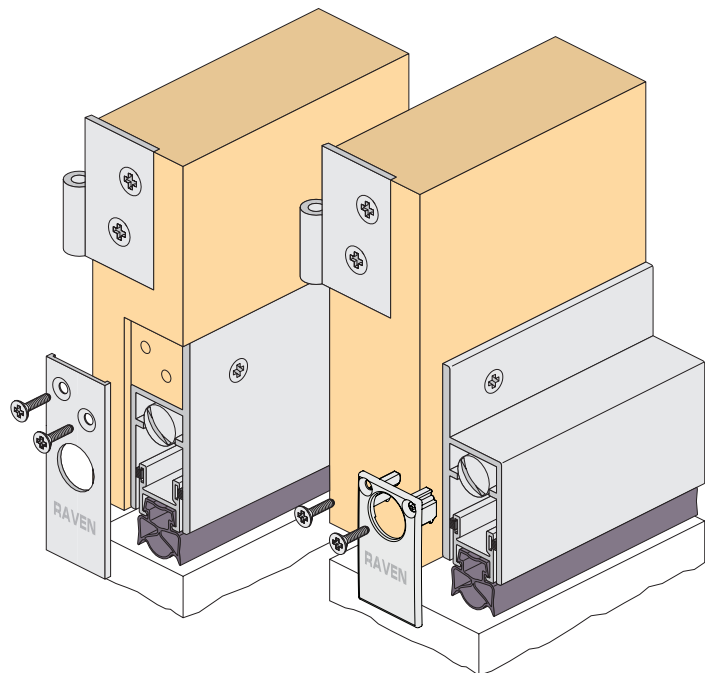
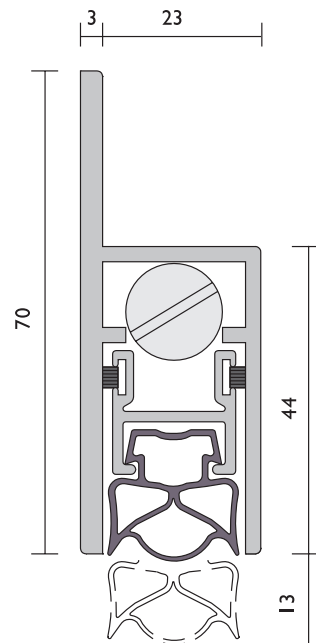
UK/EU: Conforms to Approved

Document B. Tested to ISO CD

5925-1 (similar to BS EN 1634.1, BS

476 Part 20 & 22, Sec. 31.1).

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



RP60



A face mounted automatic door bottom seal which is spring loaded to lift clear of 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/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.

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

Seal Material TPR (black).

Replacement Seal RP460.

Used in conjunction Threshold plate RP13, RP82, frame seals.

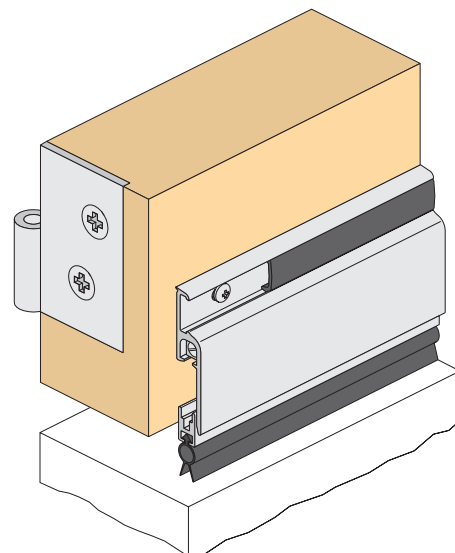
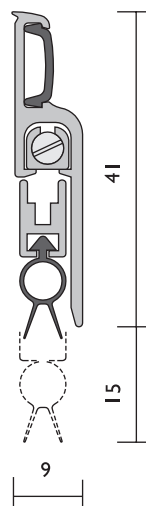
Adjustment Has screw for seal action adjustment. Self levelling.

Approvals

Fire AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.

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



RP70



The 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 of 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 doors, plain meeting stiles are required.

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

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.

Fixing Method

Fully morticed, can be adjusted, escutcheon plates provided.

Seal Material

EPDM Closed cell sponge (SE).

Replacement Seal

RP338 (silicon option RP338Si).

Approvals

Acoustic

AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Tested to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).

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

RP70 Si

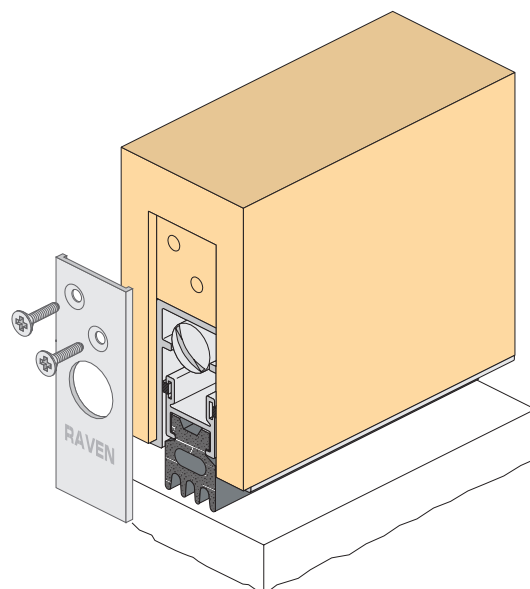
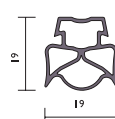
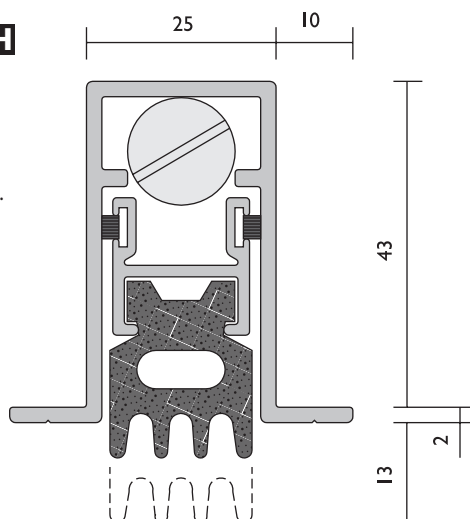


Note: If ordering RP70 with silicon option, specify RP70 Si. (N.B. Different gasket profile).

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4.

UK/EU: Conforms to Approved Document B.



RP92 Si (REPLACES RP92)



RP92Si is a heavy duty automatic door bottom seal, which is spring loaded to lift clear of the floor as soon as the door leaf is opened by a few millimetres. RP92Si is designed for broad 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 broad butt hinged doors.

Min/Max Action Sealing

gap is 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.

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.

Seal Material Silicon (SE) (Charcoal).

Replacement Seal RP347Si.

Adjustment Has set screw for sealing action adjustment.

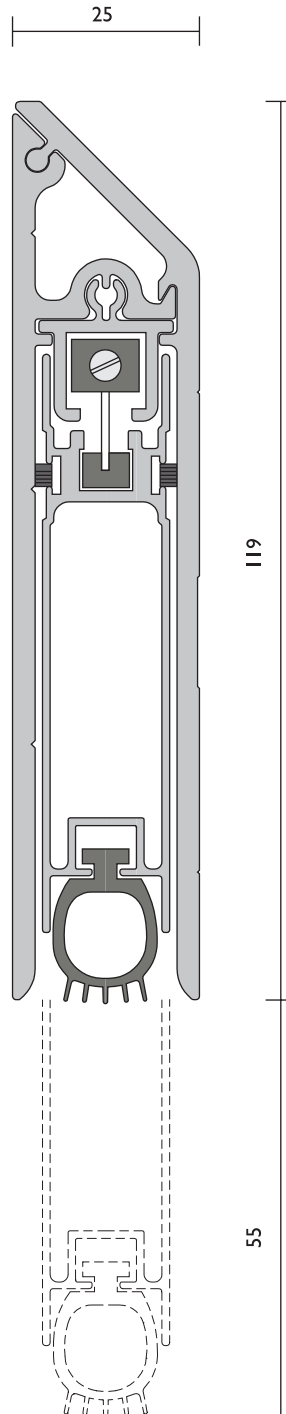
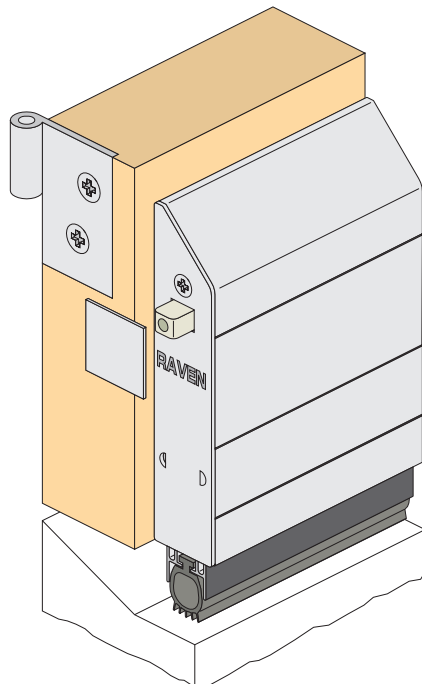
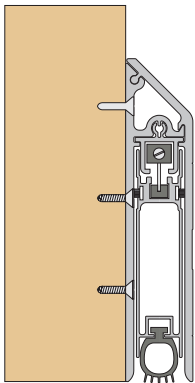
Approvals

Access & Mobility

AUS/NZ: Conforms to BCA D3, D3.2.

UK/EU: Conforms to Approved Document M.

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



RP99 Si (REPLACES RP99)



RP99 Si is a heavy duty automatic door bottom seal which is spring loaded to lift clear of 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).

RP99 Si seals when the door closes and retracts automatically when the door is opened.

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

Min/Max Gap 1mm/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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Replacement Seal RP347 Si.

Seal Material Silicon Rubber (SE) (Charcoal colour).

Approvals

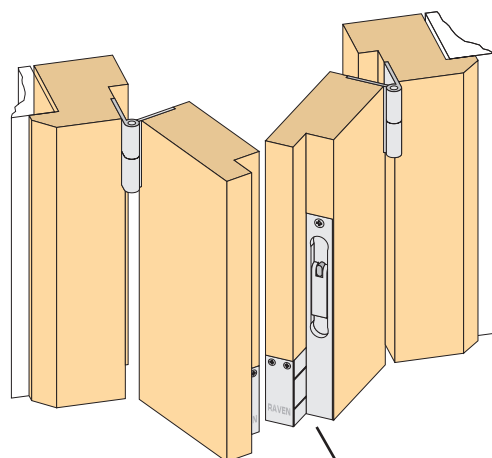
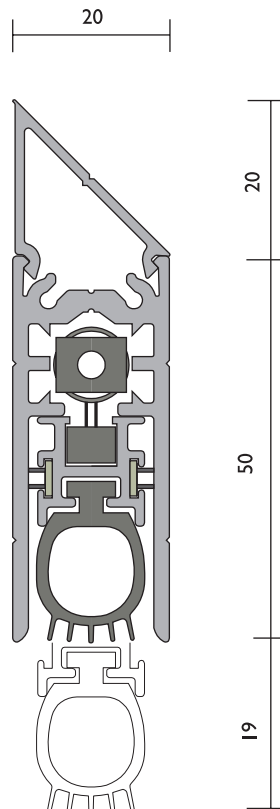
Acoustic AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

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: Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7.

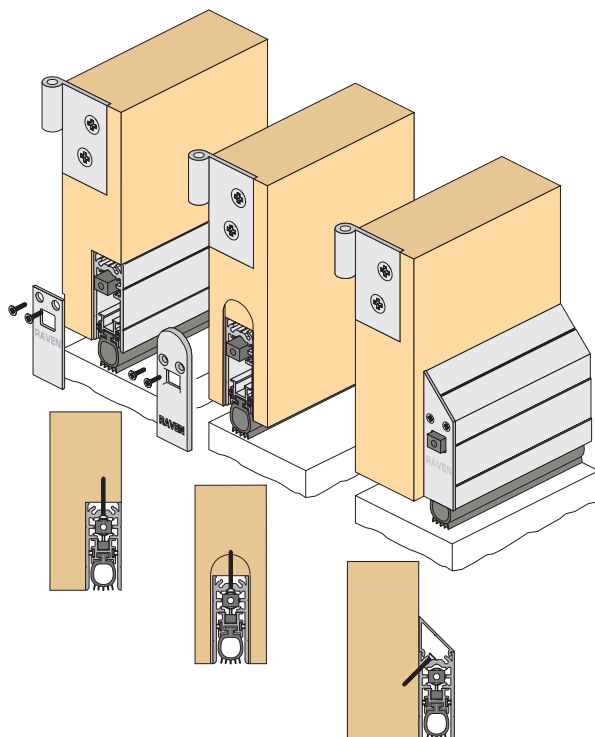
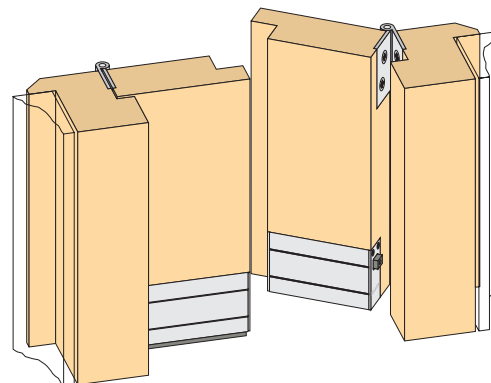
UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS EN 1634.1, BS476 Part 20 & 22, Sec.31.1).

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



Concealed Flush Bolt (by others)

Double Doors with RP99Si Fitted in Semi Morticed Position



RP4



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/25mm.

Seal Sizes

Available in stock lengths.

Standard Finish

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

Fixing Method

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

Seal Material

PVC (grey).

Replacement Seal

RP404.

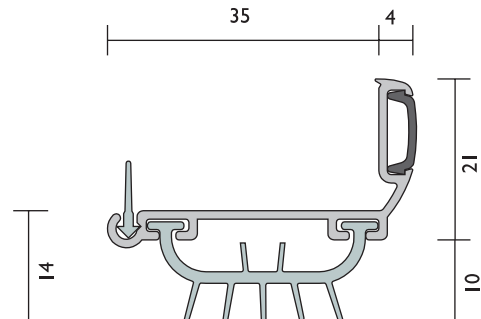
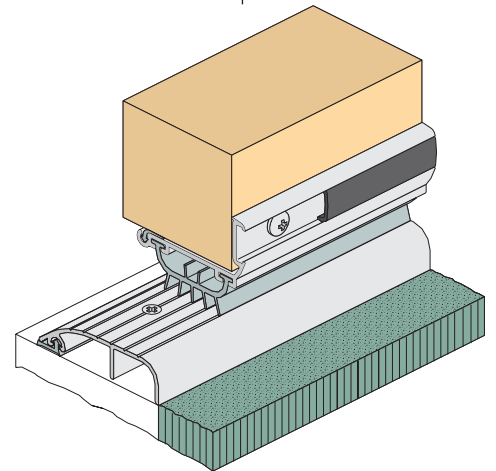
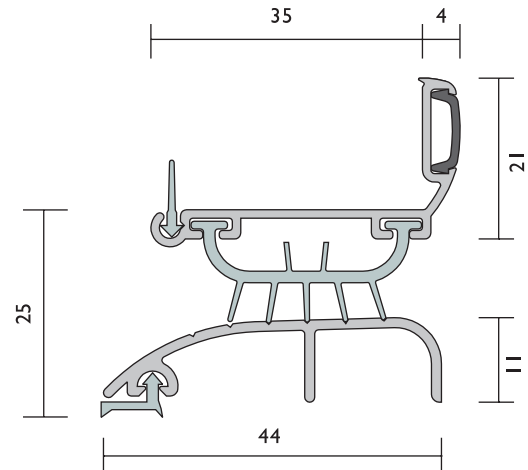
Replacement Gaskets

RP404A, RP404B and RP423.

Approvals

Access & Mobility

UK/EU: Conforms to Approved Document M.



RP4T



A weather seal, RP4T easily fits to the bottom of a door. It can be used in combination with threshold plates, such as RP91 or RP29 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) 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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

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

Seal Material

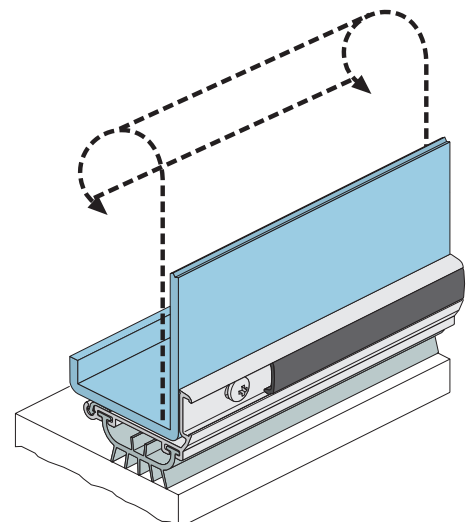
PVC (grey).

Replacement Seal

RP404.

Replacement Gasket

RP404B.



RP5



A flexible EPDM weatherstrip 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 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) or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

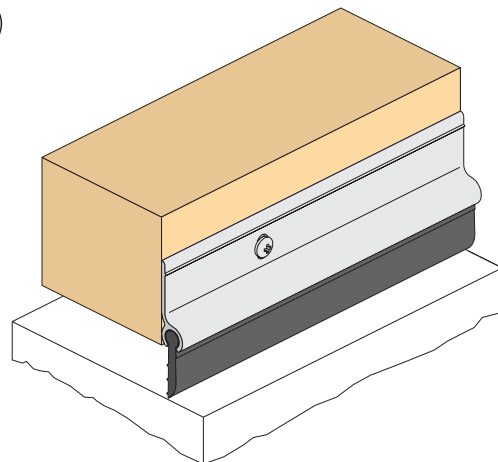
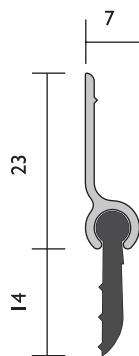
Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied.

Seal Material

EPDM (black).

Used in conjunction

Thresholds RP13, RP82.



RP17B (Replaces RP17)



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.

Fixing Method

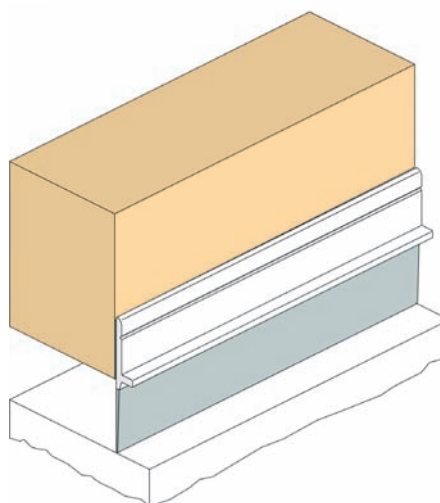
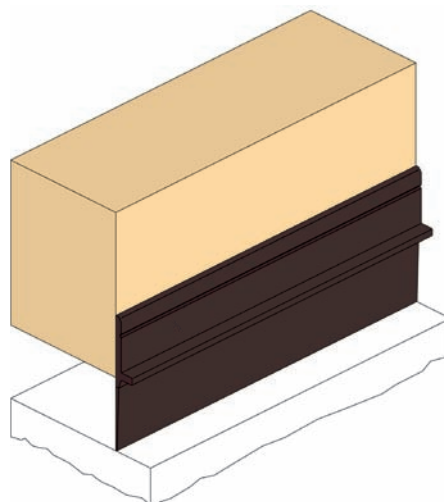
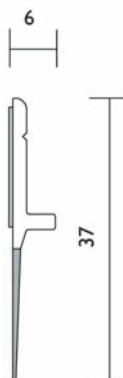
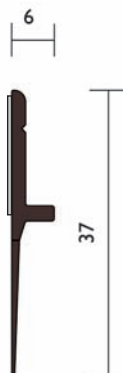
RP17B Adhesive backed (surface must be smooth, clean and well cured). Can be screw fixed.

Seal Material

White or Brown PVC Co-extrusion: rigid/flexible.

Used in conjunction

Threshold RP13, RP82.



Door Bottom Seals

RP26



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/20mm (user determined).

Seal Sizes Available in stock lengths.

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

P.E. Paint (extra cost). Is a two pack

polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

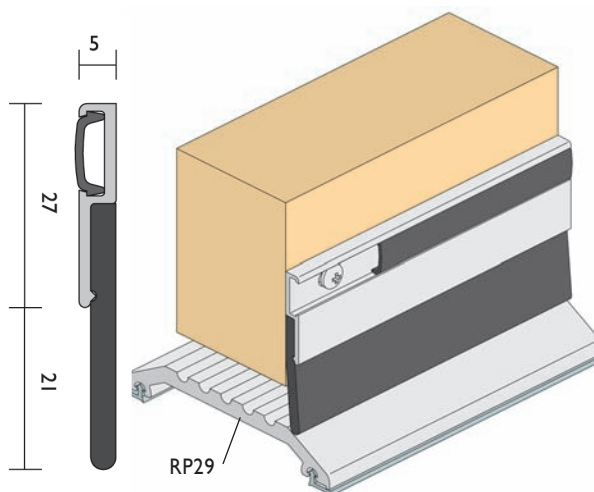
Seal Material EPDM Rubber (black).

Replacement Seal RP326.

Used in conjunction Raven Threshold plates.

Approvals

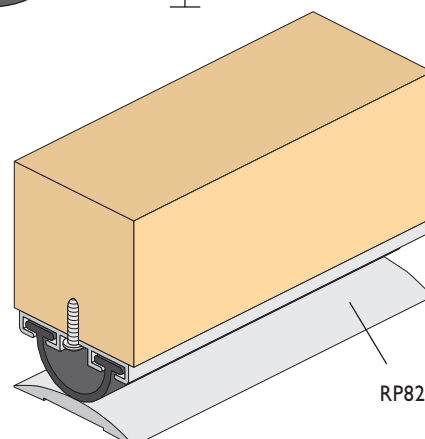
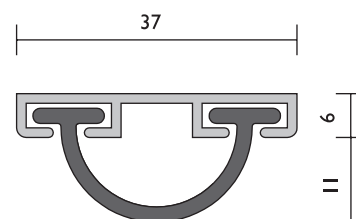
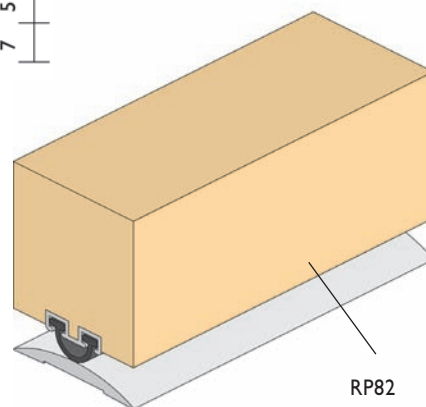
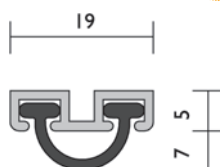
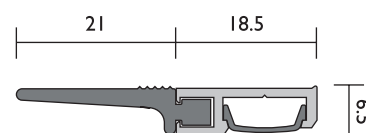
Fire & Smoke AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1.
UK/EU: Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.



RP51Si



Refer [Page 90](#) for detailed information



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/8mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns. Satin

Clear (Silver) or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material EPDM (black).

Replacement Seal RP330.

Used in conjunction RP13, RP82 (essential).

RP31



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.

Seal Sizes Available in stock lengths.

Standard Finish

Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish.
P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material EPDM (black).

Replacement Seal RP331.

Used in conjunction RP82 (essential).

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/25mm.

Seal 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. Nails Z.P.

Seal Material EPDM rubber (black).

Replacement Seal RP354.

Replacement Gaskets RP404A.

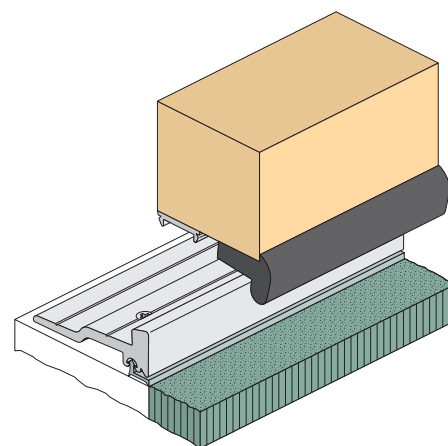
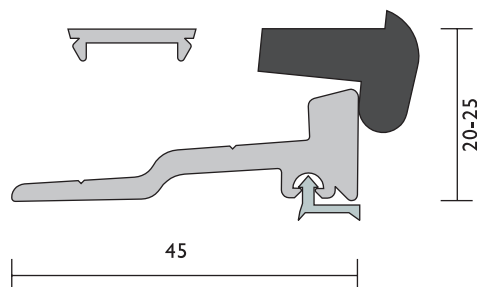
Used in conjunction

Raven door frame seals.

Approvals

Fire AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.



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) or Bronze finish.

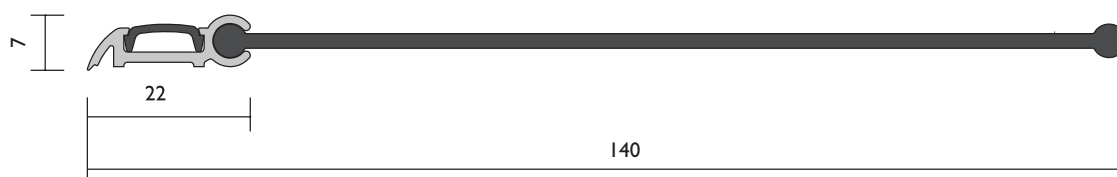
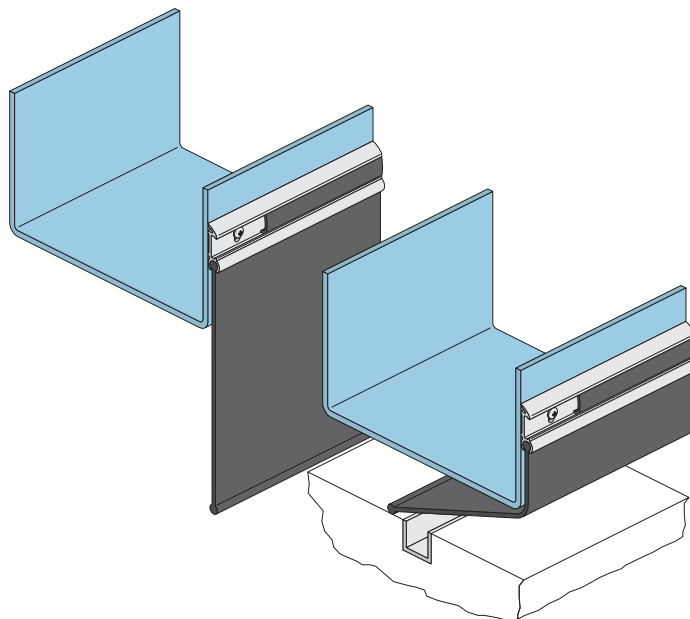
Fixing method Zinc plated, cross recess head S.T. screws of appropriate size are supplied.

Seal Material EPDM Solid rubber (black).

Replacement Seal RP381.

Used in conjunction

Threshold Plates RP82, RP29.



RP86



A weather proof door bottom seal, that is used by OEM joiners in situations where maximum weather protection is required. The multi blade 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.

Fixing Method

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

Seal Material

Rigid and flexible PVC., U.V. stabilised.

Replacement Seal

RP486.

Threshold Plate

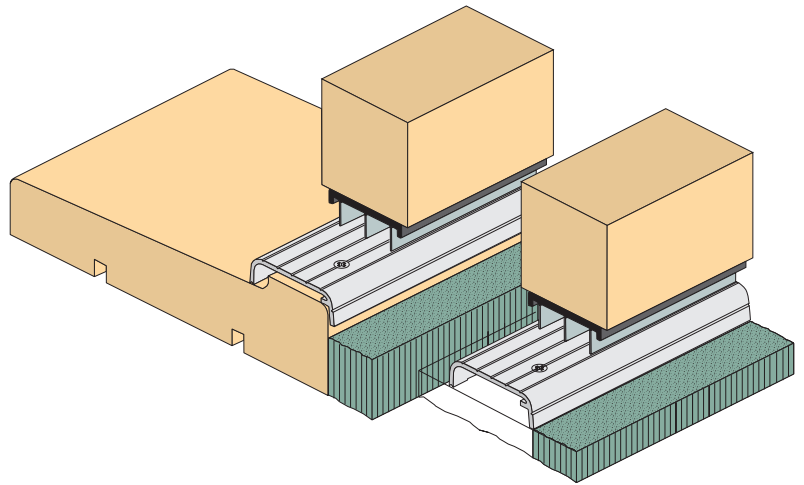
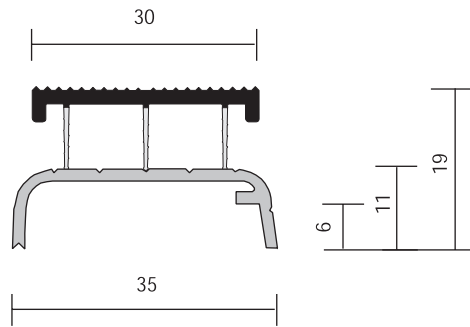
RP86B.

Approvals



Access & Mobility

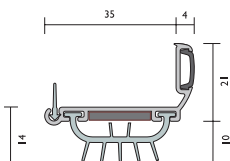
UK/EU: Conforms to Approved Document M.



RP114



RP114 Intumescent fire & hot smoke seal designed to salvage non compliant fire doors. Please refer [page 80](#) for full details.



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

RP97 Si



A threshold plate seal particularly suited for outward opening broad butt hinged plant room and emergency exit 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).

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

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

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

Location Door sills abutting outward opening broad butt hinged plant room or emergency exit doors.

Not recommended for pedestrian entry doors. Conforms to BCA Ref. D2.15, a, b, c, "Threshold at doorway".

Seal 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 builders adhesive for concealed fixing (user determined).

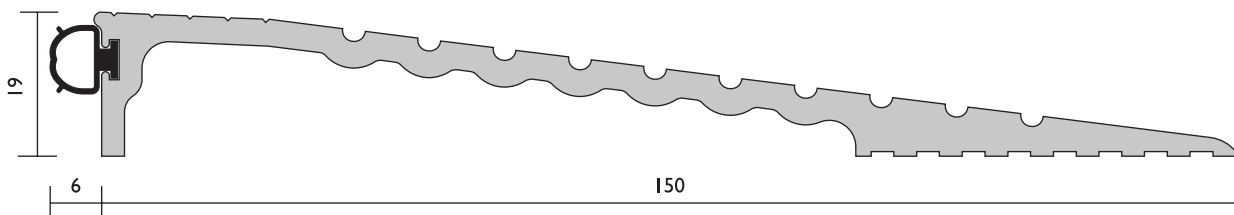
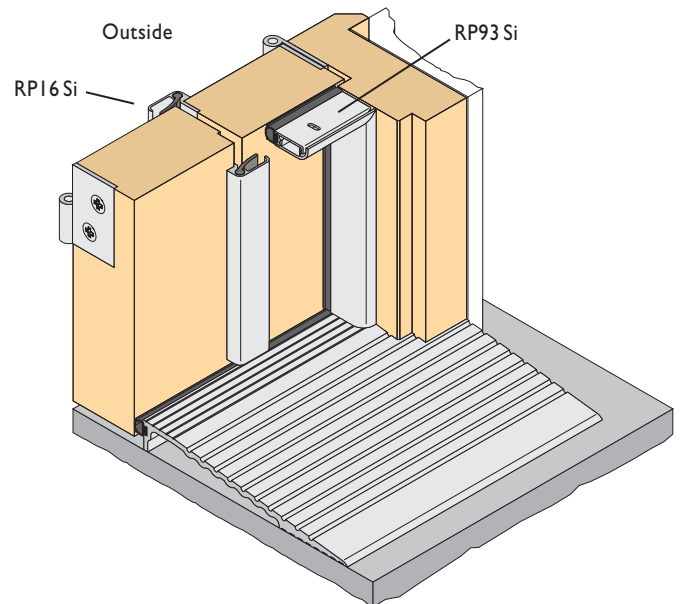
Seal Material

Silicon Rubber (SE) (black).

Replacement Seal RP393 Si.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. UK/EU: Conforms to Approved Document B.



RP109Si



The RP109 Si is a weather proof threshold plate seal suited to outward opening broad 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).

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

Location

Door sills. Outward opening doors (Broad Butt hinges recommended)

Seal Sizes Available in stock lengths.

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

Fixing Method

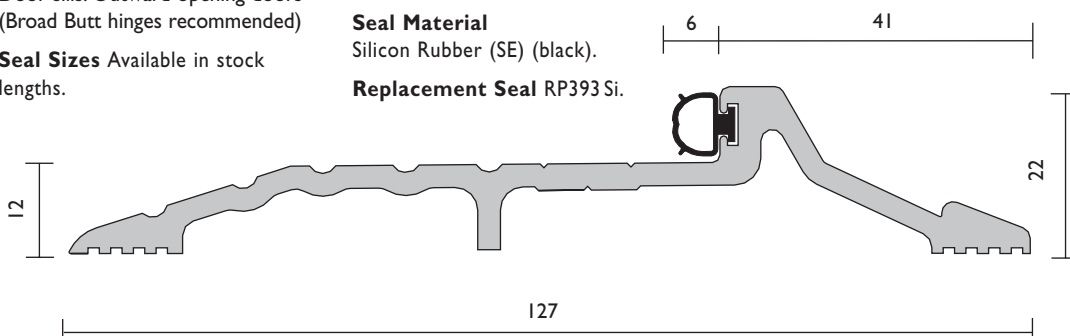
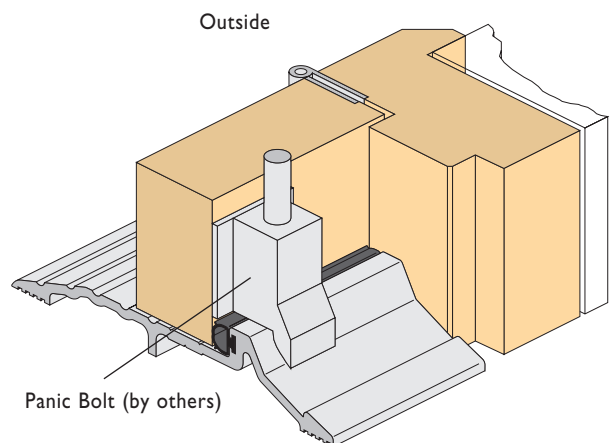
Zinc plated, cross recess head CSK S.T. screws of the appropriate size and colour are supplied, or can be fastened with builders adhesive for concealed fixing (user determined).

Used in conjunction with RP93 Si, astragal seals and suitable panic type exit devices.

Seal Material

Silicon Rubber (SE) (black).

Replacement Seal RP393 Si.



RP110Si



The RP110Si is a weather proof threshold plate seal suited to outward opening broad 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).

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

Location Door sills.
(Broad butt hinges recommended).

Seal 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 builders adhesive for concealed fixing (user determined).

Used in conjunction

Raven door frame seals, astragal seals and suitable panic type exit devices.

Seal Material

Silicon Rubber (SE) (black).

Replacement Seal RP393 Si.

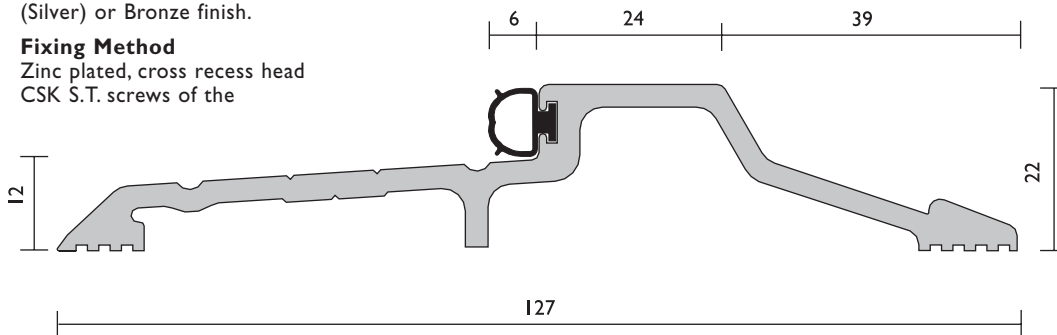
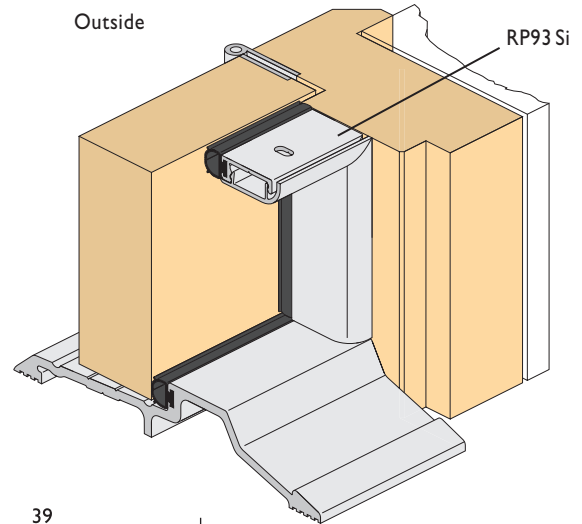
Approvals

Acoustic UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3, BS EN ISO 717.1, BS 2750, BS 5821.

AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191 (similar to AS 1045, AS/NZS 1276.

Outside

RP93 Si



RP111Si



The RP111Si is a weather proof threshold plate seal suited to outward opening broad 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).

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

Location

Door sills. (Broad Butt hinges recommended).

Seal 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 (user determined).

Used in conjunction

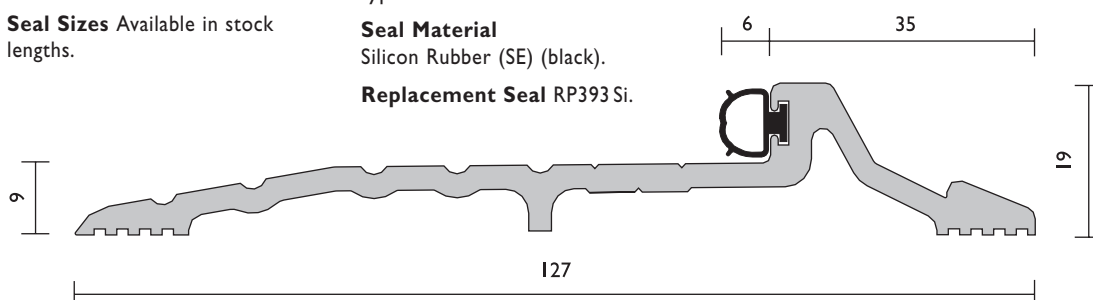
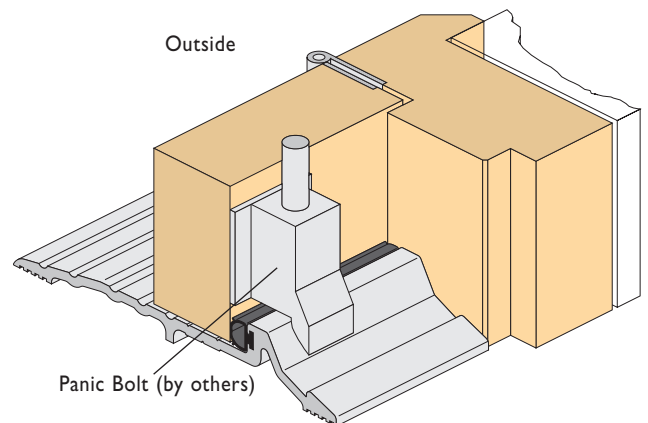
with Raven door frame seals, astragal seals and suitable panic type exit devices.

Seal Material

Silicon Rubber (SE) (black).

Replacement Seal RP393 Si.

Outside



RPI17Si

H



The RPI17Si is a weather proof threshold plate seal suited to outward opening broad 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 sills. (Broad Butt hinges recommended)

Seal Sizes Available in stock lengths.

Standard Finish

Aluminium anodised 25 microns. Satin Clear (Silver) 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.

Used in conjunction

Raven door frame seals and suitable panic type exit devices. (By others)

Seal Material

Silicon Rubber (SE) (charcoal).

Replacement Seal RP308Si.

Approvals

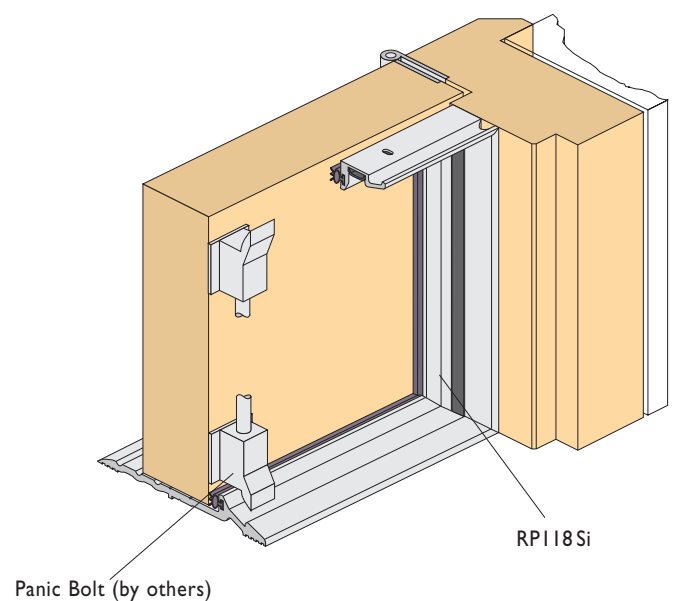
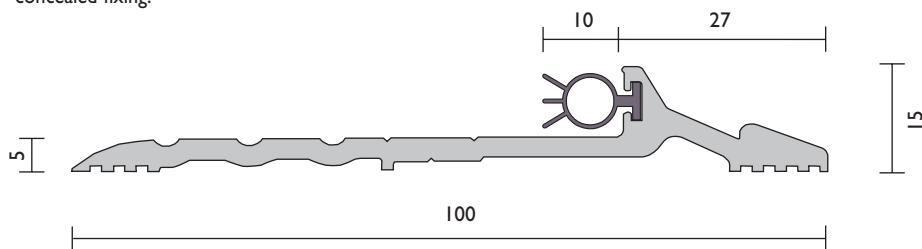
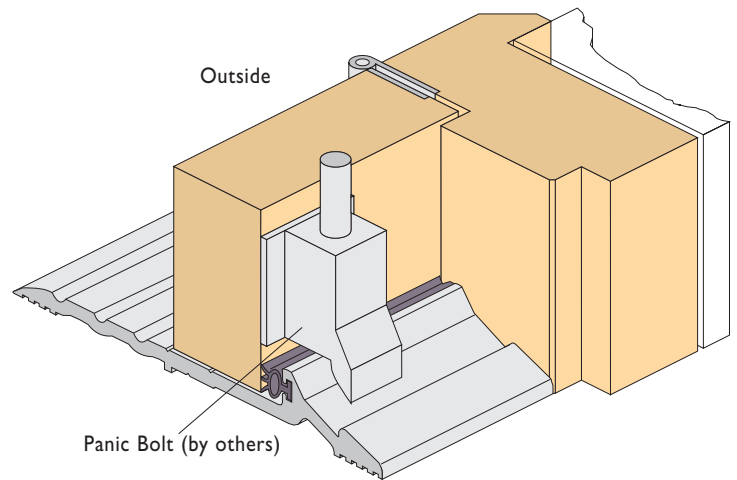
Access & Mobility

UK/EU: Conforms to Approved Document M.

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. UK/EU: Conforms to Approved Document B.

Acoustic AUS/NZ: Conforms to BCA Sec. 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).



Threshold Plates are aluminium or brass 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, thresholds offer an elevated sealing plane which, in the case of sweep seals, prevent 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. In Australia **BCA Sections DP1.10, DP2.10, DP2.15, D3, D3.2, G4.3, G4.5, AS1428** and **AS1735**. In the UK, refer to *Building Regulations Part M*. Most of Raven's Threshold Plates conform to American National Standard **ANSI A117.1 - 1992** 'Thresholds at Doorways' eg (RP13, 19, 28, 29, 66, 77, 82, 95, 96, 98, 112).

RP4B



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 S.T. screws of the appropriate size and colour are supplied.

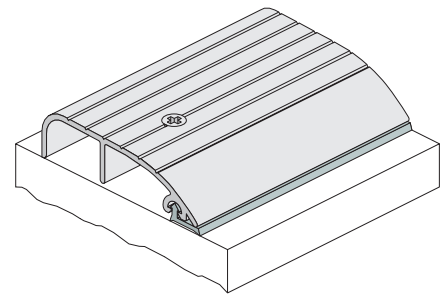
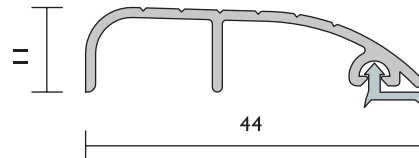
Replacement Gasket RP404A.

Used in conjunction door bottom seals.

Approvals

Access & Mobility

UK/EU: Conforms to Approved Document M.



RP13



A low profile threshold plate which is often used in conjunction with door bottom seals to prevent rain 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 CKS S.T. screws of the appropriate size are supplied, or can be fastened with adhesive.

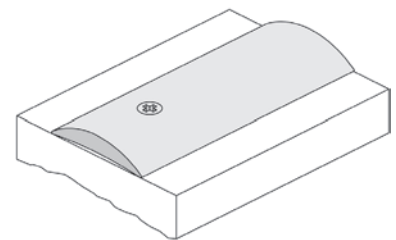
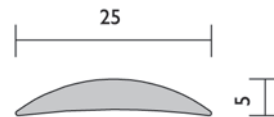
Used in conjunction Raven door bottom seals.

Approvals

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

UK/EU: Conforms to Approved Document M.



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.

Standard Finish

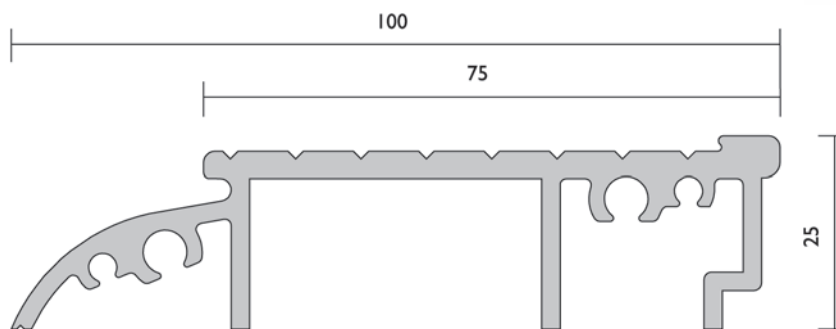
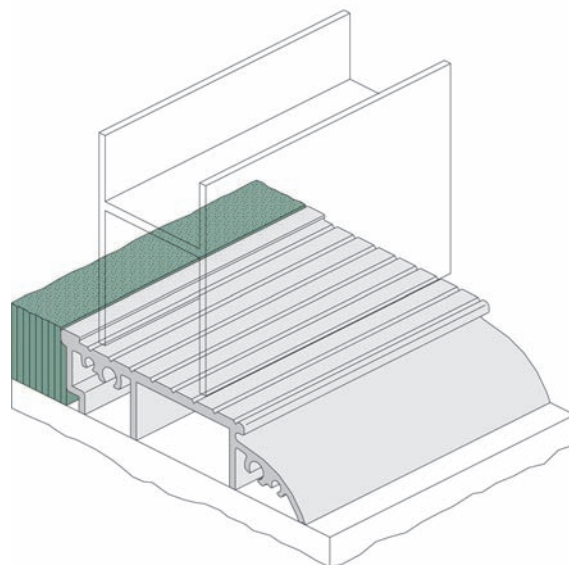
Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method

By fabricator.

Used in conjunction

Raven door bottom seals RP2B, RP74 (RP8Si butt hinged doors).



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 sills.

Sizes Available in stock lengths.

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

Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size and colour are supplied. (Brass version has brass screws).

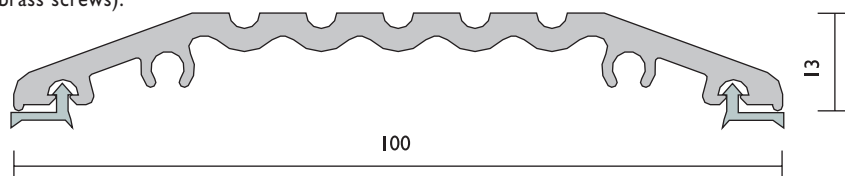
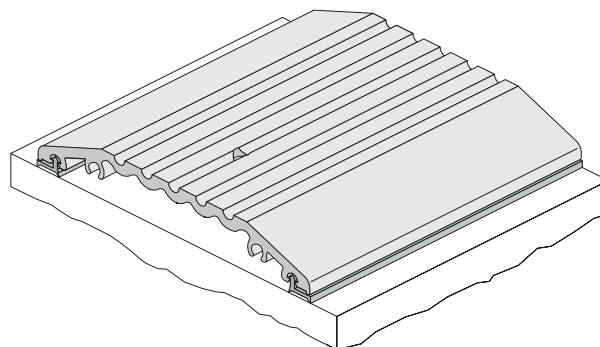
Used in conjunction

Raven door bottom seals.

Note: Solid brass version does not have sill gaskets or side fix screw channels.

Approvals

Access & Mobility UK/EU: Conforms to Approved Document M.



RP27



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

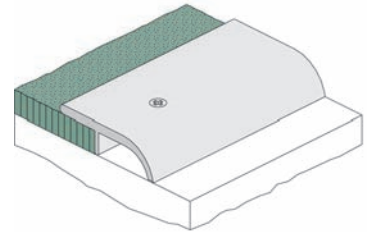
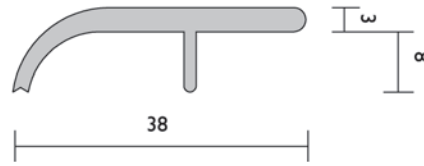
Zinc plated, cross recess head CKS S.T. screws of the appropriate size and colour are supplied.

Used in conjunction

Raven door bottom seals.

Approvals

Access & Mobility 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), Bronze or solid brass finish.

Fixing Method

Zinc plated, cross recess head CKS S.T. screws of the appropriate size and colour are supplied. Brass screws supplied for solid brass version.

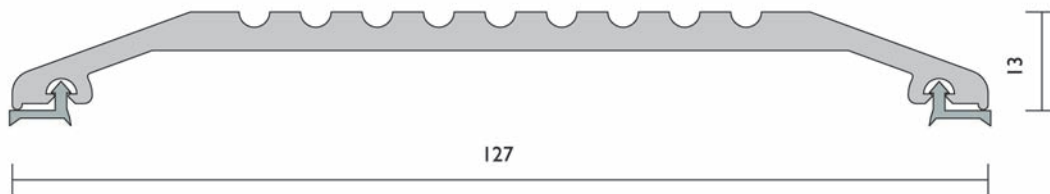
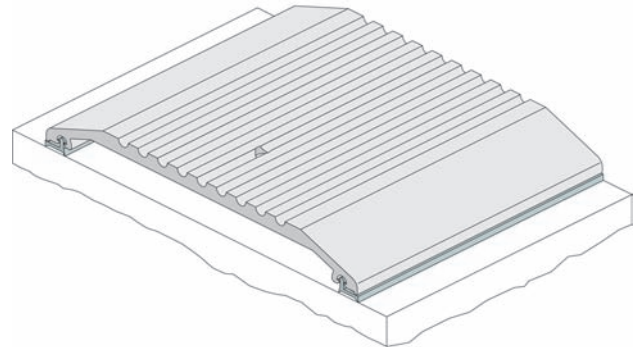
Used in conjunction

Raven door bottom seals.

Note: Solid brass version does not have sill gaskets.

Approvals

Access & Mobility UK/EU: Conforms to Approved Document M.



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 CKS S.T. screws of the appropriate size and colour are supplied.

Used in conjunction

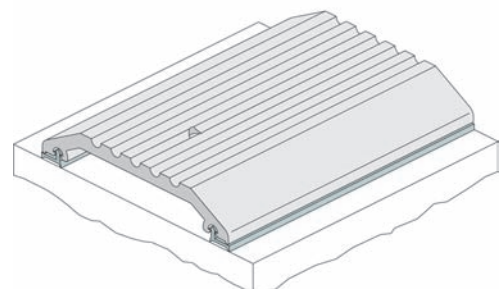
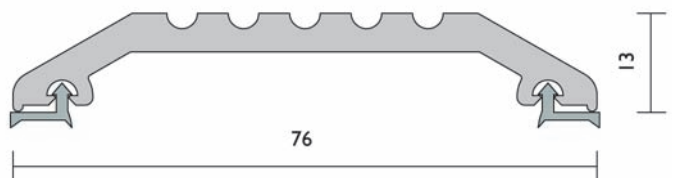
Raven door bottom seals.

Approvals

Fire AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1 (with gaskets removed). UK/EU: Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.

Access & Mobility

UK/EU: Conforms to Approved Document M.



RP66



A flush fitting threshold plate for carpet covered floors. Used in conjunction with a door bottom seal such as RP38Si, 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.

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

Used in conjunction

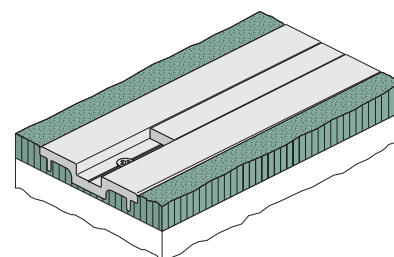
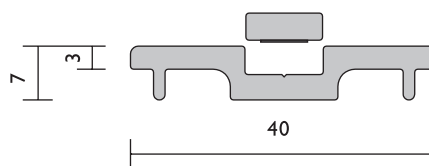
Raven door bottom seals.

Approvals

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

UK/EU: Conforms to Approved Document M.



RP77



A heavy duty door threshold. The ribbed extrusions can be positioned back to back to provide a two way threshold ramp.

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.

Used in conjunction

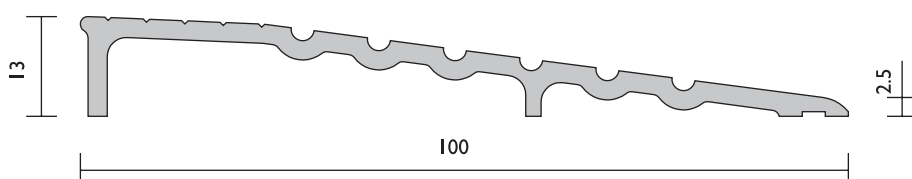
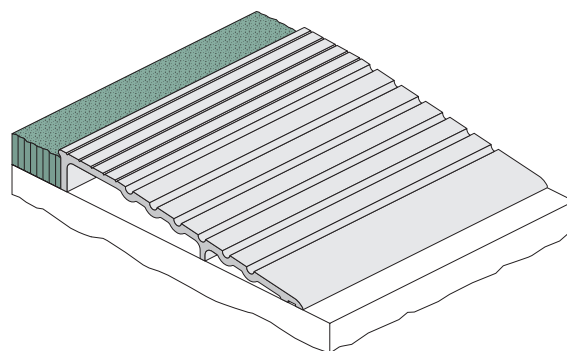
Raven door bottom seals.

Approvals

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

UK/EU: Conforms to Approved Document M.



RP82



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

Location Door sills.

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

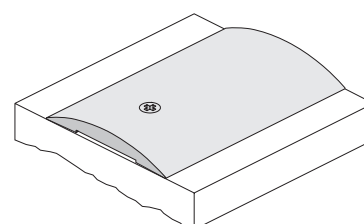
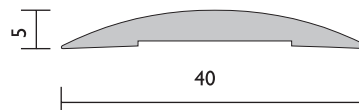
Raven door bottom seals.

Approvals

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

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 sills.

Sizes

Available in stock lengths.

Standard Finish

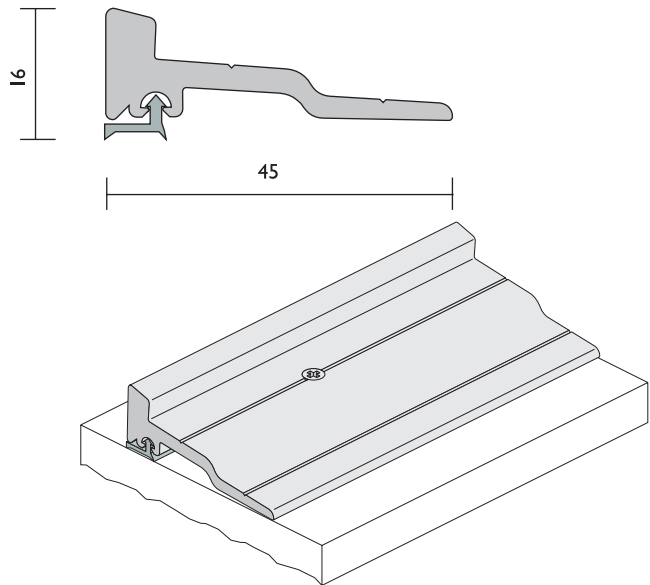
Aluminium anodised 25 microns. Satin Clear (Silver) or Bronze finish.

Fixing Method

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

Used in conjunction

Raven door bottom seals.



RP95



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

Location Door sills.

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.

Approvals

Fire

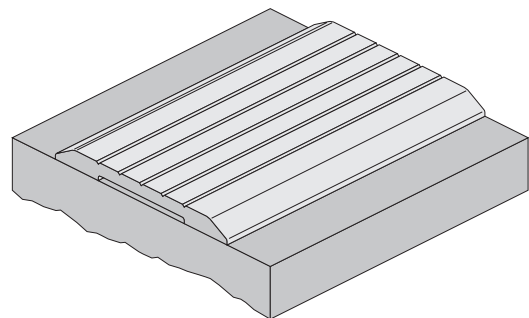
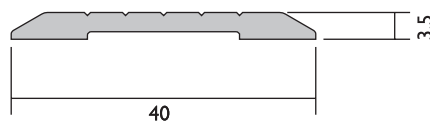
AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Conforms to Approved Document B. Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

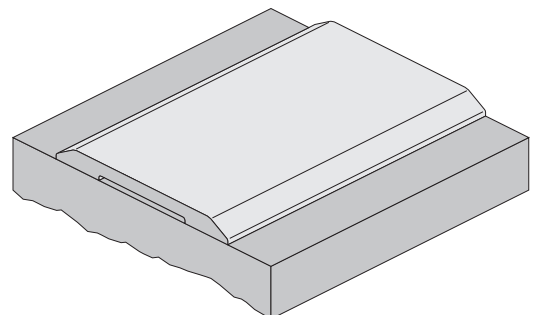
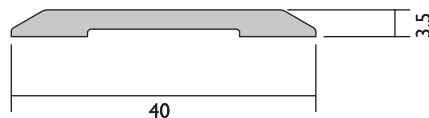
UK/EU: Conforms to Approved Document M.



RP96



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



RP98



A heavy duty threshold plate. RP98 can be positioned back to back to provide a two way ramp. RP98 is ideal for commercial shopfronts providing a neat ramp detail between carpets or tiles at doorways.

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

Location

Door sill or used as 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.

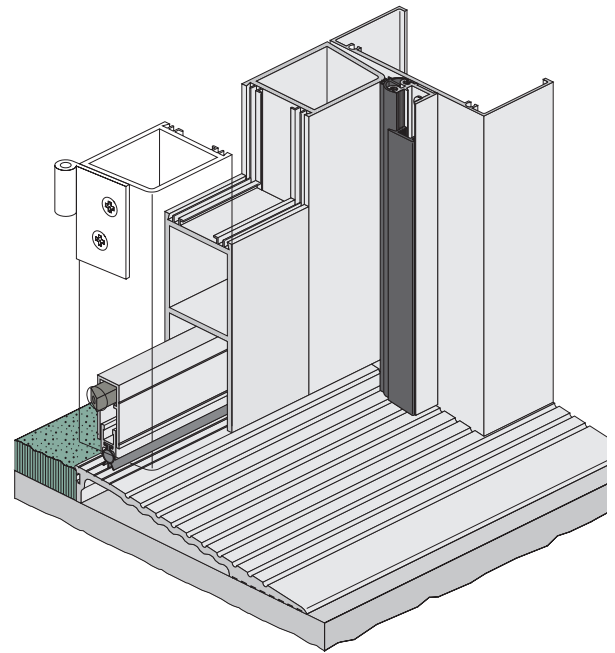
Used in conjunction

Raven door bottom and door frame seals.

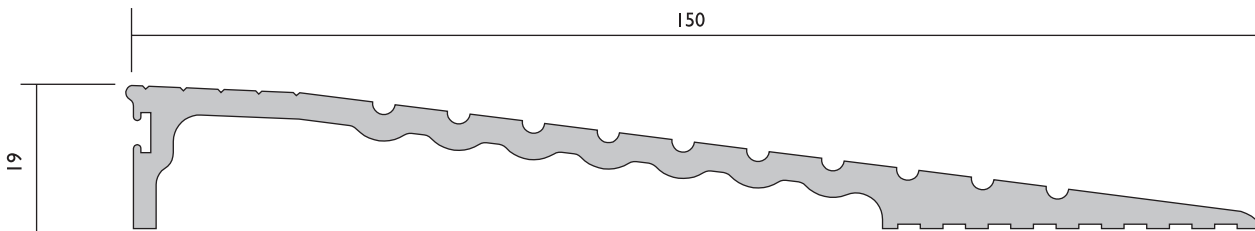
System Reference [page 28](#).

Approvals

Access & Mobility AUS/NZ: Conforms to BCA D3 D3.2. and AS 1428.1.
UK/EU: Conforms to Approved Document M.



150



RP112



A medium duty threshold plate.

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

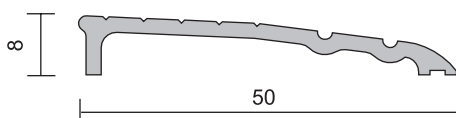
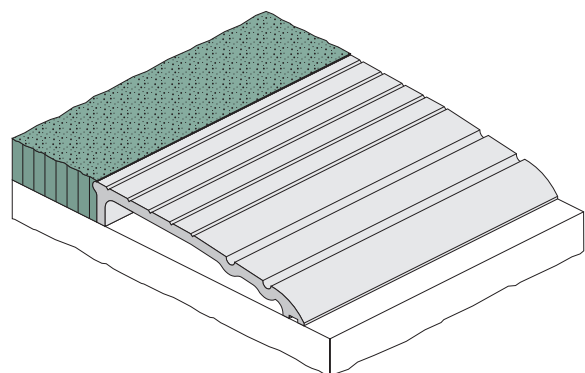
supplied.

Used in conjunction

Raven door bottom seals.

Approvals

Access & Mobility AUS/NZ: Conforms to BCA D3 D3.2. and AS 1428.1.
UK/EU: Conforms to Approved Document M.



RPI15



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

Location Door sills.

Seal 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.

Approvals

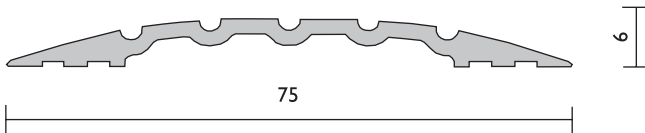
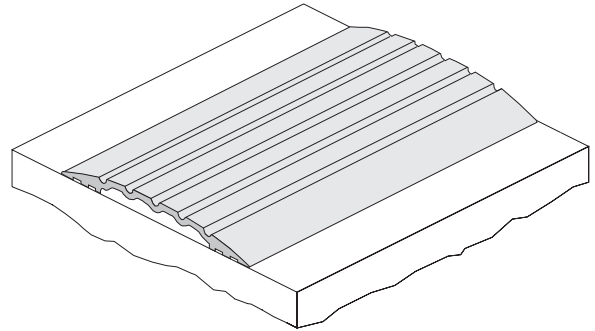
Fire AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Conforms to Approved Document B. Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

UK/EU: Conforms to Approved Document M.



RPI16



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

Location Door sills.

Seal 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.

Approvals

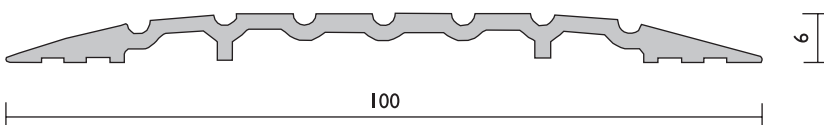
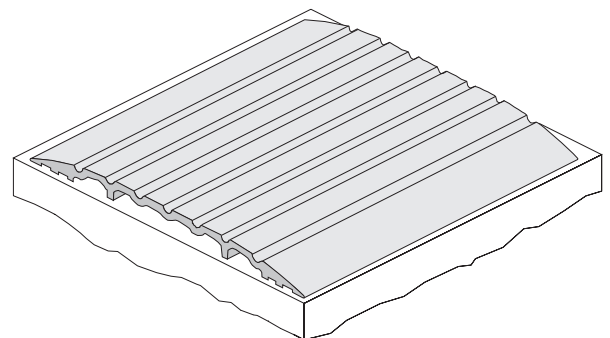
Fire AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Conforms to Approved Document B. Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.

Access & Mobility

AUS/NZ: Conforms to BCA D3 D3.2 and Standard AS1428.1.

UK/EU: Conforms to Approved Document M.



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.

RP7

M



A rigid & flexible PVC door stop frame seal suitable for rebated frames.

Location

Head & Jamb of single or double broad butt hinged doors.

Seal Sizes Available in single door sets.

Min/Max Gap

0 – 7mm (compression 1-3mm).

Fixing Method

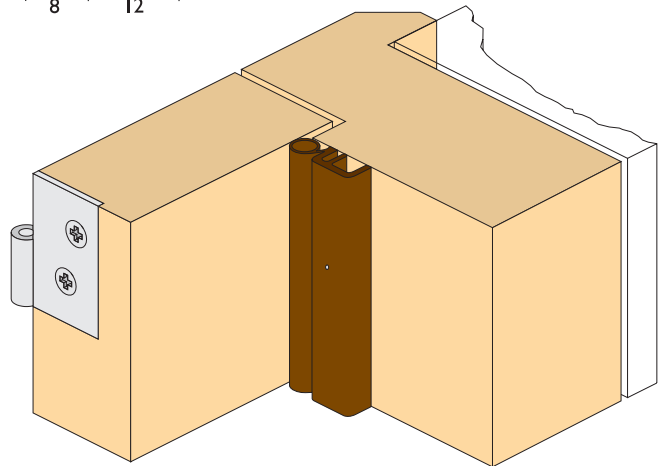
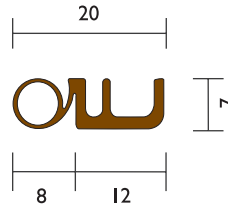
Zinc Plated nails to suit are supplied.

Seal Material

White or Brown PVC : rigid/flexible. Can be painted.

Used in conjunction

Raven door bottom seals and astragal seals.



RP12

M



Woven Pile Seal (for Noise Protection).

The RP12 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 Jamb).

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

Seal Sizes Available in stock lengths.

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

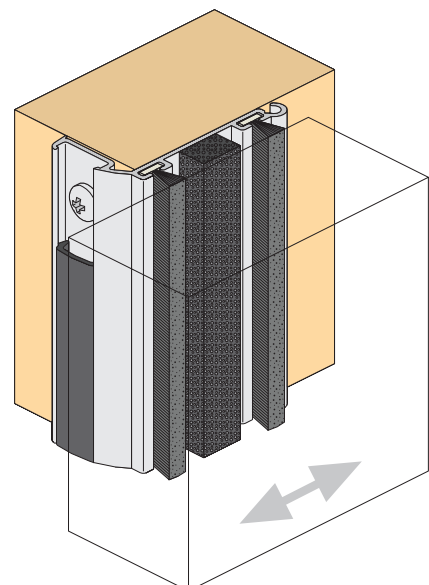
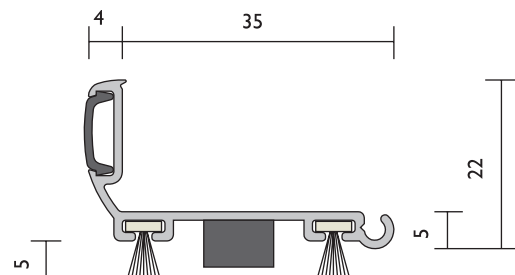
P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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.

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

Used in conjunction

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



RP10



A neat compact door stop frame seal which has proven to be an effective acoustic seal when being tested. It is quick and easy to install onto the door frame as a door stop. It is adjustable, by concealed fixing slots, for a precision fit.

The multi blade seal considerably reduces the leakage of noise and air movement. The minimum deflection of the sealing fins creates maximum efficiency, offering a large tolerance for door movement over time. The seal 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 broad butt hinged doors.

Min/Max Gap 0mm/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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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.

Seal Material

Flexible PVC Charcoal or light grey.

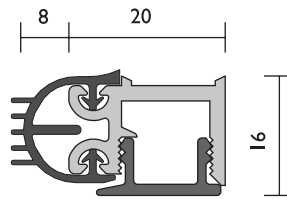
Replacement Seal RP410.

Used in conjunction Raven Door Bottom Seals, Astragals and Thresholds.

Approvals

Acoustic AUS/NZ: Conforms to BCA Sec. F5. 5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).



RP10 Si



Note: If ordering RP10 with silicon option, specify RP10 Si.

Seal Material

Silicon Rubber (SE) (charcoal).

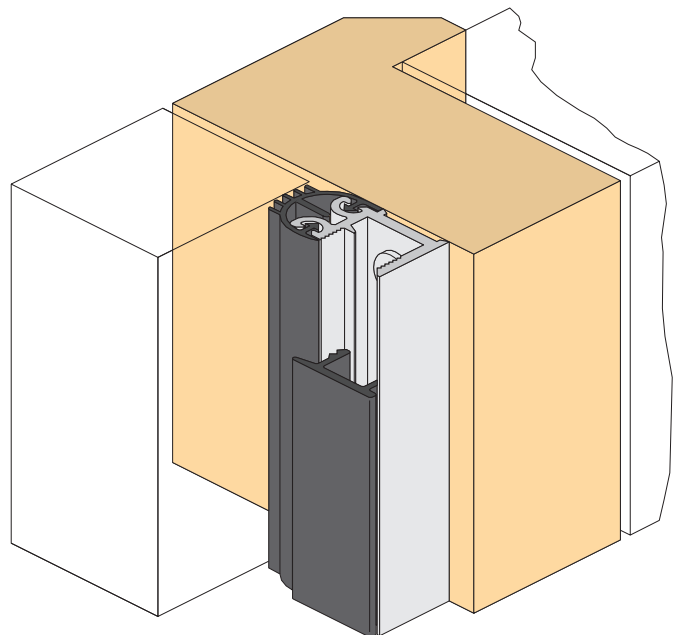
Replacement Seal RP310 Si.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7.

UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS EN 1634.1, BS 476 Part 20 & 22, Sec. 31.1).

Acoustic Refer to RP10.



RP23



A tested S.E. Neoprene compression smoke and weather seal for broad 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 broad butt hinged doors (or bulk head applications).

Min/Max Gap 0mm/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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material Neoprene (self extinguishing) black.

Replacement Seal RP323.

Used in conjunction

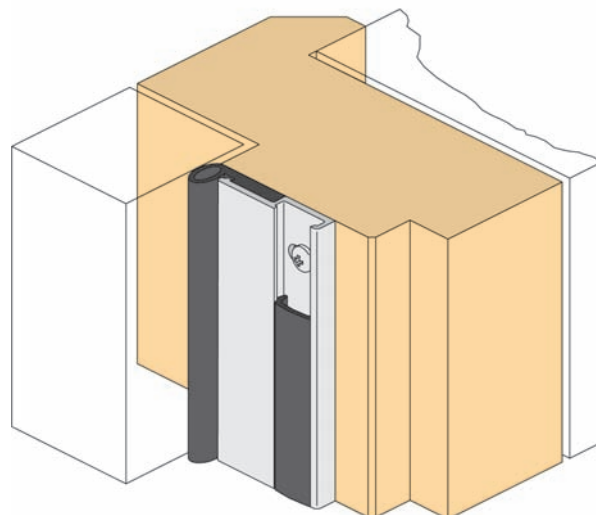
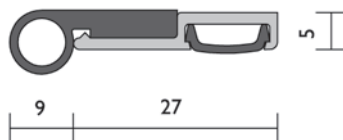
Raven threshold plates, door bottom seals, astragal seals.

Approvals

Fire & Smoke AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1. UK/EU: Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22. Conforms to **BS5588 Pt1** when tested in accordance with **BS476 Pt3.1.1**.

Acoustic AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Tested to BS EN ISO 140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).



RP24



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 E.P.D.M. 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 broad butt hinged doors.

Min/Max Gap 0mm/8mm.

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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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.

Seal Material Closed cell EPDM sponge, self extinguishing (black).

Replacement Seal RP338 (silicon option RP338 Si). **Note:** different profile.

Approvals

Acoustic AUS/NZ: Conforms to BCA Sec. 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).

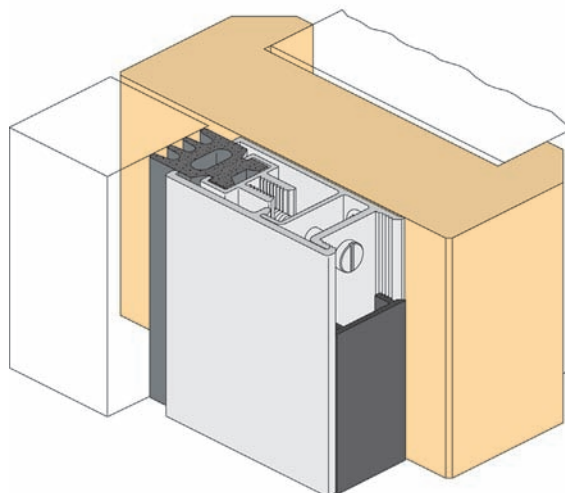
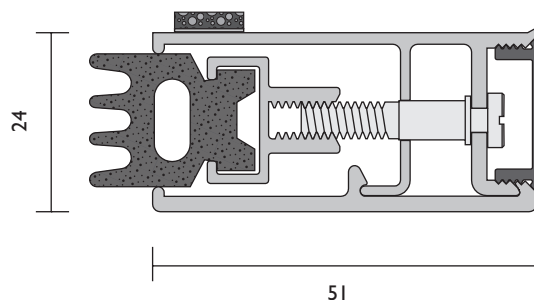
RP24 Si



Note: If ordering RP24 with silicon option, specify RP24Si (N.B. Different gasket profile).

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4.



Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7. UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS EN 1634.1, BS 476 Part 20 & 22, Sec. 31.1).



RP44 Si (REPLACES RP44)

H



Is an effective acoustic door seal which can be installed on door stops of sufficient depth. Wide broad 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.

Location Head and jambs on single or double, broad butt hinged doors or bulk head applications. **Note:** check backset door latch requirement.

Min/Max Gap

8 - 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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material

Silicon Rubber (SE) (Grey).

Replacement Seal

RP308 Si.

Used in conjunction

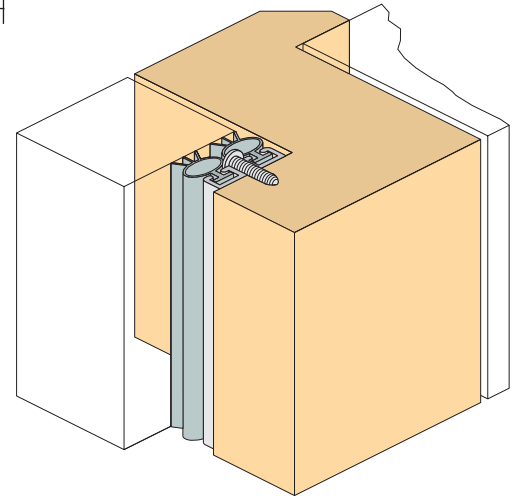
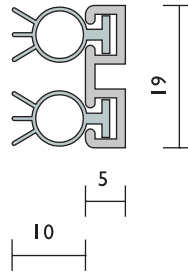
Raven Door Bottom Seals.

Approvals

Fire & Smoke AUS/NZ:

Conforms to BCA Spec. C3.4.

UK/EU: Conforms to Approved Document B.



RP47 Si (REPLACES RP47)

H



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 broad butt hinged doors or bulk head applications.

Min/Max Gap 0mm/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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material Silicon Rubber(SE). (Charcoal)

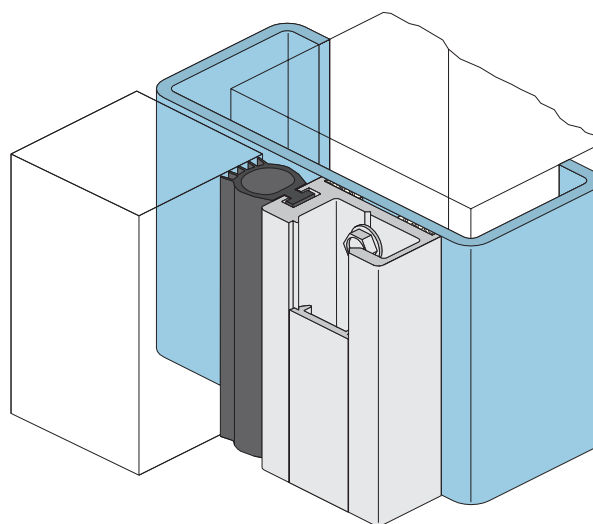
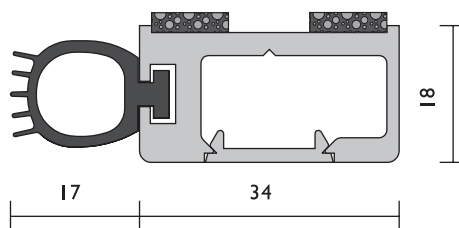
Replacement Seal RP347 Si.

Approvals

Acoustic AUS/NZ: Conforms to BCA Sec. 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: Conforms to BCA Spec. C3.4. UK/EU: Approved Document B.



RP56

M



A finned sweep seal that is designed to fit into a groove around the door edge 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 2 – 4mm.

Seal Sizes Available in stock lengths.

Fixing Method 10mm x 4mm groove with adhesive.

Seal Material

PVC rigid holder (bronze) Flexible PVC fins (black).

Used in Conjunction

Raven automatic door bottom seals, brush strip seals.

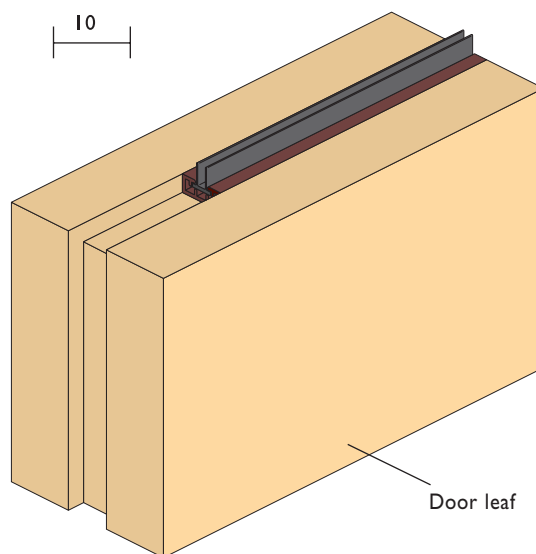
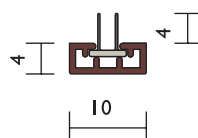
Approvals

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22.

Acoustic AUS/NZ: Conforms to BCA Sec. 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).



Door leaf

RP69



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

Location Around internal doors.

Min/Max Gap 3mm - 4mm.

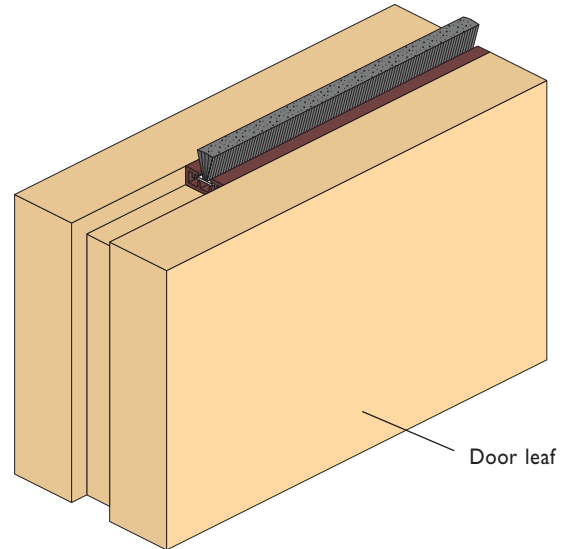
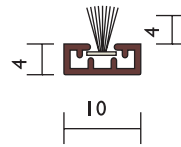
Seal Sizes Available in stock lengths.

Fixing Method 10mm x 4mm groove with adhesive.

Seal Material PVC rigid holder (bronze) black woven polypropylene pile weatherstrip.

Used in Conjunction

Raven automatic door bottom seals, brush strip seals.



RP73



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 metre (coil).

Fixing Method

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

Seal Material

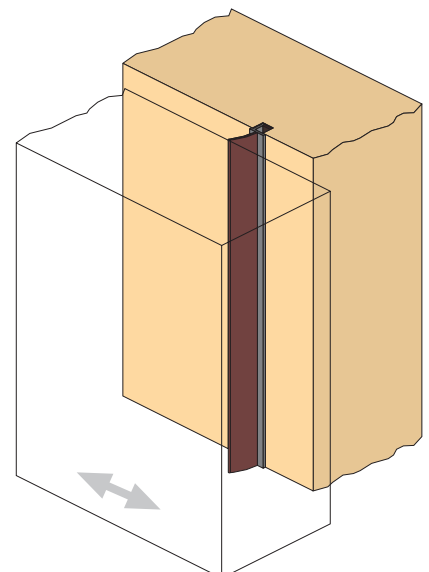
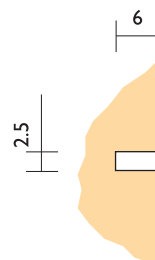
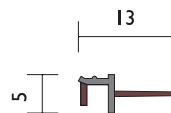
Rigid and flexible PVC co-extrusion, brown.

Used in conjunction

Raven Nylon brush strip door bottom seals.

Approvals

Acoustic UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).
AUS/NZ: Conforms to BCA Sec. F5.5. Tests above are similar to AS 1191, AS 1045, AS/NZS 1276.



RP78 Si (REPLACES RP78)



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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

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

Seal Material

Silicon Rubber (SE) (grey).

Replacement Seal RP394 Si.

Used in conjunction

RP8 Si, RP16 Si, RP38 Si, RP99 Si, RP70 Si.

Approvals

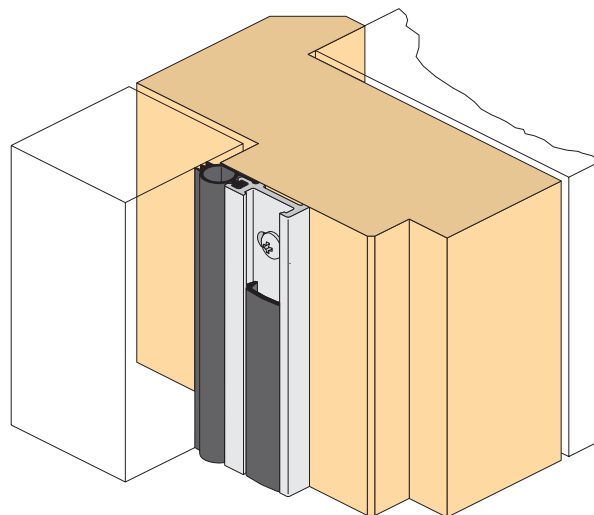
Acoustic AUS/NZ: Conforms to BCA Sec. F5. 5. Tested to AS 1191, AS 1045, AS/NZS 1276.

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:

Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7.

UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS EN 1634.1, BS 476 Part 20 & 22, Sec. 31.1).



RP84 Si



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 air borne contaminants, thus allowing for controlled air ventilation.

Location

Head and jambs for single and double broad 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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

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

Seal Material

Silicon (black).

Replacement Seal

RP384 Si.

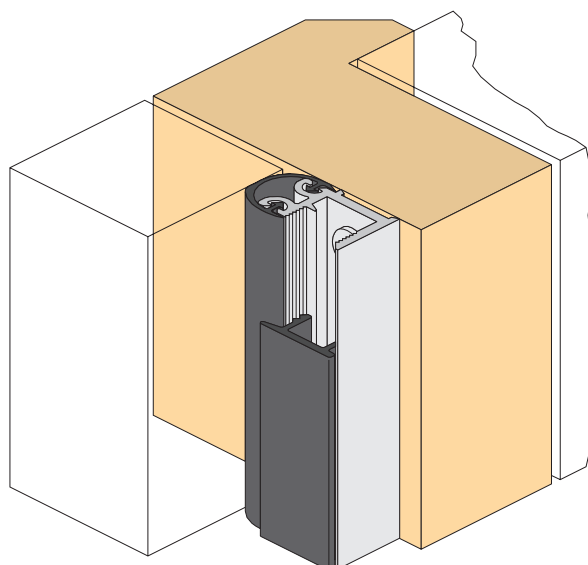
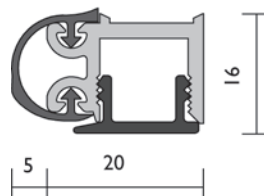
Used in conjunction

Raven door bottom seals and astragal seals.

Approvals

Smoke AUS/NZ: Conforms to BCA Spec. C3.4.

UK/EU: Conforms to Approved Document B.



RP87 Si



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

Min/Max 0mm/8mm.

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

Seal Sizes Available in stock length or door set sizes.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

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

Seal Material

Silicon Rubber (SE) (charcoal).

Approvals

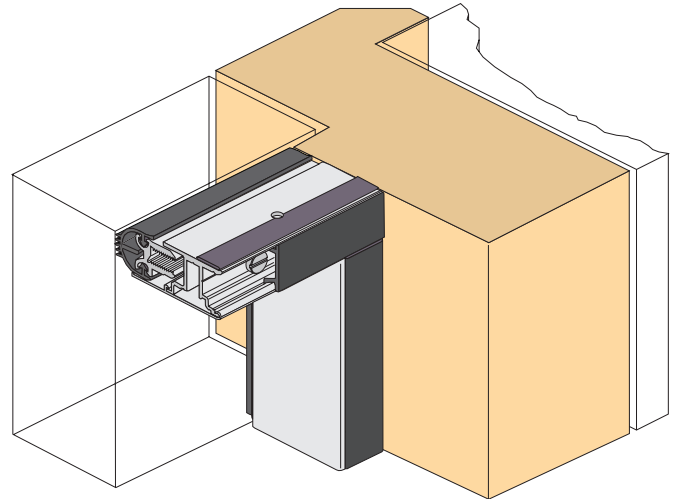
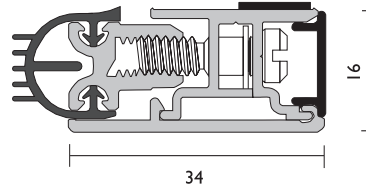
Acoustic AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Conforms to Approved Document B.



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 broad butt hinged doors.

Min/Max Gap

0mm / 6mm.

Seal Sizes Available in stock lengths or door set sizes. Maximum length 3000mm.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material

Silicon Rubber (S.E.) (charcoal).

Replacement Seal RP393 Si.

Used in conjunction

RP8 Si, RP16 Si, RP38 Si, RP99 Si, RP70 Si, RP97 Si.

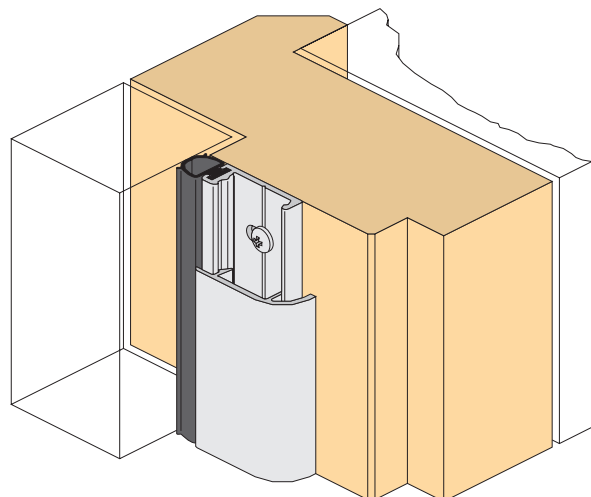
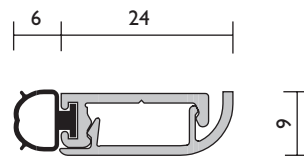
Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22, Sec. 31.1).

Acoustic AUS/NZ: Conforms to BCA Sec. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).



RP113



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 broad butt hinged doors.

Seal Sizes

Available in single and double door set sizes.

Min/Max Gap

0 – 7mm (compression 1-3mm).

Fixing Method

Zinc Plated nails to suit are supplied.

Seal Material

Brown silicon rubber.
Timber is genuine plantation Tasmanian oak.

Replacement Seal

RP320 (Brown).

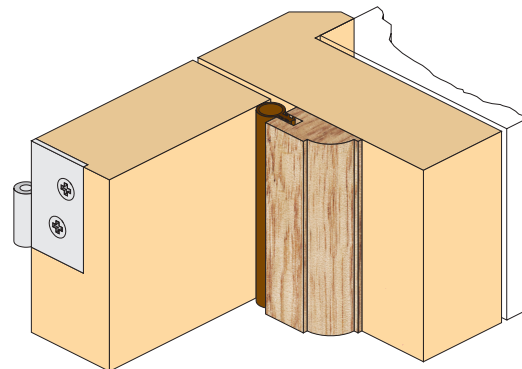
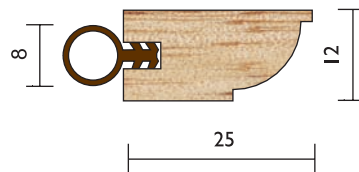
Used in conjunction

Raven door bottom seals and astragal seals.

Approvals

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

Smoke AUS/NZ: Conforms to BCA Spec. C3.4.
UK/EU: Conforms to Approved Document B.



RP94 Si



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 broad butt hinged doors.

Min/Max Gap 0mm/ 6mm.

Seal Sizes Available in stock lengths or door set sizes.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material

Silicon Rubber (SE) (charcoal).

Replacement Seal

RP394 Si.

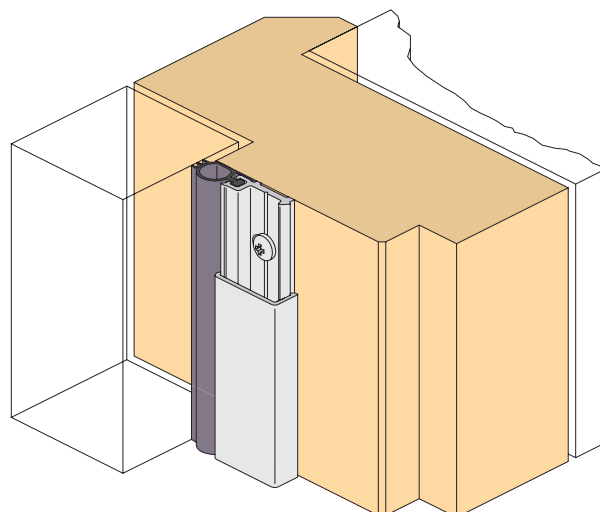
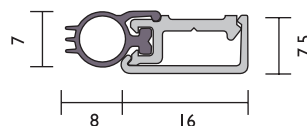
Used in conjunction

Raven door bottom seals, astragal and threshold plates.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22).

Acoustic AUS/NZ: Conforms to BCA Sec. 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).



RP118 Si



RP118Si is a smoke, weather and acoustic frame seal. It is ideal for use on outward opening broad 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 RP117Si threshold plate seal, RP118Si 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.

RP118Si 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.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Used in conjunction RP8Si, RP16Si, RP99Si, RP70Si (fully morticed), RP117Si (shown).

Seal Material Silicon Rubber (SE) (Grey).

Replacement Seal RP308Si.

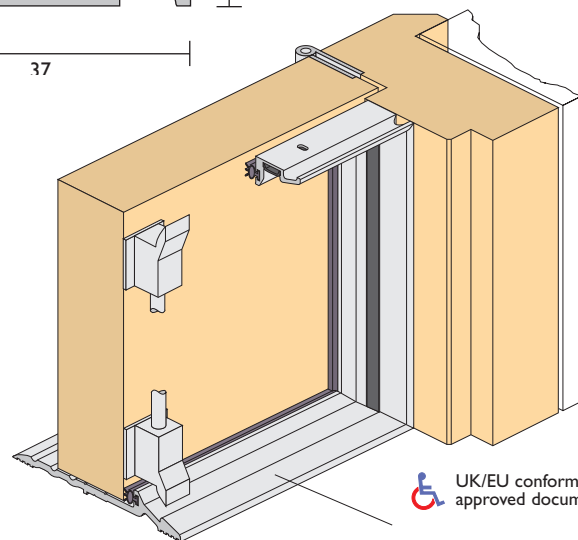
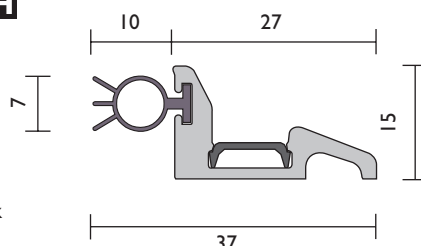
Approvals

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. UK/EU: Conforms to Approved Document B.

Acoustic AUS/NZ: Conforms to BCA Sec. 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).

Door Frame or Perimeter Seals



UK/EU conforms to approved document M

RP117Si

Fully caulked 44mm pair of doors RP118Si x 4, RP8Si 2 x RP16Si & 4 x 2		STC	Rw	STL(dB)															
		31	31	30.4															
Frequency Hz		100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
STL (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

RP120



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 broad butt hinged doors and windows.

Min/Max Gap 3mm to 5.5mm.

Seal Sizes Available in door set sizes.

Standard Finish Black (PVC).

Fixing Method

Self adhesive.

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

Seal Material

Rigid and Flexible flame

retardant PVC, with an aggressive self adhesive backing tape on both sides of the rigid carrier.

Used in Conjunction

Raven door bottom seals, threshold plates and astragal seals.

Approvals

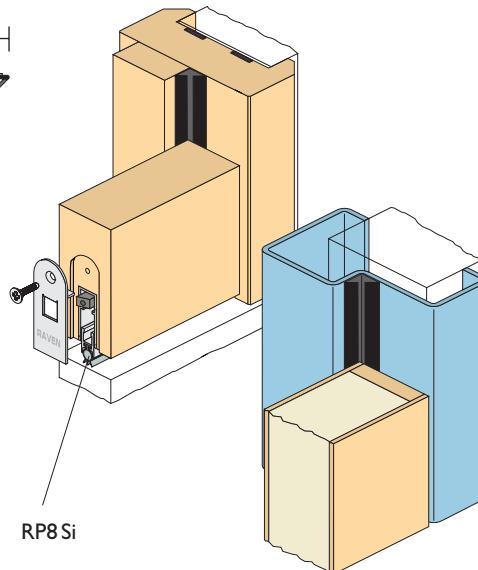
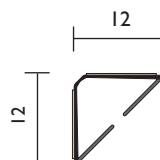
Acoustic

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. AUS/NZ: Conforms to BCA Sect. F5. 5. Tested to AS 1191 (similar to AS 1045, AS/NZS 1276).

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22).



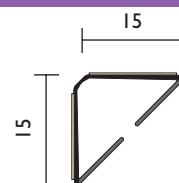
RP8Si

RP150



Delta Seal™

RP150 has the same specifications as for RP120 above, but with wider dimensions.

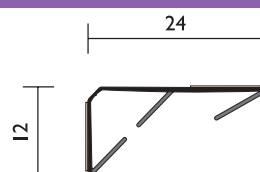


RP124



Delta Seal Plus™

Refer [Page 90](#) for detailed information.



RP39



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. Broad butt hinges recommended.

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

Standard Finish

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Seal Sizes Available in stock lengths.

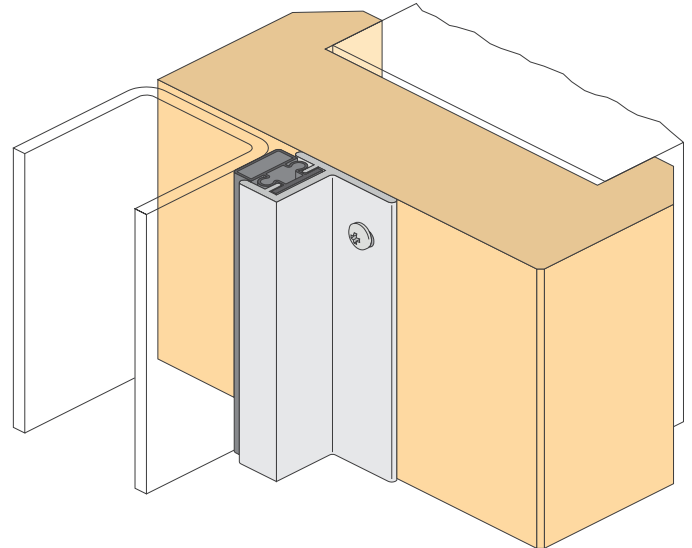
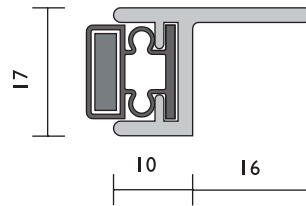
Fixing Method Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Fixing holes are slotted.

Seal Material PVC (charcoal).

Used in conjunction
Door bottom seals.

Approvals

Fire
AUS/NZ: Tested to AS 1530.4 & AS/NZS 1905.1.
UK/EU: Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22.



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 broad butt hinged doors.

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

Seal Sizes Available in stock lengths.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

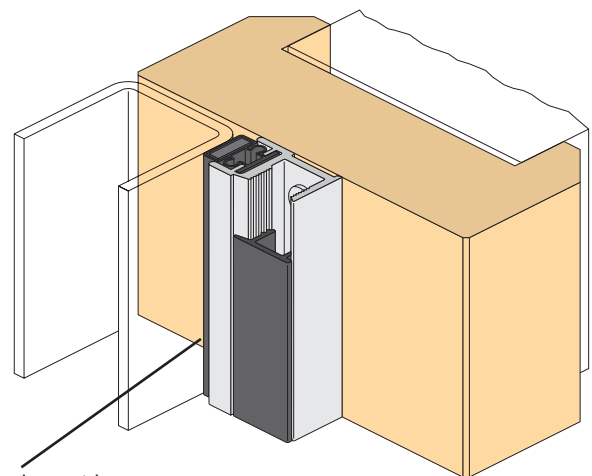
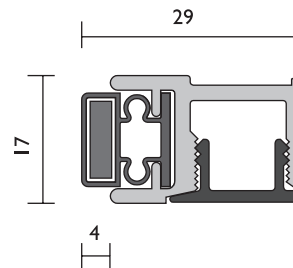
Zinc plated, cross recess head S.T. screws of the appropriate size are supplied.

Seal Material
PVC (charcoal).

Used in conjunction
Door bottom seals and astragal seals.

Approvals

Acoustic AUS/NZ: Conforms to BCA Sec. 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).



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 x 12mm 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) or Bronze finish. Charcoal flexible PVC retaining magnet strip.

Fixing Method

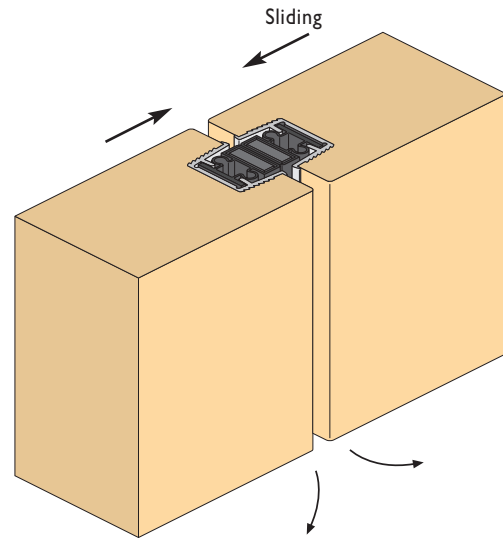
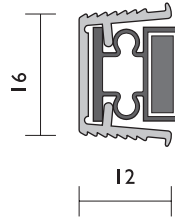
Press fit into 16.5mm x 12mm deep mortice (adhesive optional). Hardwood timber doors 40mm minimum thickness.

Seal Material

Magnetic strip with flexible PVC holder.

Used in conjunction

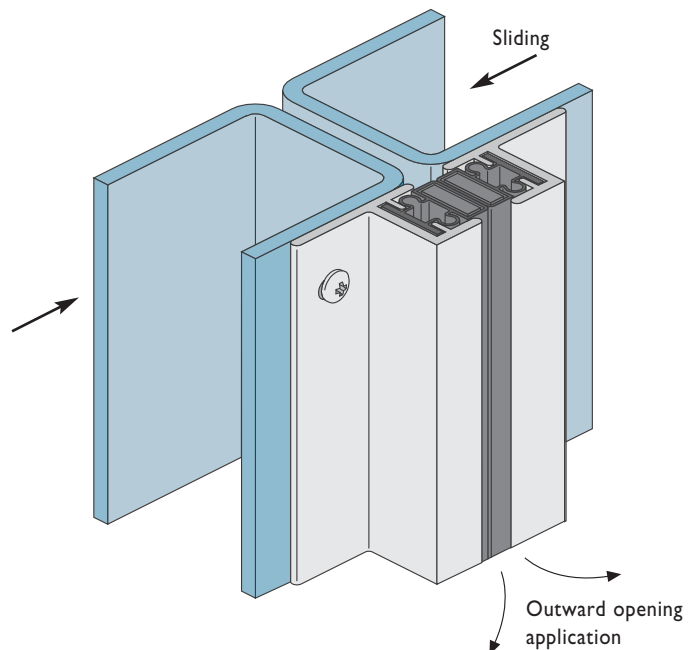
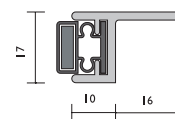
Door bottom and frame seals.



RP39



Astragal Magnetic Seal. Refer [page 64](#).



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.

RP16Si (REPLACES RP16)



RP16Si 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 cut out (checked) to allow for locks and latches. RP16Si can be rebated or face fixed.

For maximum acoustic performance, specify two seals. ie: One for each door leaf. (Minimum door thickness subject to centre latch and dimensions of mortised door bottom seals).

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

Location Meeting stiles of double doors, butt hinged.

Min/Max Gap 2.5mm/8mm.

Seal Sizes Available in stock

lengths.

Standard Finish

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Zinc plated, countersunk, cross recess head S.T. screws of the appropriate size and colour are supplied. Seal can be rebated or face mounted.

Seal Material Silicon Rubber (SE) (charcoal).

Replacement Seal RP316Si.

Approvals

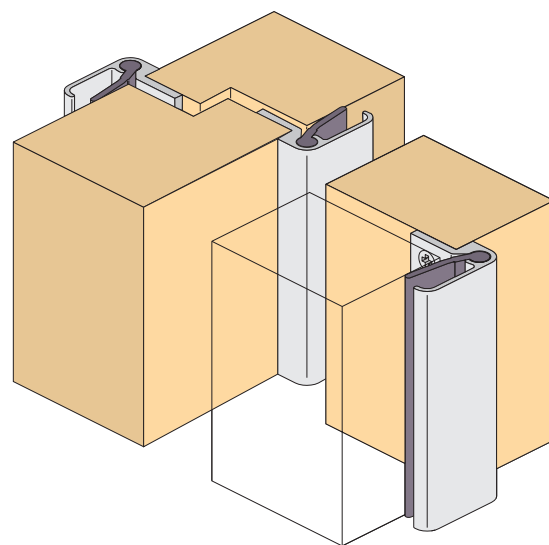
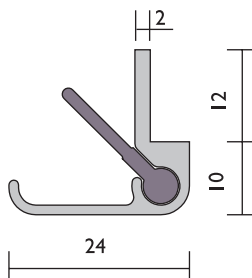
Acoustic AUS/NZ: Conforms to BCA Sect. F5. 5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).

Smoke

AUS/NZ: Conforms to BCA Spec. C3.4.

UK/EU: Conforms to Approved Document B.



RP37



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

Location

Meeting stiles of doors.

Seal Sizes Available in stock lengths.

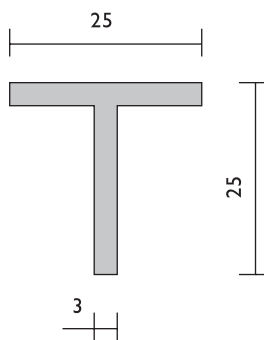
Standard Finish

Aluminium anodised 15 microns. Satin Clear (Silver).

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

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



RP26



Door Bottom Seal. Refer [page 41](#).

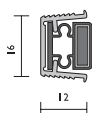


RP65



Magnetic Astragal Seal.

Refer [page 65](#).

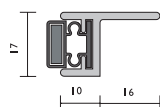


RP39



Magnetic Door Frame Seal.

Refer [page 64](#).

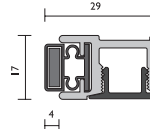


RP85



Magnetic Door Frame Seal.

Refer [page 64](#).

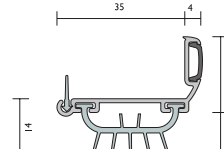


RP4T



Door Bottom Seal.

Refer [page 39](#).



Astragals (Meeting Stile Seals)



RP7I



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, incorporating felt weather fins, which are 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 broad 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 (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

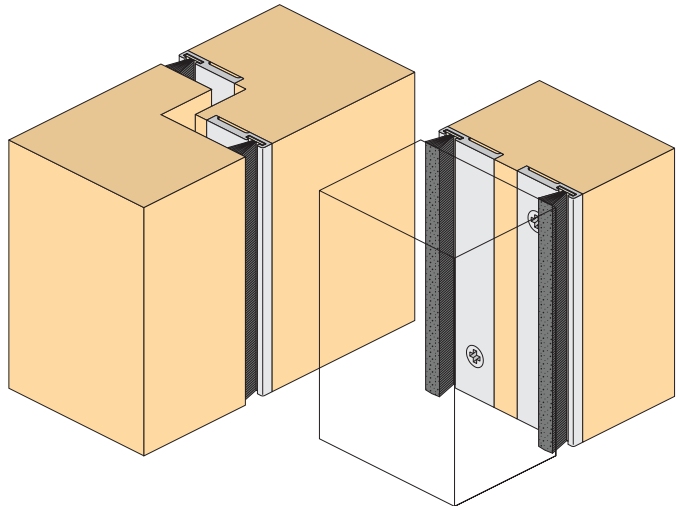
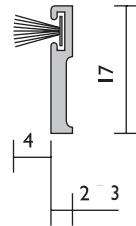
Zinc plated, cross recess CKS S.T. screws of the appropriate size and colour are supplied. Fixing holes are pre-drilled.

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

Approvals

Acoustic AUS/NZ: Conforms to BCA Sect. F5.5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).



RP7I 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 broad butt hinged and centre pivot double acting doors.

Min/Max Gap 3mm/ 5mm.

Seal Sizes

Available in stock lengths.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material Silicon Rubber (SE) (Grey).

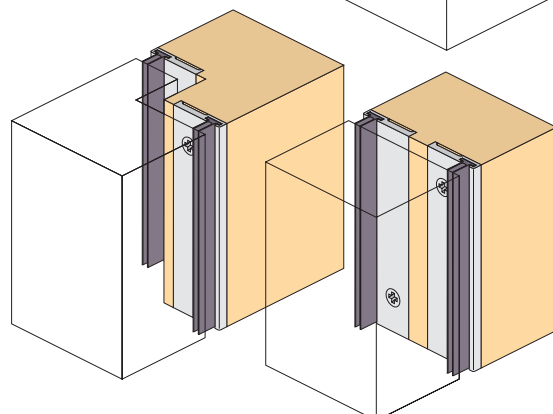
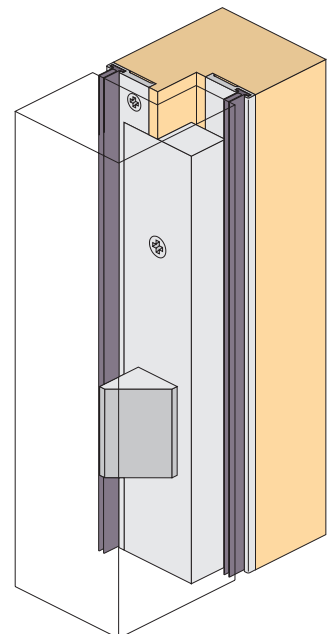
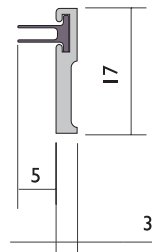
Replacement Seal RP37I Si.

Approvals

Smoke AUS/NZ: Conforms to BCA Spec. C3.4.

UK/EU: Conforms to Approved Document B.

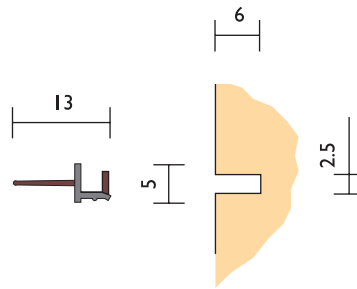
Acoustic Refer to RP7I.



RP73



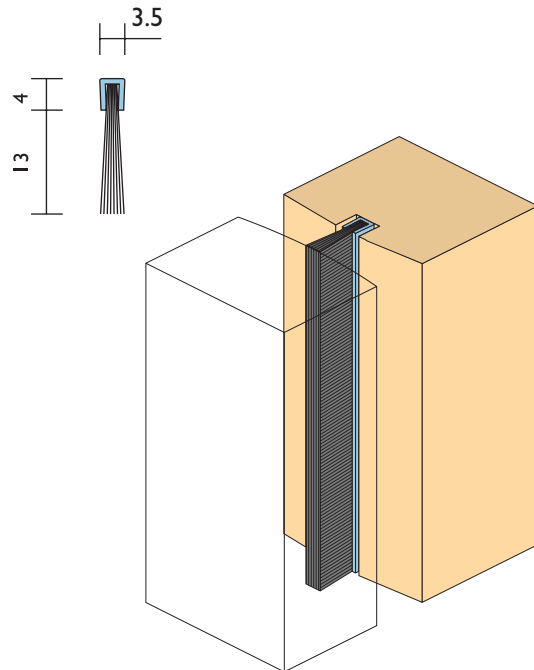
An extremely flexible co-extruded PVC sweep seal that fits into a saw kerf groove cut into the frame or door. Refer to [page 59](#) for full details.



RP2B BRUSH ONLY



Brush Strip Seal. Refer to [page 73](#).



Astragal 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 7 - 8mm (prior to installation)

Seal Sizes 3000mm.

Standard Finish

Clear hi-impact UV stabilised polycarbonate.

Seal Material

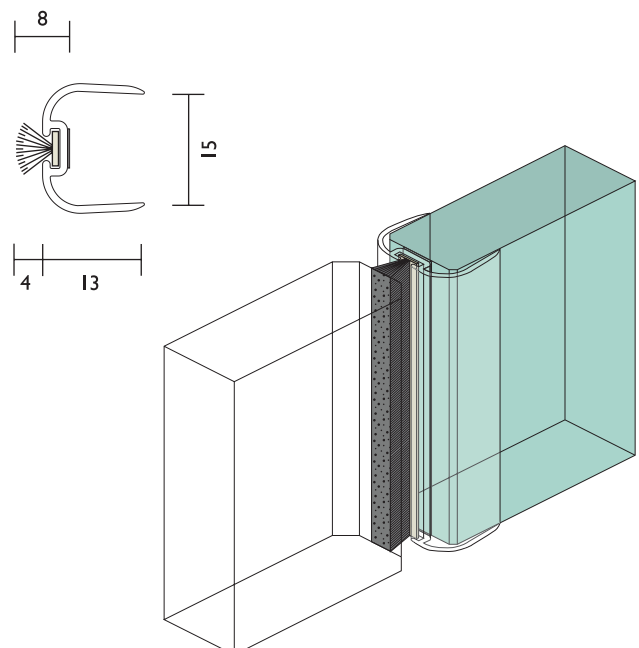
Black polypropylene pile with weather fin.

Fixing Method

Adhesive double sided tape.

Used in conjunction

Raven door bottom brush seals RP2b, RP74 and Raven threshold plates.



Astragal 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

8 - 9mm (prior to installation).

Seal Sizes Available in stock lengths.

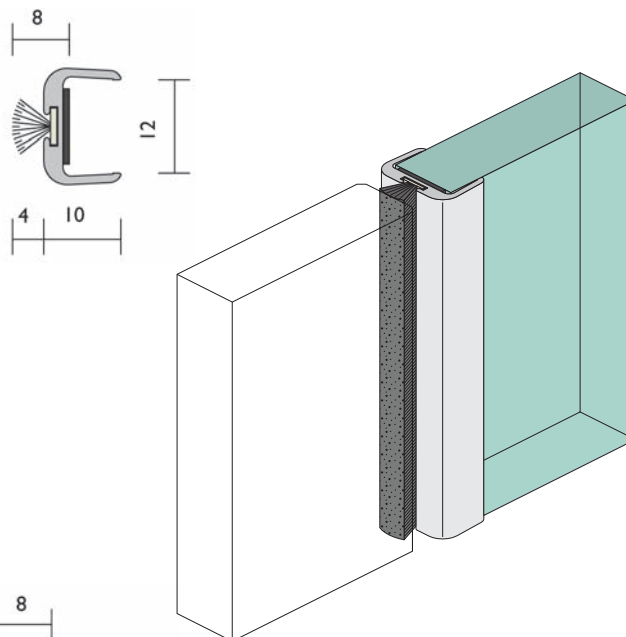
Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver) finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Adhesive double sided tape.

Seal Material Polypropylene pile with a weather fin.

Used in conjunction Door bottom brush seals RP74, RP2B.

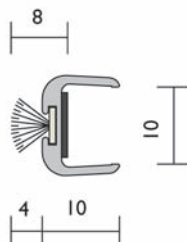


RP88



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.

Specifications as per RP79.



RP103



A clear polycarbonate astragal seal for 10mm 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

7 - 8mm (prior to installation)

Seal Sizes 3000mm.

Standard Finish Clear hi-impact UV stabilised polycarbonate.

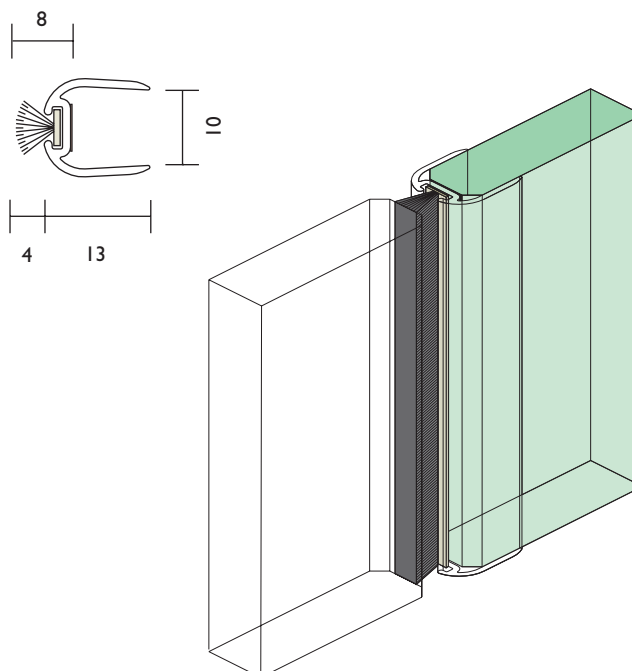
Seal Material

Black polypropylene pile with weather fin.

Fixing Method

Adhesive double sided tape.

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

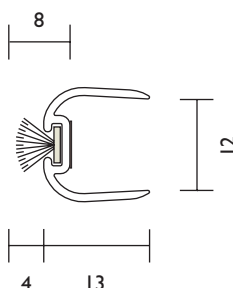


RP104



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, RP42 for 15mm.

Specifications as per RP103.



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 and rattles and cushioning applications.

RP I 4



A polyester foam adhesive weather seal which is available in white or charcoal.

Location

Around door and window frames.

Min/Max Gap

3mm to 5mm (user determined).

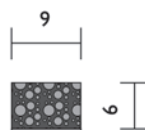
Seal Sizes

5m coil.

Fixing Method Self adhesive backed (surface must be smooth, clean and well cured).

Seal Material

Polyester foam (white, grey).



RP I 4A



An extra wide polyester foam adhesive weather seal which is available in white.

Location

Around door and window frames.

Min/Max Gap

3mm to 5mm (user determined).

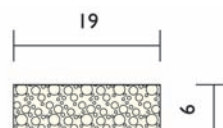
Seal Sizes

5 m coil.

Fixing Method Self adhesive backed (surface must be smooth, clean and well cured).

Seal Material

Polyester foam (white & grey).



RP I 4B



An extra thick polyester foam adhesive weather seal which is available in white.

Location

Around door and window frames.

Min/Max Gap

8mm to 11mm (user determined).

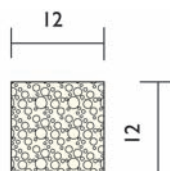
Seal Sizes

2.5m coil.

Fixing Method Self adhesive backed (surface must be smooth, clean and well cured).

Seal Material

Polyester foam (white).



RP 6 I



A self adhesive soft woven pile draught seal which is ideal for sliding door and window applications. It seals gaps of between 3mm and 5mm. This polypropylene fibre seal is available in grey.

Location

Around window and door frames.

Min/Max Gap

3mm to 5mm (user determined).

Seal Sizes

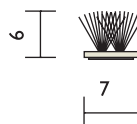
5m (max). Can be cut to length required.

Fixing Method Self adhesive.

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

Seal Material

Polypropylene pile (grey).



Superior quality self adhesive door and window frame weather strip. These soft rubber EPDM seals are set into the corners between the stop and frame providing a compression seal.

RP48



Location

Around door and window frames.

Min/Max Gap

3mm to 5mm (user determined).

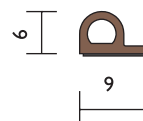
Seal Sizes

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

Fixing Method

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

Seal Material EPDM closed cell sponge (white, brown or grey).



RP55



Min/Max Gap

3mm to 6mm (user determined).

Seal Sizes

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

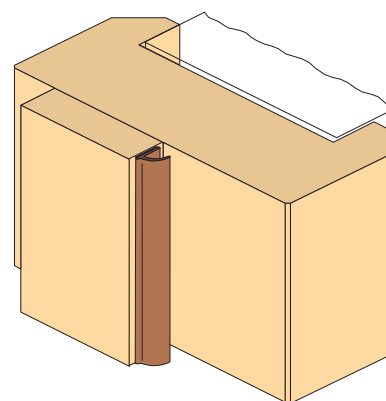
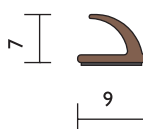
All other specifications
as per RP48.

Approvals

Fire & Smoke AUS/NZ:

Conforms to BCA Spec. C3.4.
Tested 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 Part 20 & 22).



RP59



Min/Max Gap

2mm to 4mm (user determined).

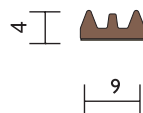
Seal Sizes

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

Fixing Method

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

Seal Material EPDM closed cell sponge (white, brown or grey).



RP108



RP108 is a multi purpose, user determined self adhesive EPDM compression seal.

Location

Multi Use (user determined).

Min/Max Gap

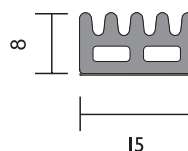
6mm to 8mm (user determined).

Seal Sizes 2m coil pack.

Fixing Method

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

Seal Material EPDM closed cell sponge (white or grey).



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

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 strip which is then generally fitted into an aluminium holder. The aluminium holder will take all bristle lengths, and the adhesive PVC foam tape is standard on most aluminium holders. Brush strips are available without the aluminium holders. Specify for example 'RP57 (brush only).

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

RP2



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, single, double or sliding, double acting, meeting stiles.

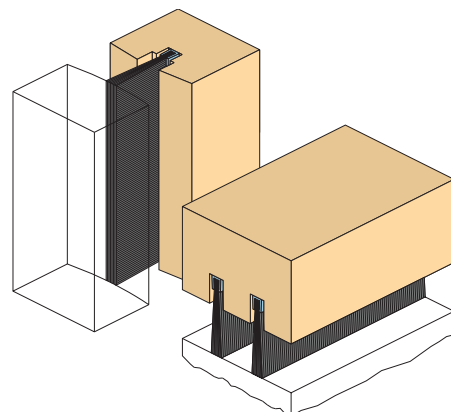
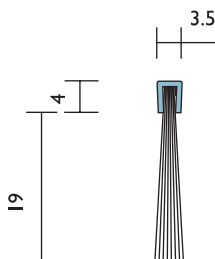
Min/Max Gap

Up to 19mm (user determined).

Seal Sizes Available in stock lengths.

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

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



RP2A



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.

Standard Finish Aluminium anodised 15 microns. Satin Clear

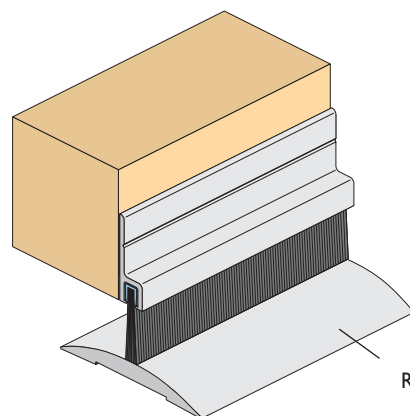
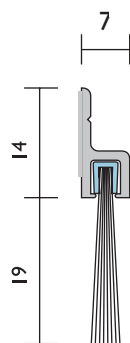
(Silver), Gold or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Self adhesive backing (surface must be smooth, clean and well cured). Can screw fix.

Seal Material Fine dense black nylon filament, UV stabilised.

Used in conjunction Raven threshold plates.



RP82

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), Gold or Bronze finish.

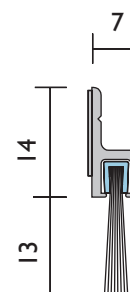
P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Self adhesive backing (surface must be smooth, clean and well cured). Can screw fix.

Seal Material Fine dense black nylon filament, UV stabilised.

Used in conjunction Raven threshold plates.

Approvals AUS/NZ: Smoke leakage and obscuration test on by-parting outer lift door on a single track.



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.

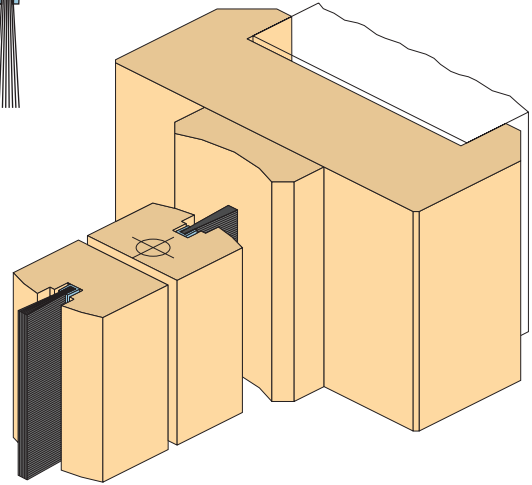
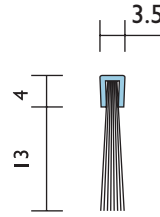
Location Door bottoms, single, double or sliding.

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

Seal Sizes Available in stock lengths.

Fixing Method Galvanised steel spine is bowed and inserted in mortice groove to provide a friction fit. Builder's adhesive if required.

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



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), Gold or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

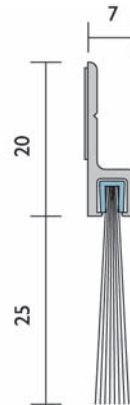
Fixing Method

Self adhesive backing (surface must be smooth, clean and well cured). Can screw fix.

Seal Material Fine dense black nylon filament UV stabilised.

Used in conjunction

Raven threshold plates.



RP41



A nylon brush strip seal that is ideal for installations where large gaps occur or 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/50mm (user determined).

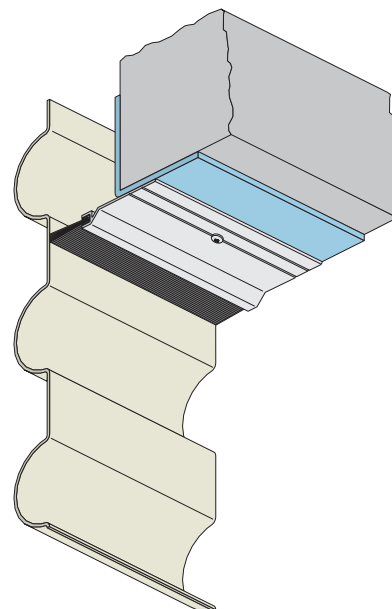
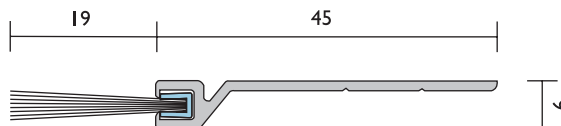
Seal Sizes Available in stock lengths.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material Fine dense black nylon filament, UV stabilised.



RP49



A versatile nylon brush seal with a 90° angle aluminium carrier.

Location Door frame, door stiles of sliding doors (user determined).

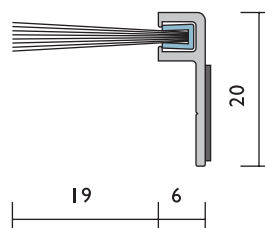
Seal Sizes Available in stock lengths.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Self adhesive backing (surface must be clean, smooth and well cured). Can screw fix.

Seal Material Fine dense black nylon filament, UV stabilised.



RP50



A versatile nylon brush seal with a 45° angle aluminium carrier.

Location Can be used on panel lift doors. User determined.

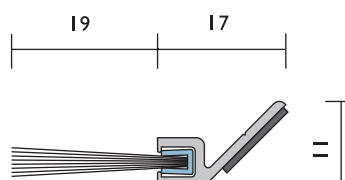
Seal Sizes Available in stock lengths.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Self adhesive backing (surface must be clean, smooth and well cured). Can screw fix.

Seal Material Fine dense black nylon filament UV stabilised.



Brush Strip Seals (Nylon Filament)



RP57

H



A nylon brush strip seal that is ideal for installations where large gaps occur or 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/50mm (user determined).

Seal Sizes Available in stock lengths.

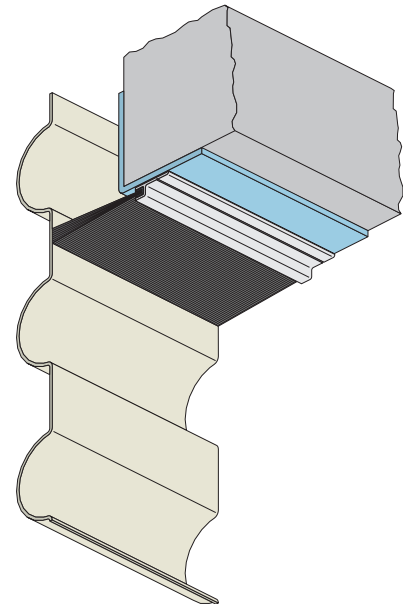
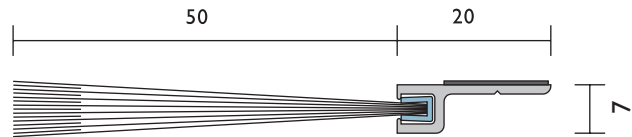
Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver), Gold or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Self adhesive backing (surface must be clean, smooth and well cured). Can screw fix.

Seal Material Fine dense black nylon filament, UV stabilised.

Used in conjunction Refer to system on [page 30](#).



RP58

H



A nylon brush strip seal that is ideal for installations where large gaps occur or 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/75mm (user determined).

Seal Sizes Available in stock lengths.

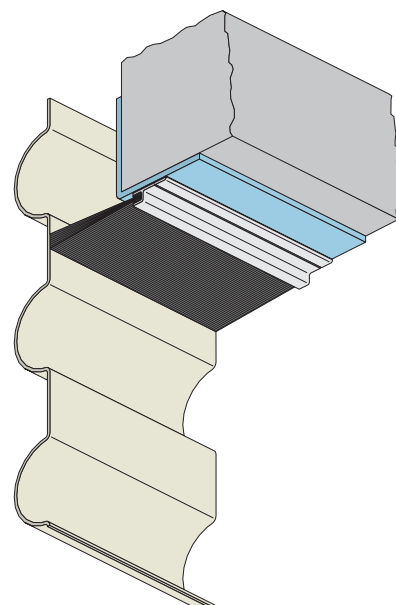
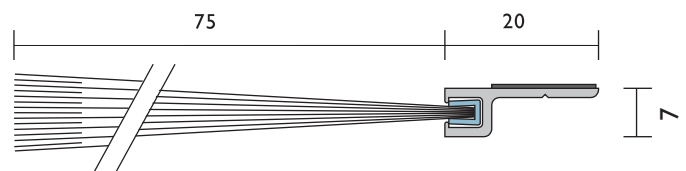
Standard Finish Aluminium anodised 15 microns. Satin Clear (Silver), Gold or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Self adhesive backing (surface must be clean, smooth and well cured). Can screw fix.

Seal Material Fine dense black nylon filament, UV stabilised.

Used in conjunction Refer to system on [page 30](#).



RP74



A nylon brush 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), Gold or Bronze finish.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

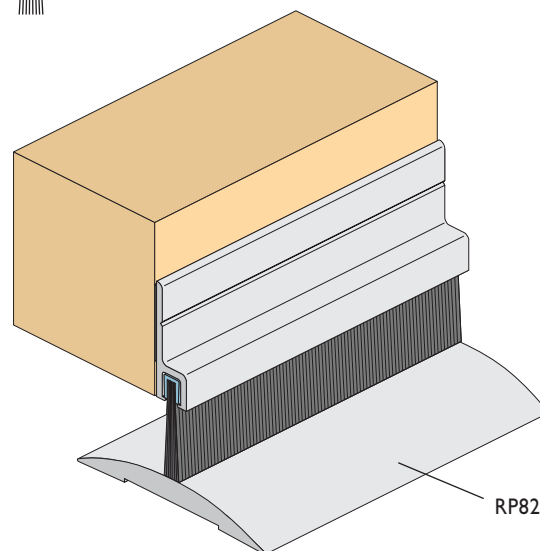
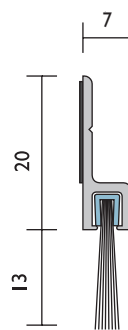
Fixing Method

Self adhesive backing (surface must be clean, smooth and well cured). Can screw fix.

Seal Material Fine dense black nylon filament, UV stabilised.

Used in conjunction

Raven threshold plates.



RP75



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.

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method

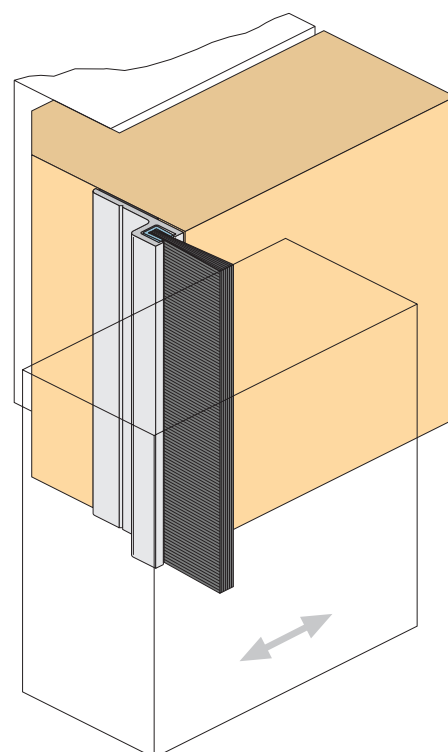
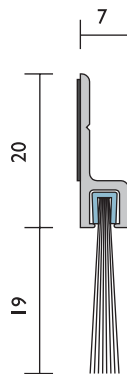
Self adhesive backing (surface must be clean, smooth and well cured). Can screw fix.

Seal Material

Fine dense black nylon filament, UV stabilised.

Used in conjunction

Raven threshold plates.



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.

Raven intumescent seals provide a high performance barrier against fire, hot smoke and fumes. On reaction to fire they expand up to 25 times their original volume and maintain a positive pressure between two substrates.

Unlike sodium silicate based products, Raven intumescent seals are made from a unique material formulation that is not affected by water and can be used in extremely damp environments. Raven intumescent seals are clean, non-toxic and display features of outstanding durability and reliability.

For further details refer Intumescent Seals (fire and hot smoke) [page 25](#).

RP63



A combined intumescent fire and smoke seal which is heat activated. It is unobtrusively set into a machined groove (30x7mm) around perimeter of 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 2 to 3mm.

Seal Sizes 2100mm & 2400mm.

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

P.E. Paint (extra cost). Is a two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

Fixing Method Adhesive (by installer).

Seal Material Intumescent infill.

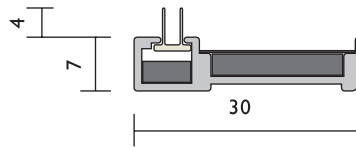
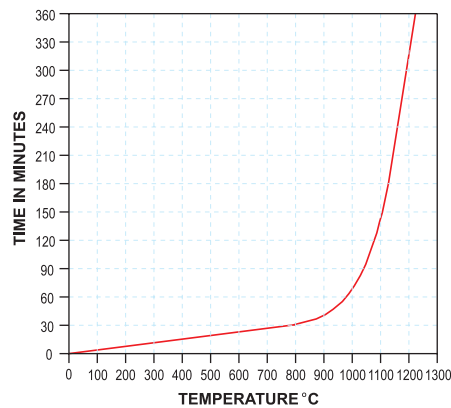
Used in conjunction Raven Si rated door bottom smoke seals, or nylon brush strip seals for pivot doors.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22).

Furnace Temperature / Time Curve



Trim Selection



Antique White



American Oak



Teak



Rosewood

RP76



A combined intumescent smoke and fire seal which is heat activated. It is unobtrusively set into a machined groove (10x6mm) around perimeter of timber frame or door edges.

Dependent on application, fire ratings of **one** to **four** hours have been certified by fire door manufacturers using RP76 intumescent fire and smoke seal.

Location Morticed into the door or frame stiles and head.

Min/Max Gap 3mm to 4mm.

Seal Size 2100mm.

Fixing Method

Adhesive (by installer).

Seal Material Intumescent infill, polypropylene pile smoke seal Rigid PVC holder (cranberry red colour).

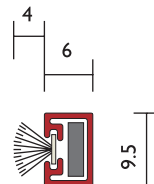
Used in conjunction

Raven Si rated door bottom smoke seals, or Raven nylon brush strip seals for pivot doors.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22).



RP76 Si



Note: If ordering RP76 with silicon option specify RP76 Si.

Min/Max Gap 4mm to 5mm.

All other specifications as per RP76.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA spec. C3.4. Tested to AS/NZS 1530.7. UK/EU: Conforms to Approved Document B. Tested to ISO CD 5925-1 (similar to BS 476 sec31.1).

RP1004



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.

Seal Size 2100mm.

Fixing Method Self adhesive.

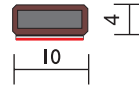
Note: Contact surface must be clean, smooth and if painted, well cured.

Seal Material Intumescent infill with Rigid PVC holder.

Standard Finish Brown or White.

Approvals

Fire & Smoke UK/EU: Conforms to Approved Document B. Tested to BS EN 1634.1, BS 476 Part 20 & 22. AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1. **FRL30**



Standard colours are White and Brown, other colours, lengths and finishes available to special order.

RP1504



Approvals

Fire & Smoke

AUS/NZ: **FRL30**, UK/EU: **FD30**.

RP2004



Approvals

Fire & Smoke

AUS/NZ: **FRL60**, UK/EU: **FD60**.

RP3004

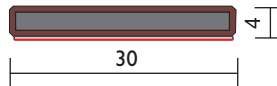
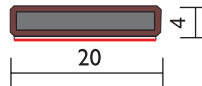
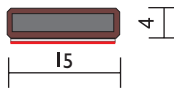


Approvals

Fire & Smoke

AUS/NZ: **FRL60**, UK/EU: **FD60**.

All other specifications as per RP1004.



RP1004F



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 retro-fitted to upgrade perimeter door frame margins that exceed the 3mm gap compliance (refer local standards). An aggressive self adhesive backing tape is standard.

Seal Size 150m coil.

Location Morticed into the door or frame stiles and head.

Fixing Method Self adhesive.

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

Seal Material Intumescent infill with flexible PVC holder.

Standard Finish PVC Brown or White.

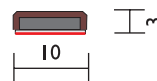
Used in conjunction Raven Si rated door smoke seals, or Raven nylon brush strip seals for pivot doors.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1. **FRL30**

UK/EU: Conforms to:

Approved Document B. Tested to BS EN 1634.1, BS 476 Part 20 & 22.



RP2004F



Seal Sizes 100m coil.

All other specification as per RP1004F.

Approvals

Fire & Smoke AUS/NZ:

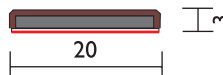
Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1.

UK/EU: Conforms to Approved Document B. Tests above are

similar to BS EN 1634.1, BS 476 Part 20 & 22.

Fire resistance level of 60 minutes **FRL60**, fire doors **FD60**.

All other specifications as per RP1004S.



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**, fire-smoke 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 Size 2100mm.

Fixing Method Self adhesive.

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

Seal Material Intumescent infill,

polypropylene pile smoke seal and fin barrier with Rigid PVC holder.

Standard Finish PVC Brown or White.

Used in conjunction Raven Si rated door bottom smoke seals, or Raven nylon brush strip seals for pivot doors.

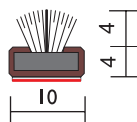
Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1. **FRL30**

UK/EU: Conforms to Approved Document B. Tested to BS EN 1634.1, BS 476 Part 20 & 22.

Acoustic AUS/NZ: Conforms to 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).



Standard colours are White and Brown, other colours, lengths and finishes available to special order.

RP1504S

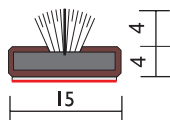


Approvals

Fire & Smoke

AUS/NZ: **FRL60**, UK/EU: **FD60**.

All other specifications as per RP1004S.



RP2004S

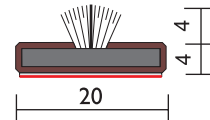


Approvals

Fire & Smoke

AUS/NZ: **FRL60**, UK/EU: **FD60**.

All other specifications as per RP1004S.



RP1004SA



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**, fire-smoke doors **FDS30**. (**FRL60** or **FDS60** when two strips are used.)

Location Morticed into the door or frame stiles and head.

Min/Max Gap 1mm to 4mm.

Seal Size 2100mm.

Fixing Method Self adhesive.

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

Seal Material Intumescent infill, PVC fin seal.

Standard Finish PVC Brown or White.

Used in conjunction Raven Si rated door bottom smoke seals, or Raven nylon brush strip seals for pivot doors.

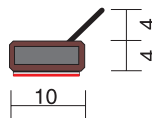
Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4 & AS/NZS 1905.1. **FRL30**

UK/EU: Conforms to Approved Document B. Tested to BS EN 1634.1, BS 476 Part 20 & 22.

Acoustic AUS/NZ: Conforms to 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).



RP1504SA



Approvals

Fire & Smoke

AUS/NZ: **FRL30**, UK/EU: **FD30**.

RP2004SA

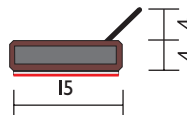


Approvals

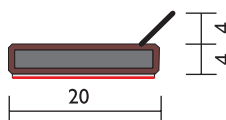
Fire & Smoke

AUS/NZ: **FRL60**, UK/EU: **FD60**.

All other specifications as per RP1004SA.



All other specifications as per RP1004SA.



Intumescent fire Seals should be fitted as shown in the following examples.

Half Hour Fire Rated Doors FD30/FRL30

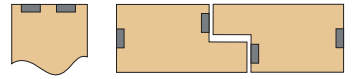
Single Door RP1004, for UK/EU RP1504 Seals.



Pair of Doors with Square Meeting Stiles RP1004, UK/EU RP1504 & RP2004 Seals.



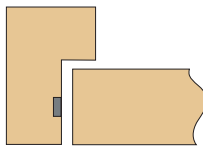
Pair of Doors with Rebated Meeting Stiles RP1004, UK/EU RP1504 Seals.



Pair of Doors with Rounded Meeting Stiles RP1004, UK/EU RP1504 & RP2004 Seals.



Pair or Single Doors with RP1004 Seals for UK/EU RP1504 Seals. Fitted to Head & Jambs.



Note: In meeting stiles where seals are opposite each other, always fit an intumescent pile/fin smoke seal opposite a plain intumescent seal.

One Hour Fire Rated Doors FD60/FRL60

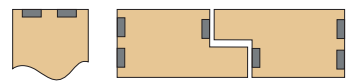
Single Door RP2004 for UK/EU 3004 Seals.



Pair of Doors with Square Meeting Stiles RP2004 for UK/EU 3004 Seals.



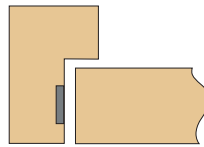
Pair of Doors with Rebated Meeting Stiles RP1004, UK/EU RP1504 Seals.



Pair of Doors with Rounded Meeting Stiles RP2004 for UK/EU 3004 Seals.



Pair or Single Doors with RP2004 Seals Fitted to Head & Jambs for UK 3004 Seals.



Note: In meeting stiles where seals are opposite each other, always fit an intumescent pile/fin smoke seal opposite a plain intumescent seal.

RP114



RP114 is a door bottom intumescent fire and hot smoke seal that is designed to salvage non compliant fire doors where clearances exceed 10mm under fire doors as per **AS/NZS 1905.1**.

The simple retro-fit 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 Available 820mm, 915mm, 1220mm.

Standard Finish

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

Fixing method

Simply cut seal to length. Zinc plated cross recess head ST screws of the appropriate size are supplied.

Seal Material

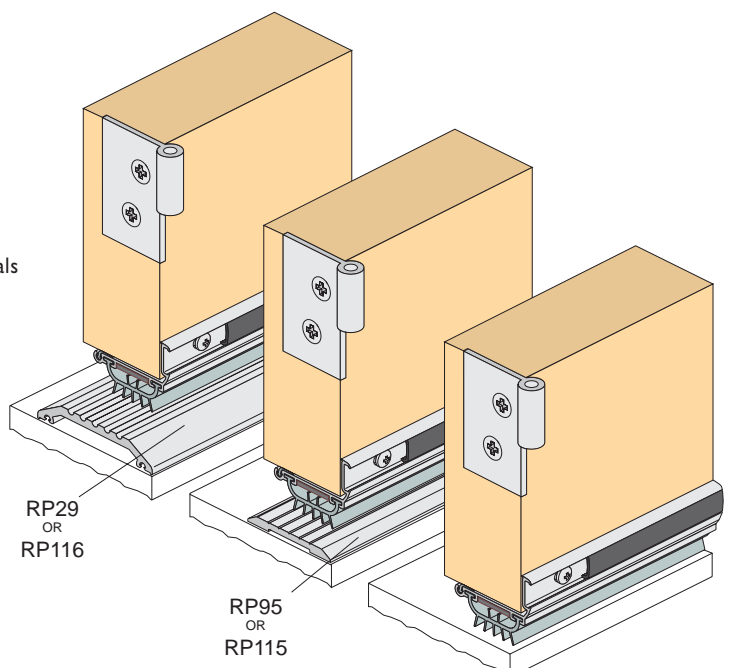
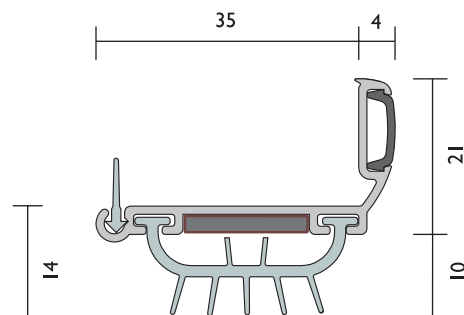
Intumescent infill, S.E. flexible PVC cover strip and finned gasket.

Used in Conjunction with approved Raven door frame seals and threshold plates.

Approvals

Fire & Smoke AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22).



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. A feature which is well appreciated by painters and maintenance people.

Importantly, Raven silicon weather stripping offers improvements in air and rain infiltration performance, particularly where lower closing forces are required to meet new building regulations for energy efficiency and acoustic performance or where access and mobility is important.

RP500



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.

Location Door and window frames (user determined).

Compression I - 3mm.

Reel Length 100m.

Colours RP500w (white), RP500b (brown), RP500bk (black).

Fixing Method 3mm x 5.5mm deep kerf groove, push-in locking fit.

Seal Material Silicon rubber.

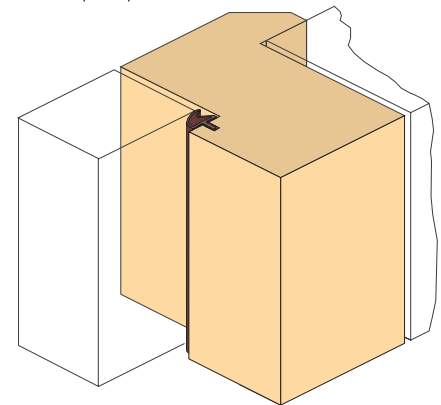
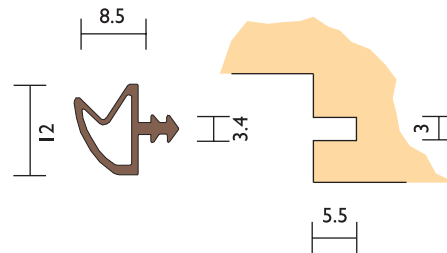
Used in conjunction

Raven door bottom seals and threshold plates.

Approvals

Weather AUS/NZ: Conforms to BCA various sections. Tested to AS2047, AS4420, AS4055, AS4420 Parts 0 to 5, AS/NZS1170.

UK/EU: Conforms to Approved Document L1 & L2. Tests above are similar to BS5368, BS7386.



RP510



Compression I - 2mm.

Reel Length 100m.

Colours RP510w (white), RP510b (brown), RP510bk (black).

Fixing Method 3.5mm x 5mm deep kerf groove, push-in locking fit.

Approvals

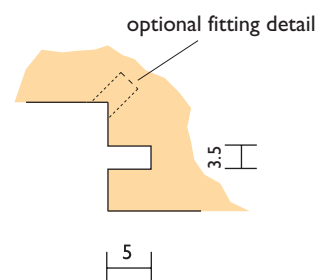
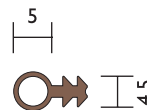
Weather AUS/NZ: Conforms to BCA various sections. Tested to AS2047, AS4420, AS4055, AS4420 Parts 0 to 5, AS/NZS1170.

UK/EU: Conforms to Approved Document L1 & L2. Tests above are similar to BS5368, BS7386.

Acoustic UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3, BS EN ISO 717.1, BS 2750, BS 5821.

AUS/NZ: Conforms to BCA Sect. F5. 5. Tests above are similar to AS 1191, AS 1045, AS/NZS 1276.

All other specifications as per RP500.



RP520



Compression I - 3mm.

Reel Length 100m.

Colours RP520w (white), RP520b (brown), RP520bk (black).

Fixing Method 3.5mm x 5mm deep kerf groove, push-in locking fit.

Approvals

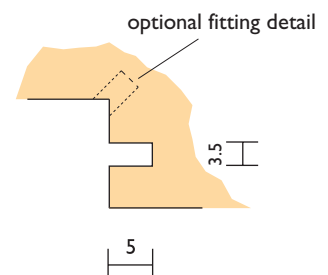
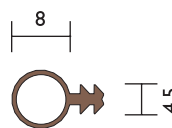
Weather AUS/NZ: Conforms to BCA various sections. Tested to AS2047, AS4420, AS4055, AS4420 Parts 0 to 5, AS/NZS1170.

UK/EU: Conforms to Approved Document L1 & L2. Tests above are similar to BS5368, BS7386.

Acoustic UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3, BS EN ISO 717.1, BS 2750, BS 5821.

AUS/NZ: Conforms to BCA Sect. F5. 5. Tests above are similar to AS 1191, AS 1045, AS/NZS 1276.

All other specifications as per RP500.



RP530



Compression I - 2mm.

Reel Length 50m.

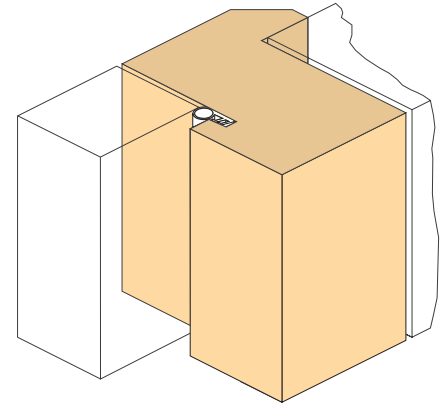
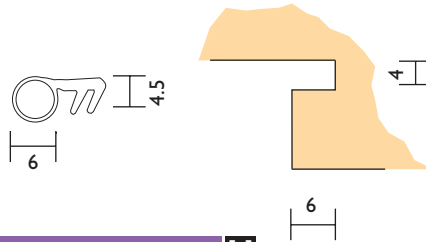
Colours RP530w (white), RP530b (brown), RP530bk (black).

Fixing Method 4mm x 6mm deep kerf groove, push-in locking fit.

Approvals

Acoustic AUS/NZ: Conforms to BCA Sect. F5. Tested to AS 1191, AS 1045, AS/NZS 1276.

UK/EU: Conforms to Approved Document E. Tested to BS EN ISO140.3 (similar to BS EN ISO 717.1, BS 2750, BS 5821).



RP550



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.

Location Door and window frames (user determined).

Compression I - 3mm.

Reel Length 100m.

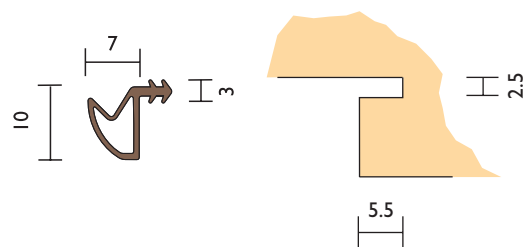
Colours RP550w (white), RP550b (brown), RP550bk (black).

Fixing Method 2.5mm x 5.5mm deep kerf groove, push-in locking fit.

Seal Material Silicon rubber.

Used in conjunction

Raven door bottom seals and threshold plates.



RP560



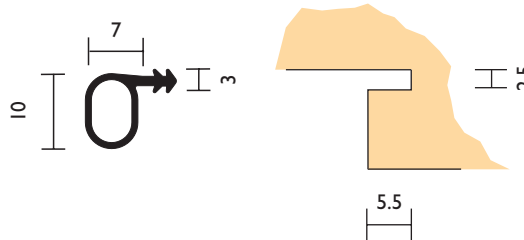
Compression I - 3mm.

Reel Length 100m.

Colours RP560w (white), RP560b (brown), RP560bk (black).

Fixing Method 2.5mm x 5.5mm deep kerf groove, push-in locking fit.

All other specifications as per RP550.



RP540



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.

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

Compression I - 3mm.

Reel Length 100m.

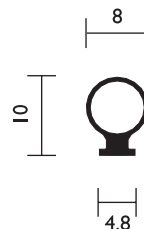
Colours RP540bk (black).

Fixing Method Slide fit into aluminium or rigid PVC groove.

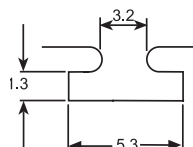
Seal Material Silicon rubber.

Used in conjunction

Raven door bottom seals and threshold plates.



Recommended Groove (Channel Not Supplied) Dimensions



Raven woven pile Weather stripping is manufactured to the highest international standards of quality and performance.

Pile is produced from multi-filament polypropylene yarn. Recent technological improvements in the composition of this yarn have given substantial improvements to air infiltration performance. The yarn is silicon treated to improve water repellence and is also ultra violet stabilised. The pile is bonded to its backing, which is also a polypropylene compound. The backing gives a strong rigid base for ease of application whilst retaining flexibility for straightforward reeling and handling. Raven Pile incorporates a reeling method which eliminates “criss-crossing” of pile on the reel. This eliminates problems of pile distortion and tangling of weather stripping when feeding off the reels and ensures continuous easy fitment.

Typical Applications



Woven Pile weather stripping is used particularly with aluminium and PVC window and door systems. The weather stripping is manufactured entirely from polypropylene which means exceptional abrasion resistance, and resistance to biological and chemical attack.

Pile weather stripping eliminates air, water and noise problems as well as acting as a low friction bearing for sliding applications.

Different sizes and densities are available to suit most applications.

It is suitable for sliding or compression applications where a quietly operating low friction, high performance weather seal is needed.

Pile weather stripping acts not only as a seal but helps to stabilise sliding sashes and it provides a low frictional bearing surface.

Terminology

Width

Raven Weather stripping is available in widths of 4.8mm and 6.7mm.

Density

The density of Raven Weather strip is the optimum for most residential and commercial applications. Selected materials ensure low friction forces are achieved while maintaining maximum air infiltration efficiency.

Pile Height

Pile heights vary from 3mm to 12.75mm in increments of 0.5mm. Pile is available in black for optimum U.V. resistance.

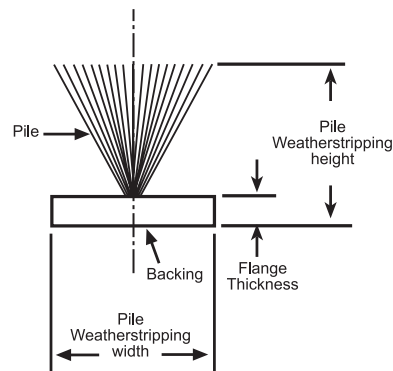
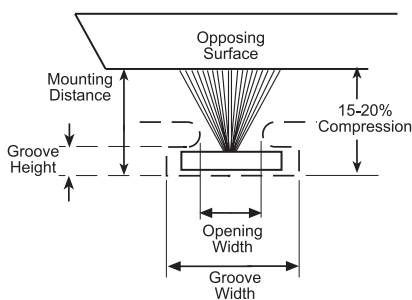
Fitting - Groove Sizes

A very high standard of accuracy of the pile weather stripping width ensures continuous easy fitting. Unlike extruded PVC or rubber type seals there is no possibility of “creep back”, a result of stretching of the weather stripping in application or shrinkage due to temperature variation. Raven pile fibres are independent of each other and therefore conform easily to any surface irregularities.

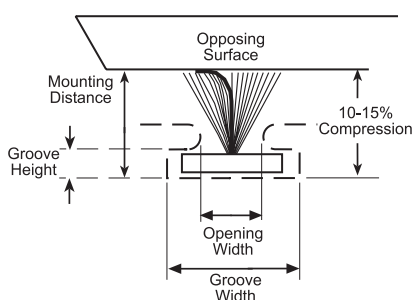
Fin

Standard Glidefin products are supplied with a clear/neutral fin.

Plain Pile Weather Stripping



Glidefin



Glidefin

This is a newly introduced low-friction weather seal, developed especially for sliding doors/windows and compression applications. It incorporates excellent air and water exclusion properties whilst offering significant advantages in reduced sliding, breakaway and closing forces when compared to other products. This is by the use of a special fin material with slip additive combined with a lower friction weaving design.

Selection and Performance

The pile height to use in an application can vary according to a number of factors such as weather stripping density; the use of single or double weather stripping; the design of the window or door; or the anticipated manufacturing tolerances of the unit.

The optimum performance of the pile weather stripping, ie. the point at which increased compression has a relative smaller decrease in air filtration is about 25%. However, the friction of the sliding door or window frame, or the initial force required to open the door or window (termed the breakaway force), can often be too great at this level of compression. Therefore, lower compression levels must often be used.

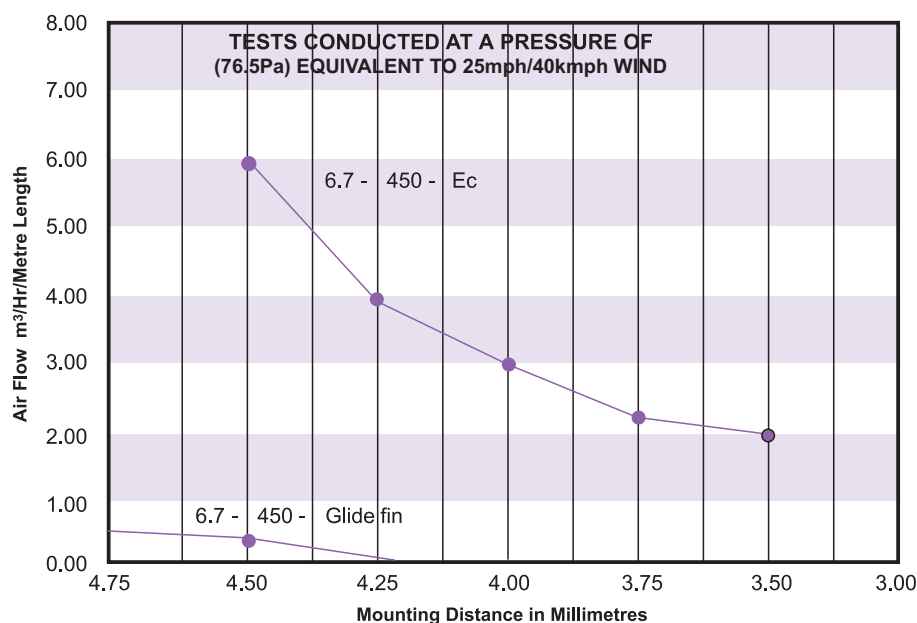
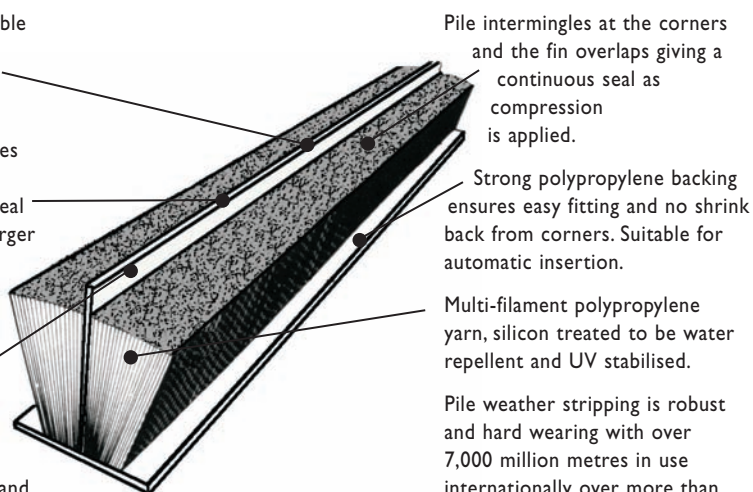
The degrees of variation in the mounting distance can also affect the recommendations of pile height for every application.

Combined action of the flexible fin and the pile ensures an efficient seal even against irregular surfaces.

Extra fin height accommodates manufacturing and assembly tolerances ensuring a good seal particularly when gaps are larger than expected.

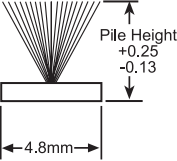
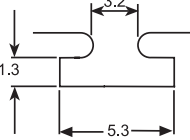
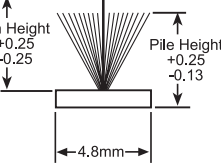
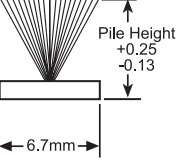
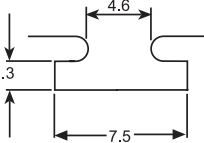
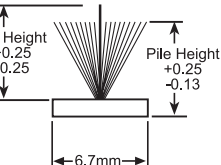
1mm flexible fin achieves high acoustic performance, with low resistance to compression and exceptionally low friction on sliding.

Glidefin is available in black, and in a size to suit your needs from 4mm high to 12.75mm in 0.5mm increments.

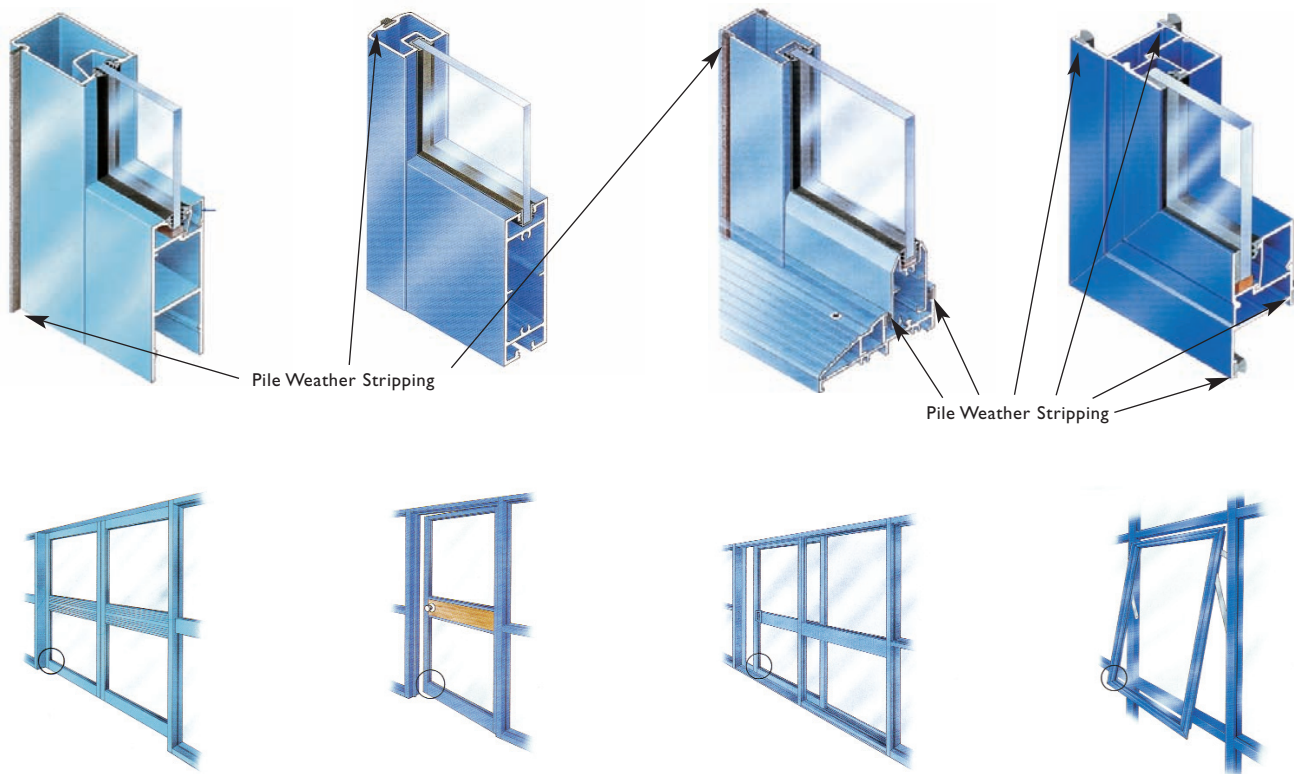


- Standard pile is not recommended by Raven at compression levels lower than 15-20%. Levels below this can cause air infiltration problems, due to lack of pile compression.

- Glidefin requires only 5-10% compression on the pile fibres, as its central fin is exposed by 1mm, thus allowing for tolerance differential around the section whilst reducing the breakaway and sliding forces quite significantly.

		DESCRIPTION				PACKING		
REORDER CODE.	PILE HEIGHT mm	CATALOGUE No.	COLOUR	PLAIN or GLIDEFIN	METRES per REEL	METRES per CARTON		
<div>4.8 mm wide range</div>		B0480300EB	3	RP4.8 300-EC-B	BLACK	PLAIN	800	3200
		B0480300EG	3	RP4.8 300-EC-G	GREY	PLAIN	800	3200
	<div>Recommended Groove Dimensions</div> 	B0480350EB	3.5	RP4.8 350-EC-B	BLACK	PLAIN	800	3200
		B0480400EB	4	RP4.8 400-EC-B	BLACK	PLAIN	700	2800
	<div>Glidefin</div> <div>glidefin is 1mm above pile</div> 	B0480400EBS	4	RP4.8 400-EC-BS	BLACK	GLIDEFIN	800	1600
		B0480450EB	4.5	RP4.8 450-EC-B	BLACK	PLAIN	600	2400
		B0480450EBS	4.5	RP4.8 450-EC-BS	BLACK	GLIDEFIN	800	1600
		B0480500EB	5	RP4.8 500-EC-B	BLACK	PLAIN	575	2300
		B0480500EBS	5	RP4.8 500-EC-BS	BLACK	GLIDEFIN	700	1400
		B0480550EB	5.5	RP4.8 550-EC-B	BLACK	PLAIN	500	2000
		B0480550EBS	5.5	RP4.8 550-EC-BS	BLACK	GLIDEFIN	700	1400
		B0480600EB	6	RP4.8 600-EC-B	BLACK	PLAIN	450	1800
		B0480600EBS	6	RP4.8 600-EC-BS	BLACK	GLIDEFIN	600	1200
		B0480600EGS	6	RP4.8 600-EC-GS	GREY	GLIDEFIN	600	1200
		B0480650EB	6.5	RP4.8 650-EC-B	BLACK	PLAIN	425	1700
		B0480650EG	6.5	RP4.8 650-EC-G	GREY	PLAIN	425	1700
		B0480650EBS	6.5	RP4.8 650-EC-BS	BLACK	GLIDEFIN	600	1200
		B0480650EGS	6.5	RP4.8 650-EC-GS	GREY	GLIDEFIN	650	1300
		B0480750EB	7.5	RP4.8 750-EC-B	BLACK	PLAIN	300	1200
		B0480750EBS	7.5	RP4.8 750-EC-BS	BLACK	GLIDEFIN	500	1000
<div>6.7 mm wide range</div>		B0670400EB	4	RP6.7 400-EC-B	BLACK	PLAIN	475	1900
		B0670400EBS	4	RP6.7 400-EC-BS	BLACK	GLIDEFIN	650	1300
	<div>Recommended Groove Dimensions</div> 	B0670450EB	4.5	RP6.7 450-EC-B	BLACK	PLAIN	475	1900
		B0670450EBS	4.5	RP6.7 450-EC-BS	BLACK	GLIDEFIN	550	1100
	<div>Glidefin</div> <div>glidefin is 1mm above pile</div> 	B0670500EB	5	RP6.7 500-EC-B	BLACK	PLAIN	425	1700
		B0670500EBS	5	RP6.7 500-EC-BS	BLACK	GLIDEFIN	500	1000
		B0670550EB	5.5	RP6.7 550-EC-B	BLACK	PLAIN	375	1500
		B0670550EBS	5.5	RP6.7 550-EC-BS	BLACK	GLIDEFIN	450	900
		B0670600EB	6	RP6.7 600-EC-B	BLACK	PLAIN	350	1400
		B0670600EG	6	RP6.7 600-EC-G	GREY	PLAIN	350	1400
		B0670600EBS	6	RP6.7 600-EC-BS	BLACK	GLIDEFIN	400	800
		B0670600EGS	6	RP6.7 600-EC-GS	GREY	GLIDEFIN	400	800
		B0670650EB	6.5	RP6.7 650-EC-B	BLACK	PLAIN	325	1300
		B0670650EBS	6.5	RP6.7 650-EC-BS	BLACK	GLIDEFIN	375	750
		B0670650EGS	6.5	RP6.7 650-EC-GS	GREY	GLIDEFIN	375	750
		B0670750EB	7.5	RP6.7 750-EC-B	BLACK	PLAIN	250	1000
		B0670750EBS	7.5	RP6.7 750-EC-BS	BLACK	GLIDEFIN	350	700
		B0670800EB	8	RP6.7 800-EC-B	BLACK	PLAIN	225	900
		B0670800EBS	8	RP6.7 800-EC-BS	BLACK	GLIDEFIN	350	700
		B0670850EBS	8.5	RP6.7 850-EC-BS	BLACK	GLIDEFIN	275	550
	B0670900EB	9	RP6.7 900-EC-B	BLACK	PLAIN	200	800	
	B0670900EG	9	RP6.7 900-EC-G	GREY	PLAIN	200	800	
	B0670900EBS	9	RP6.7 900-EC-BS	BLACK	GLIDEFIN	250	500	
	B0670900EGS	9	RP6.7 900-EC-GS	GREY	GLIDEFIN	250	500	
	B0671275EB	12.75	RP6.7 1275-EC-B	BLACK	PLAIN	175	700	
	B0671275EBS	12.75	RP6.7 1275-EC-BS	BLACK	GLIDEFIN	125	250	
	B0671275EGS	12.75	RP6.7 1275-EC-GS	GREY	GLIDEFIN	125	250	
	B0671500EB	15.0	RP6.7 1500-EC-B	BLACK	PLAIN	100	400	
	B0671700EB	17.0	RP6.7 1700-EC-B	BLACK	PLAIN	500	500	
<div>9.0 mm wide</div>		B0901500EB	15.0	RP9.0 1500-EC-B	BLACK	PLAIN	100	400

Weather Sashes



Notes

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 among 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 for the full height of the door/jamb for maximum protection. This will reduce the potential for vandalism and the accidental deposit of toys or waste material behind the anti-finger jam seal.

RP62 can be retro fitted 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.

RP62



(Anti Finger Jam)

A rubber EPDM safety strip which prevents fingers being jammed on the hinge side of a door. It is fixed to the door and the jamb on the hinged side.

Note: It is recommended to fit RP62 the full height of the door/jamb for maximum protection. For longer lengths, butt join together.

Location Butt hinged or centre pivot door.

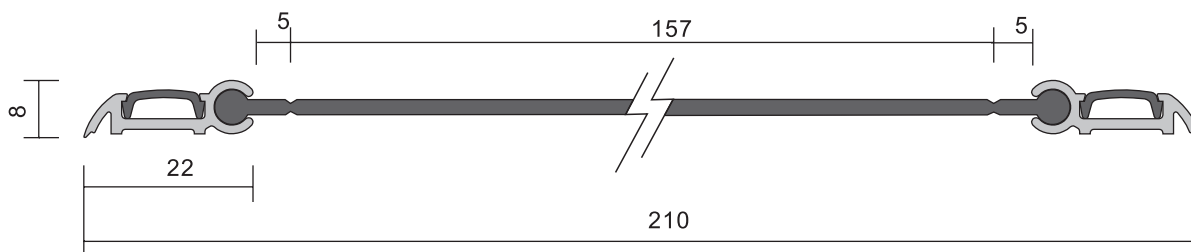
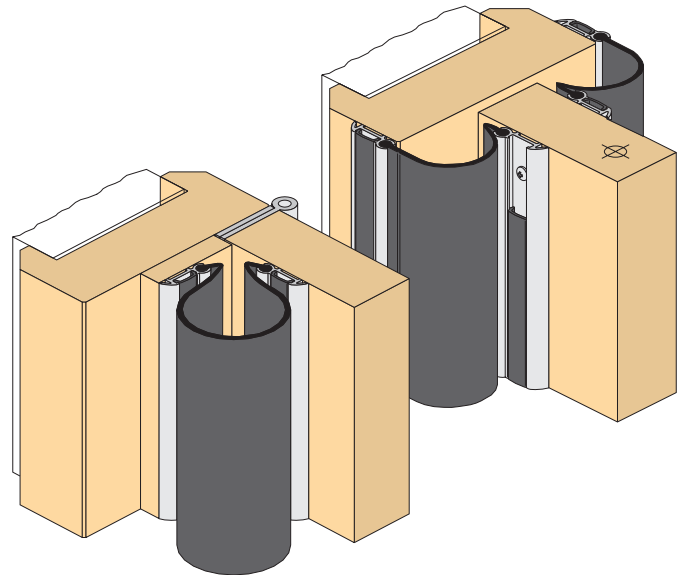
Seal Sizes Available in stock lengths.

Standard Finish

Holder is Aluminium anodised 15 microns. Satin Clear (Silver) or Bronze finish. Black EPDM rubber seal.

Fixing Method

Zinc plated, cross recess head S.T. screws of the appropriate size are supplied. Fixing holes are slotted. Push-in cover strip.



RP67



A drip strip to shed or channel water away from the head of exposed doors, particularly outward opening doors.

An allowance of 50 mm of overlap each side of door opening is required.

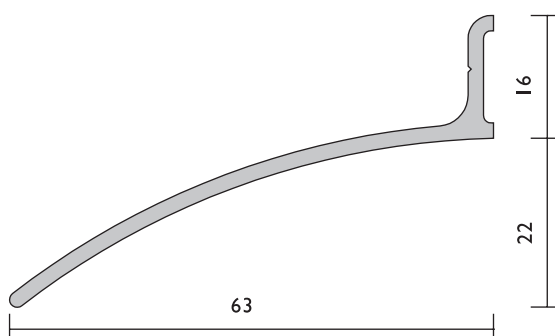
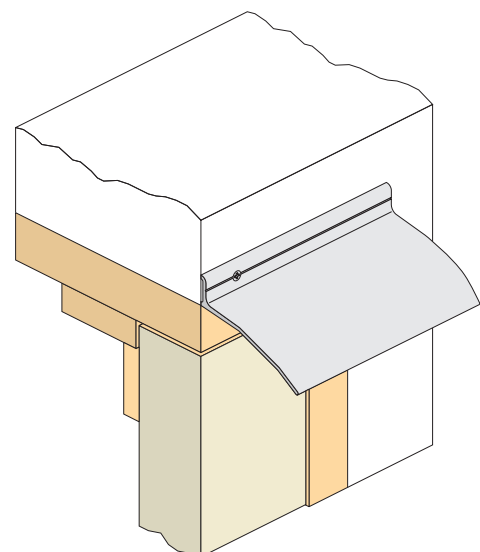
Location Above doors.

Seal Sizes Available in stock lengths.

Standard Finish

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

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



Some of the many extrusions that are used in the seals within this catalogue, may be ordered separately.

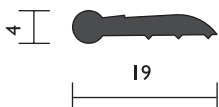
RP300 Series, Neoprene, EPDM, TPR, Silicon Rubber.

A range of rubber extrusions that can be purchased as spare parts for the seals.

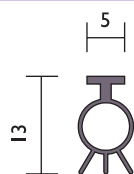
Seal Materials

Sponge EPDM, Solid Neoprene, Solid EPDM and Solid TPR, Silicon Rubber.

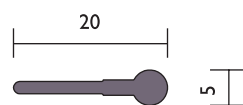
Solid EPDM RP303



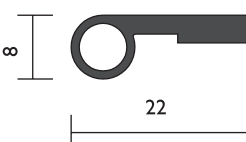
Silicon Rubber (SE) RP308 Si



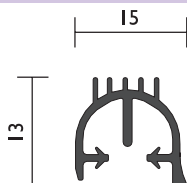
Silicon Rubber (SE) RP316 Si



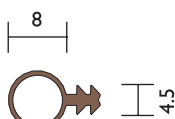
Solid Neoprene (SE) RP323



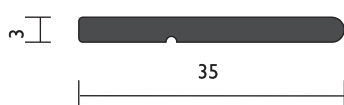
Silicon Rubber (SE) RP310 Si



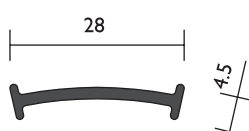
Silicon Rubber RP320



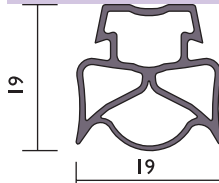
Solid EPDM RP326



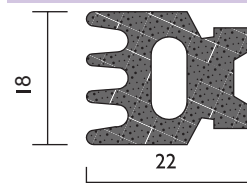
Solid EPDM RP330



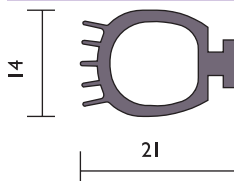
Silicon Rubber (SE) RP338 Si



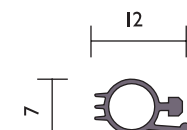
Sponge EPDM (SE) RP338



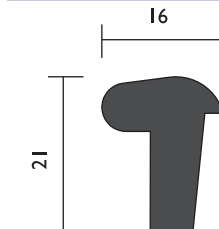
Silicon Rubber (SE) RP347 Si



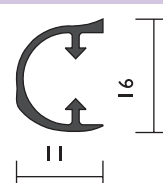
Silicon Rubber (SE) RP378 Si



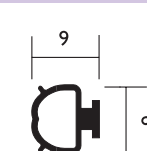
Solid EPDM RP354



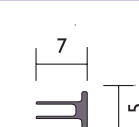
Silicon Rubber (SE) RP384 Si



Silicon Rubber (SE) RP393 Si



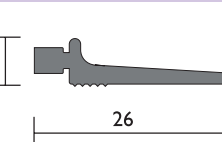
Silicon Rubber (SE) RP371 Si



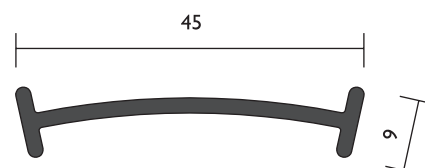
Silicon Rubber (SE) RP394 Si



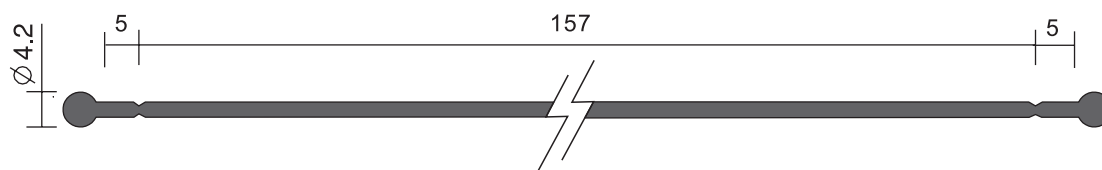
Silicon Rubber (SE) RP351 Si



Solid EPDM RP331



Solid EPDM RP362



Solid EPDM RP381

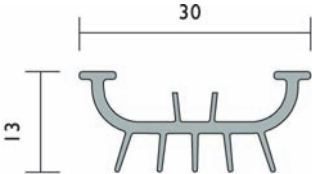


RP400 Series, Rigid and Flexible extrusions

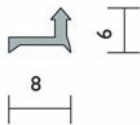
A range of extrusions that can be purchased as spare parts for the seals.

Seal Materials
Rigid and Flexible PVC or TPR.

Flexible PVC RP404



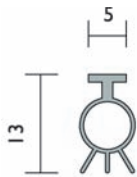
Flexible PVC RP404A



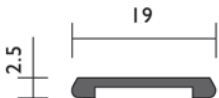
Flexible PVC RP404B



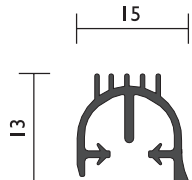
Flexible PVC RP408



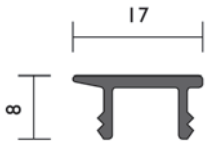
Rigid PVC RP409



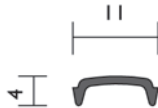
Flexible PVC RP410



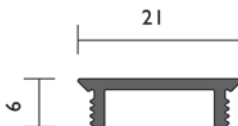
Rigid PVC RP410A



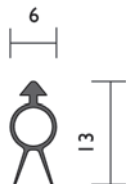
Flexible PVC RP423



Rigid PVC RP424



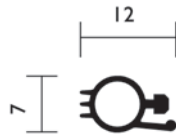
Flexible TPR RP460



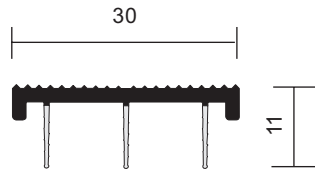
Rigid/Flexible PVC RP469



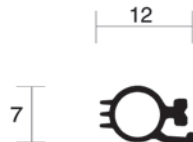
Flexible TPR RP478



Rigid/Flexible PVC RP486



Flexible TPR RP494



Rigid PVC RP487



RP51Si

H


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

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/20mm (user determined).

Seal Sizes Available in stock lengths.

Standard Finish Aluminium anodised 15 microns, Satin Clear or Bronze. PE. Paint (extra cost). Is a

two pack polyester enamel colour match finish which is equal to or exceeds powdercoat finish.

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

Seal Material Silicon Rubber (SE) (Grey)

Replacement Seal RP351Si

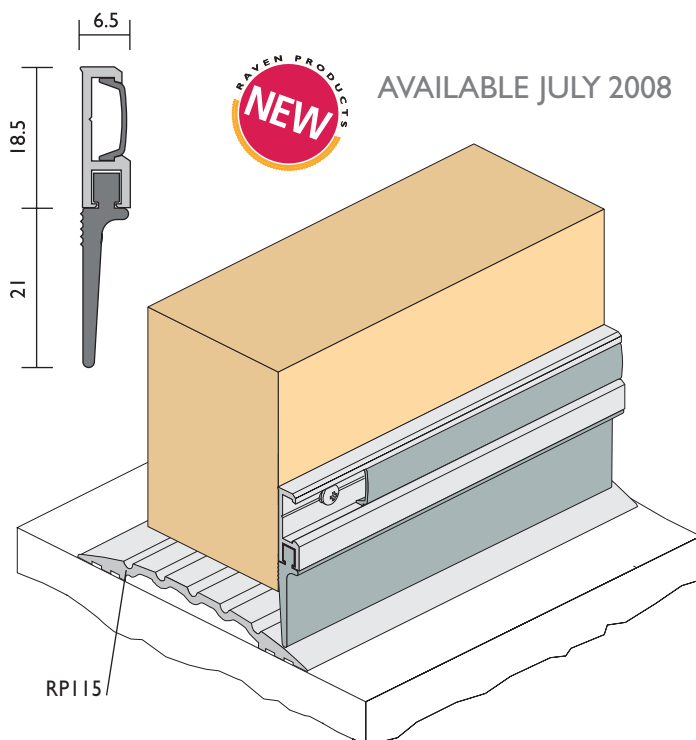
Used in conjunction Raven Threshold plates.

Approvals

Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. Tested 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 Part 20 & 22).



RP124

M


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 broad butt hinged doors.

Min/Max Gap 3mm to 5.5mm.

Seal Sizes Available in door set sizes.

Standard Finish Black.

Fixing Method

Self adhesive backing on both rigid fixing legs. Note: Contact surface must be clean, smooth and if painted, well cured.

Seal Material

Co-extruded Rigid and Flexible flame retardant PVC

Used in Conjunction

Raven door bottom seals, threshold plates and astragal seals.

Approvals

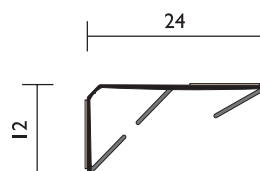
Acoustic

AUS/NZ: Conforms to BCA Sect. F5. 5. UK/EU: Conforms to Approved Document E.

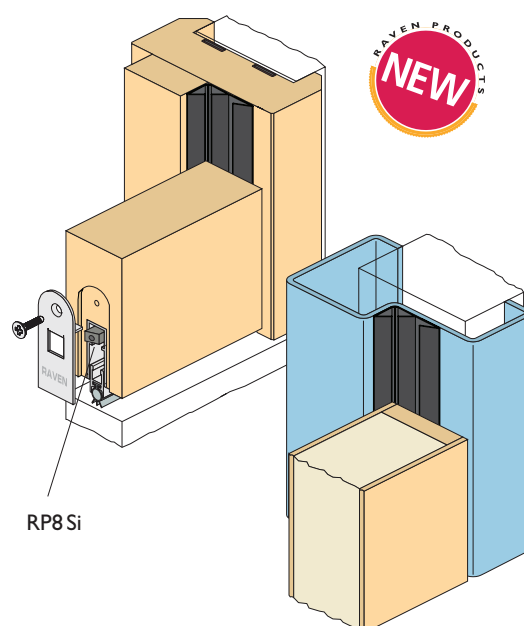
Fire & Smoke

AUS/NZ: Conforms to BCA Spec. C3.4. Tested to AS 1530.4, AS/NZS 1905.1 & AS/NZS 1530.7.

UK/EU: Conforms to Approved Document B. (Tests above are similar to BS EN 1634.1, BS 476 Part 20 & 22).



AVAILABLE AUG 2008



RP89

M



A rigid & 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 - 9mm to Raven threshold plate or raised sill. Note: a threshold plate is recommended for RP89 to clear floor surface.

Fixing Method

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

Seal Material

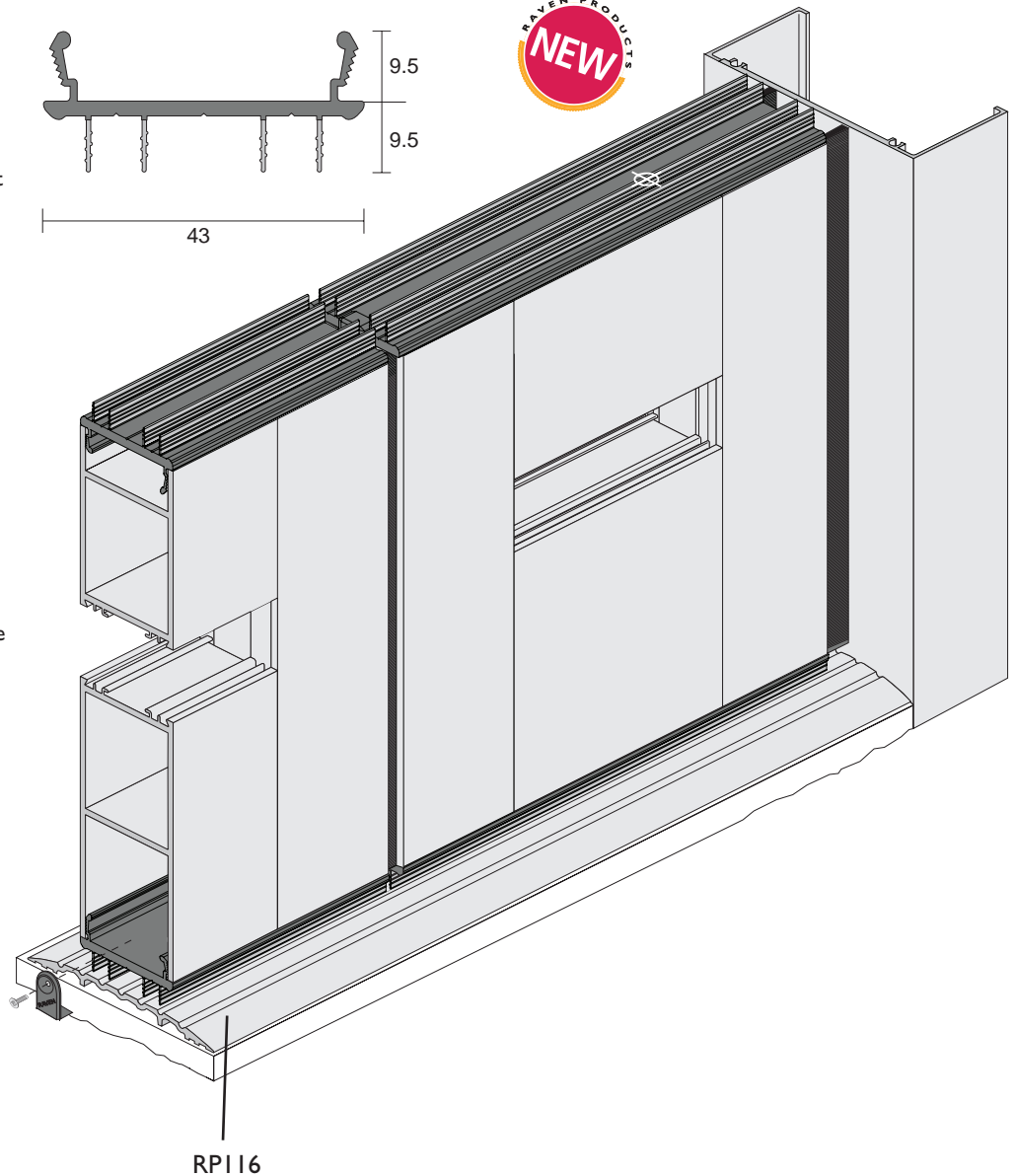
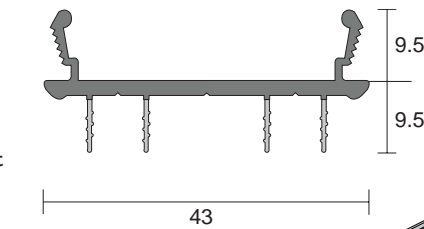
A rigid black & grey flexible UV stabilised copolymer.

Durability

Seal tested to 500,000 operating cycles without failure.

Used in Conjunction

with Raven threshold plates and perimeter seals.



RP116



Lined area for notes, consisting of multiple horizontal blue lines.



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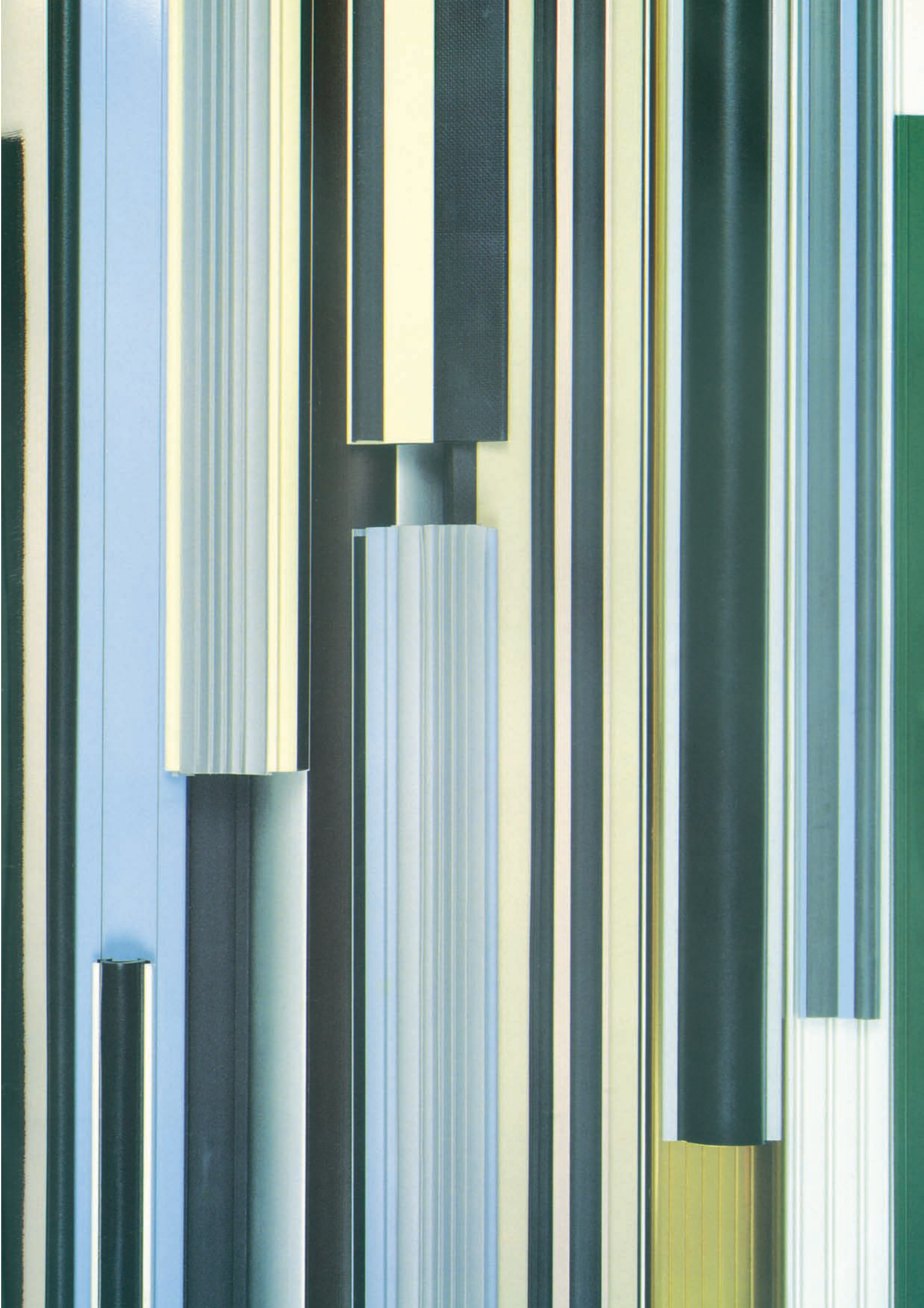
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