

ENVIROSEAL®

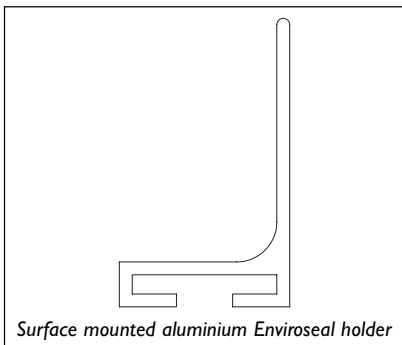
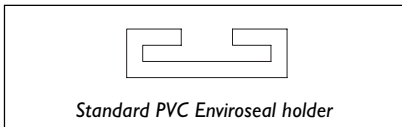
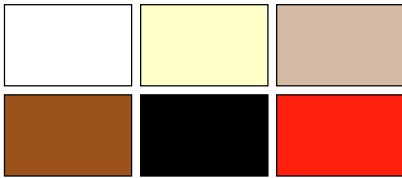
ENVIROSEAL®

Flexible Seals that combat, Smoke, Noise, Dust, Toxic Fumes, Weather and Draughts

Increasing emphasis on conservation of fuel means that draught proofing and heat loss around doors and windows must be kept to a minimum. Mann McGowan Enviroseals have been specifically designed to reduce the problems caused by smoke, dust, noise, fumes and differential air temperatures.



ENVIROSEAL®



Enviroseal Holders

Enviroseal holders are designed to accommodate the wide range of seals in Mann McGowan's range. Profiles are interchangeable so the specified seal simply slides into the holder. Once fitted, seals are simply pinned top and bottom to prevent movement. This unique slide-in assembly enables simple, cost effective replacement and upgrading.

Standard Holders

Standard – Rigid PVC normally rebated into doors and windows, available in four standard lengths, 1000mm, 1050mm, 2050mm and 2100mm which are easily cut to size. Standard holders have a self adhesive backing to allow speedy and accurate fixing.

The standard range of colours includes white, cream, light brown, dark brown, black and red. Special colours are available to order.

Surface Mounted

Aluminium extrusion in milled silver or anodised silver with other colours manufactured to order. Suitable for doors, windows and loft hatches, Mann McGowan surface mounted holders are available in easily cut to size 2134mm lengths. Mann McGowan surface mounted holders are pre-drilled for screw fitting.

Flexible Seals

Increasing emphasis on conservation of fuel means that draughts and heat loss around doors and windows must be kept to a minimum. Mann McGowan Enviroseals have been specifically designed to reduce the problems caused by smoke, dust, noise, fumes and air temperature differences.

The wide range of compression and wiper seals is available in profiles and sizes to suit a variety of applications. These elastomeric neoprene-based seals have self extinguishing properties in fire and are unaffected by fumes, dust or differential weather conditions.

Draught Control

Mann McGowan's Enviroseal holders and smoke seals conform to BS 7836 *Specification for draughtstrips for the draught control of existing doors and windows in housing*. All the seals illustrated, except 5mm Smoke seals, are BS 7836 Class 1 products intended for use on poorly fitting external hinged doors which have maximum perimeter gaps greater than 2mm and/or have large seasonal movements. 5mm Smoke seals are Class 2 products intended for use on domestic loft hatches and internal or well fitting external hinged wood doors which have maximum perimeter gaps less than 2mm and have small seasonal movements.

Effectiveness

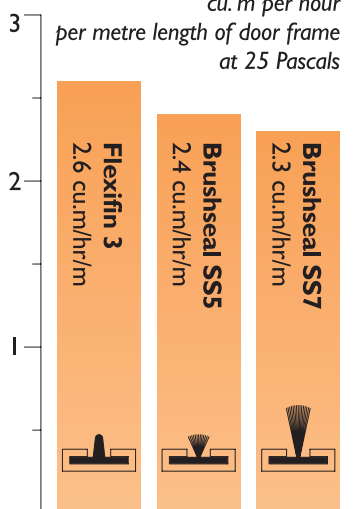
Comparisons of air leakage rates on doorsets with smoke seals are shown in the accompanying graph. When cold smoke seals to BS 476 Part 31.1 are fitted, air leakage rates were shown to be reduced by over 80%.

Acoustic Testing

Measurements and calculations of reduction of airborne sound have been conducted by AIRO (NAMAS testing laboratory No 0483, Test No L/2579) in accordance with BS 2750, BS 5821 and ISO 354. Tests were carried out at one-third octave bands from 100Hz to 5,000Hz and the Weighted Sound Reduction Index (R_w) determined. This index figure is a property of the seal alone as all other possible variables are constrained using the control doorset.

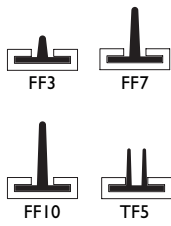
Test results are compared against a control doorset and show that Mann McGowan seals are highly effective in reducing airborne noise.

Air leakage rate
cu. m per hour
per metre length of door frame
at 25 Pascals



| | Weighted Sound Reduction Index (R_w) |
|------------------|--|
| Control | 20dB |
| Bulb seal – 6 mm | 29dB |
| Flexifin – 5mm | 29db |

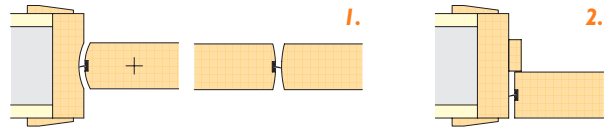
Mann McGowan Flexible Seals



Flexifin

Seals against draught, smoke and fumes. Available with three blade sizes and as a twin blade option, Flexifin is used in the edges of double swing doors, in the stiles of single action double doors and for sliding doors and sash windows.

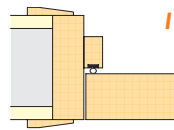
1. Double swing doors.
2. If gaps are larger use compression seal on opposite side to blade.



Compression seals

Circular profile seals for sound reducing doors and windows and as buffer seals for sliding and folding doors.

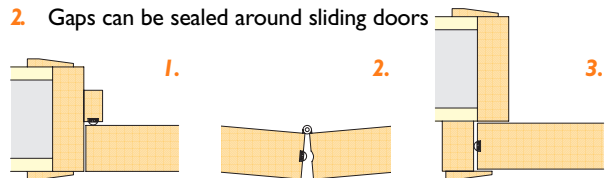
1. Fitted into doorstops.



Buffer seals

Semicircular compression seals for use as stops around windows and doors, between folding doors and as buffer seals for sliding doors and sliding and sash windows.

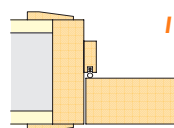
1. Single action door
2. Gaps can be sealed around sliding doors
3. Folding door



Firtree seals

Circular compression seals that are inserted direct into saw cuts in the timber. Firtree seals provide effective and economical sound and smoke insulation. Speedily fitted, the seals are available in two sizes to suit new build and refurbishment projects.

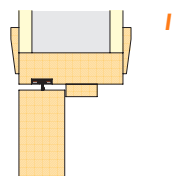
1. Single action door



Smoke seals

Brush seals that are highly effective against draught, cold smoke and fumes. Available with three brush sizes, they are used with Enviroseal holders or in combination with Mann McGowan Pyrostrip to provide approved fire protection.

1. Single action door



Teardrop seals

Self adhesive semicircular seals that provide effective stopping and buffering. Self adhesive strips mean that the seals can be quickly located and fixed. Teardrop seals are suitable for retrofitting to both steel and wooden doors.



Stop seals

Cup shaped seals that provide stops around door and sash, sliding and pivot window frames and draught and acoustic reduction.

Seals are shown full size

PYROSTRIP^{SS}

Pyrostrip has been specified and installed in many thousands of locations including:

The Royal Albert Hall
Stansted Airport
Manchester Town Hall
Royal Shakespeare Theatre
The National Gallery
Tesco stores throughout the UK

as well as in locations across the world including:

the new Hong Kong International Airport at Chek Lap Kok

Intumescent seals

Combining brush seals to combat draught, weather and cold smoke with intumescent inserts that seal against fire

Pyrostrip SS is a range of intumescent inserts that use 5mm, 7mm or 10mm brush seals to provide sealing against draughts, weather and cold smoke. The longer seals provide a useful option which facilitates upgrading and retrofitting.

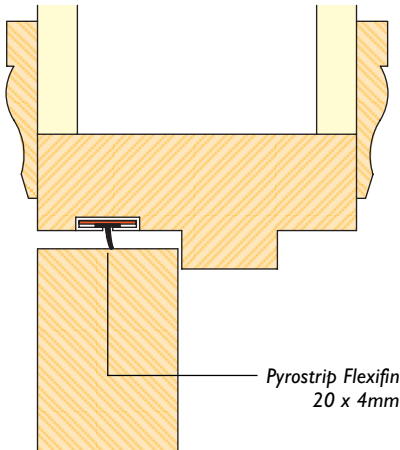
Standard brush pile height is 5mm, sufficient to seal gaps of 3mm to 4.5mm and provide adequate smoke control. Pile height of 7mm will seal gaps up to 6mm wide. Advice should be sought from Mann McGowan for environmental sealing of wider gaps and for intumescent fire sealing of gaps greater than 4mm.

Pyrostrip works when it is heated, the PVC sleeve softens whilst at the same time the intumescent core expands to seal gaps in the structure. The brush seals are stable up to 200C and thus serve to increase fire resistance.

Pyrostrip SS is available for both wooden and steel doorsets. It has undergone numerous internationally recognised fire resistance tests. Pyrostrip 100PSS has been successfully tested to BS 476 Parts 8, 22 and 31.

Pyrostrip Flexifin seals have been tested and appraised to act as fire, smoke and acoustic seals, effectively combining three functions in a single product.

Pyrostrip SS and Pyrostrip Flexifin are available in bespoke colours, pile heights and lengths to order.



| Report Number | Standard | Product |
|----------------|------------------|------------------------|
| IFC1/193 | BS 476 Part 31.1 | Pyrostrip 100PSS |
| IFC1/193 | BS 476 Part 31.1 | Pyrostrip FF5 |
| IFC1/193 | BS 476 Part 31.1 | Enviroseal SS5 and SS7 |
| IFC1/193 | BS 476 Part 31.1 | Enviroseal FF5 |
| B89217/2 | BS 476 Part 31.1 | Pyrostrip 100PSS |
| WARRES 70603 | BS 476 Part 22 | Pyrostrip Flexifin |
| WFRC C 82339 | BS 476 Part 22 | Pyrostrip Flexifin |
| WARRES 67719/C | BS 476 Part 22 | Pyrostrip Flexifin |
| L/2579 | BS 2750 Part 3 | AC2 Seal |
| L/2579 | BS 2750 Part 3 | AC2 Seal |
| L/2579 | BS 2750 Part 3 | Enviroseal MMA6 |
| L/2579 | BS 2750 Part 3 | Enviroseal Flexifin |



For details of these and other products in Mann M'Gowan's range please telephone: 01252 333601
 Mann McGowan is registered to ISO 9002. Orders can be placed direct to our sales office:

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Intumescent House
9 Springlakes Estate, Deadbrook Lane
Aldershot, Hampshire, GU12 4UH
United Kingdom

Telephone 01252 333601
 Facsimile 01252 322724

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