

Intumescent Fire & Smoke Seals



THERM-A-SEAL INTUMESCENT STRIP

Unique intumescent formulation

INTRODUCTION

The installation of intumescent fire seals around fire door assemblies is now universally regarded as essential if these are to comply with the criteria specified in the updated BS 476: parts 20 and 22: 1987 test protocol. To meet this requirement our intumescent seals have been developed to a unique intumescent formulation representing a breakthrough in intumescent product technology.

APPLICATION

THERM-A-SEAL has been developed primarily for sealing the air-gap between the edges of the leaves and the frames, or between the separate leaves and the frames, of both timber and steel fire-resisting door assemblies in the event of a fire.

In a fire situation, an intumescent foam is produced which is voluminous and also capable of exerting a pressure high enough to restrain the edges adjacent to the seal. THERM-A-SEAL is therefore ideally suited to applications where some applied restraint combined with the normal gap-filling properties of intumescent materials is needed. Unlatched door leaves, or double swing assemblies are most likely to benefit from such characteristics across the head, although the seal is equally well suited to conventional latched single-leaf doors.

For most latched single-leaf single-swing 30 minute (FD30) timber fire-resisting door assemblies, a single 10mm x 4mm strip down each jamb and across the head will normally suffice. Unlatched single-leaf timber door assemblies will invariably provide a 30 minute rating, whether single or double-swing, with a 10mm x 4mm strip fitted down the jambs; depending upon the nature of the door, however, it may be prudent to increase this the size to 15mm x 4mm.

Most latched single-leaf single-swing 60 minute (FD60) timber fire-resisting door assemblies, will satisfy the requirement of BS 476: parts 20 and 22: 1987 test procedures when fitted with a single 20mm strip across the head and down both jambs. Unlatched doors may require additional material across the head.

The intumescent foam produced by THERM-A-SEAL has high temperature tolerances and so is well suited for use with steel door assemblies where conventional intumescent foams may break down.

DESCRIPTION

THERM-A-SEAL is formulated from a unique chemical formulation based on expandable graphite. The seal is supplied in a PVC casing which has a distinctive channel running the complete length of its reverse face. This channel provides a quick and easy visible confirmation of the continuity of the intumescent material.

Unlike many other types of intumescent material, THERM-A-SEAL is not affected by moisture and therefore does not require any further protection; it is also unaffected by carbon dioxide.



AVAILABILITY

THERM-A-SEAL is supplied as standard in brown or white casings although black, grey, cream, red and a light oak woodgrain finish are also available to order.*



Nominal sizes are available in the following dimensions:

- 10mm x 4mm
- 15mm x 4mm
- 20mm x 4mm
- 25mm x 4mm
- 30mm x 4mm
- 38mm x 4mm

THERM-A-SEAL is supplied with double-sided adhesive tape and in lengths of 1050mm and 2100mm.

TEST EVIDENCE

THERM-A-SEAL meets the requirements for fire and smoke performance of BS476: parts 20 and 22: 1987. It has also passed the more exacting standards required by Certifire.

* Colours may vary slightly between examples illustrated in print, online and actual samples - which will depend upon lighting conditions in situ.



Intumescent Fire & Smoke Seals



THERM-A-STOP FIRE & SMOKE SEALS

For use on fire resisting door assemblies

INTRODUCTION

The installation of intumescent fire and ambient temperature smoke seals around fire door assemblies is essential to meet the requirements of BS5588 'Fire precautions in the design and construction of buildings'. Throughout its code of practice, BS5588 designates certain fire resistant doorsets which are required to retard the passage of smoke at ambient temperatures with the suffix S. Hence:

FD20S represents a Fire Door with no less than 20 minutes integrity.
FD30S represents a Fire Door with no less than 30 minutes integrity.
FD60S represents a Fire Door with no less than 60 minutes integrity.

THE PRODUCT

THERM-A-STOP has been designed for use in fire resisting door assemblies which have been designated as smoke control doors. The seal slows the spread of smoke and fire through a building by reducing the flow of smoke and air through the gaps between the leaf and the frame or an adjacent leaf edge during the early stages of a fire. Activated by heat, the material rapidly expands to seal the air gaps between the leaf and frame, insulating and protecting the gaps - thereby significantly slowing the spread of fire through the doorset.

THERM-A-STOP is suitable for use on fire resisting door assemblies manufactured from timber, steel or combinations of both.

APPLICATION

THERM-A-STOP intumescent fire and ambient temperature smoke seals are available in PVC holders which are either 4 mm or 5 mm deep. For some latched single-leaf, single swing 30 minute (FD30S) timber fire resisting door assemblies, a single 10 mm x 4 mm strip down each jamb and across the head will usually meet these requirements but some

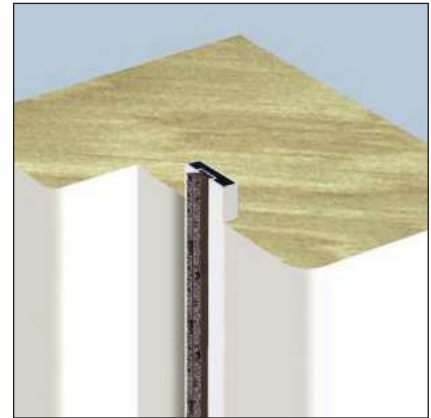
manufacturers use 15 mm x 4 mm seals to give a more consistent and reliable door performance.

Some latched single-leaf, single swing 60 minute (FD60S) timber fire resisting door assemblies will satisfy the requirements of BS476 : parts 20 and 22 (1987) test procedures when fitted with a single 20 mm x 4 mm strip across the head and down both jambs and some require two strips of 15 mm x 4 mm strip. There are several other combinations of seals for 60 minute applications so it is usually necessary to consult the door or seal manufacturer to identify the seals required.

Steel doors do not usually require intumescent seals. Fire doors tested to BSEN 1634 (the new European Standard which is more onerous than BS476) usually require better sealing performance and these seals are generally door specific. For advice, please contact Firewise.

DESCRIPTION

THERM-A-STOP's chemical formulation is based on expandable graphite which is manufactured in the UK to our unique formulation. The seal is supplied in a PVC casing. Unlike many other types of intumescent material, THERM-A-STOP is unaffected by atmospheric moisture and therefore does not require any further protection. It is also immune to degradation by carbon dioxide in the atmosphere.



AVAILABILITY

THERM-A-STOP is supplied as standard in brown or white casings although black, grey, cream, red and a light oak woodgrain finish are also available to order.*



Nominal sizes are available in the following dimensions:

10 mm x 4 mm
15 mm x 4 mm
20 mm x 4 mm
25 mm x 4 mm
30 mm x 4 mm
38 mm x 4 mm
Lengths 1050mm or 2100mm

The height of the pile projects 5 mm from the PVC holder - and is generally suitable for sealing an average gap of 3 mm to 4 mm between door and frame. If wider gaps have to be sealed, a higher brush profile can be supplied.

TEST EVIDENCE

THERM-A-STOP meets the requirements for fire and smoke performance of BS476 : parts 20, 22 & 31.1 . It has also passed the more exacting standards required by Certifire.



* Colours may vary slightly between examples illustrated in print, online and actual samples - which will depend upon lighting conditions in situ.

Intumescent Fire & Smoke Seals



THERM-A-BLADE ACOUSTIC FIRE & SMOKE SEALS

Elastomeric twin blade combined acoustic fire and smoke seal

INTRODUCTION

THERM-A-BLADE combines the outstanding performance of THERM-A-FLEX intumescent with a superb twin blade elastomeric seal for maximum smoke control and improved acoustic properties.

It provides an alternative to THERM-A-STOP which has a pile smoke seal without compromising the excellent fire performance of THERM-A-FLEX graphite fire seal.

PERFORMANCE

THERM-A-BLADE has been developed to enhance the smoke performance properties of THERM-A-STOP. The fire performance properties of both products are the same as they both contain the same intumescent, THERM-A-FLEX, the first UK manufactured graphite intumescent.

The specially developed elastomeric blades are very thin to give a very low deflection force thereby minimizing the opening and closing forces when operating the door.

DESCRIPTION

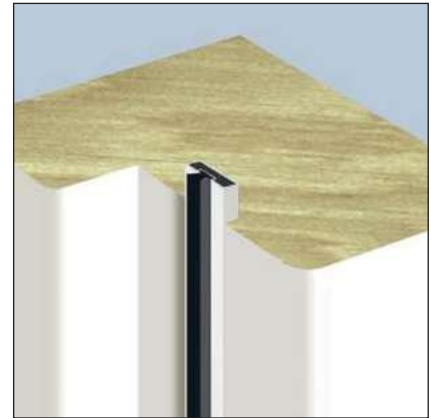
THERM-A-BLADE is a flexible elastomeric insert which has been developed to give maximum fatigue resistance ensuring a long and satisfactory life when installed into a 3 to 4mm gap between the door edge and the frame. Narrower gaps than this will shorten the life of the smoke seal.

Larger gaps will not be a problem provided that the seal bridges the gap. The seal is fitted into a PVC holder containing THERM-A-FLEX graphite for outstanding fire performance.

ACOUSTIC PERFORMANCE

A typical single and double door application with FD30 fire performance has a mass of only 18-22 kg/m² - below the requirement stated in approved document E. Therefore to meet the requirements of document E, it is essential to establish the acoustic performance of the doorset to at least 29dB RW.

Using THERM-A-BLADE together with either a Sealmaster Threshold seal or suitable Automatic Door Bottom Drop Seal on a nominal thickness 44-45mm door leaf shows an acoustic performance in the range of RW = 29-33dB.



AVAILABILITY

THERM-A-BLADE is supplied as standard in brown or white casings although black, grey, cream, red and a light oak woodgrain finish are also available to order.*



THERM-A-BLADE is available in the following nominal sizes with or without double sided adhesive tape;

10mm x 4mm
15mm x 4mm
20mm x 4mm
25mm x 4mm
30mm x 4mm
38mm x 4mm

Lengths - 1050mm or 2100mm

TEST STANDARDS

THERM-A-BLADE meets the fire and smoke performance requirement of BS 476: parts 20, 22 & 31.1. Test evidence is available on request and it is covered by our Certifire approval.

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Intumescent Fire & Smoke Seals



THERM-A-FLEX

Exfoliating flexible intumescent material

INTRODUCTION

THERM-A-FLEX has been available for more than 20 years and was the first UK manufactured exfoliating graphite based intumescent product. It has established itself as a market leader giving the benefits of flexibility and resistance to atmospheric degradation. No special protective measures are necessary to ensure that this product will expand on heating when required to do so.

The material will conform to accommodate tight corners, pipes or tubes, and this is one of the factors which ensures its superiority in performance and application when compared with other intumescent strip seals.

THE PRODUCT

THERM-A-FLEX is a general purpose intumescent material offering the qualities of a high expansion foam with a firm pressure to provide the qualities required of an ideal intumescent material for most applications.

The product is designed to withstand a full range of environmental conditions, allowing it to be used in either open or concealed situations without special protection. The flexible nature of the material also permits it to be used for many applications where a rigid strip would be impractical.

APPLICATION

THERM-A-FLEX has been developed for general sealing applications but it is particularly suited for the following type of installation:

- sealing gaps between elements of construction;
- sealing gaps between fire resisting doors and frames, shutters, windows and the adjacent walls;
- sealing services into walls or even for sealing voids within services.

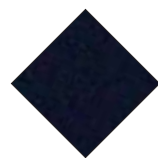
Recommendations on the amount of THERM-A-FLEX necessary for the above applications cannot be made, because this will vary according to the size of the gap or void, the nature of the bounding materials, and the period of fire resistance required.

Firewise will be pleased to offer advice on the quantity of materials likely to be needed for any specific application.

DESCRIPTION

THERM-A-FLEX is formulated from a unique chemical formulation based upon expandable graphite in a binder that allows the material to flex at normal room temperatures. This flexibility reduces as the temperature nears freezing point. It is not recommended that the material is used at temperatures below 5°C.

THERM-A-FLEX is supplied in its natural black* finish which because of its resistance to both atmospheric moisture and carbon dioxide, requires no additional protection. The material may be decorated with a wide range of conventional finishes without impairing its performance.



AVAILABILITY

THERM-A-FLEX is available in the following sizes:

WIDTHS - up to a maximum of 130 mm.

LENGTHS - 1050 mm and 2100 mm as standard (other lengths are available on request).

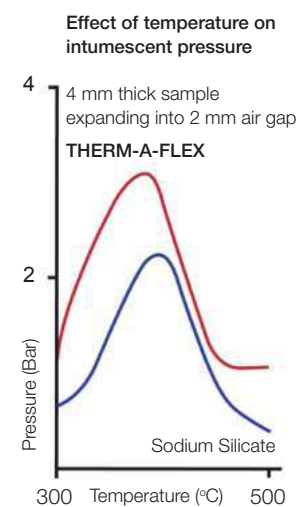
THICKNESS - 2 mm as standard but the range is currently from 1mm to 10mm.



TEST EVIDENCE

THERM-A-FLEX meets the requirements for fire and smoke performance of BS476 : parts 20, 22 & 31.1 . It has also passed the more exacting standards required by Certifire. It is currently being evaluated to the requirements of BS EN 1634-1.

Copies of test certificates and other evidence are available on request.



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Intumescent Fire & Smoke Seals



SURFACE-MOUNTED INTUMESCENT/SMOKE SEALS FOR DOORS

INTRODUCTION

When fire strikes, gaps around doors are a perfect escape route for the fire to travel, therefore it is crucial to halt the spread of flame and smoke by fitting Intumescent Door Seals. Intumescent surface-mounted seals offer an easy and speedy solution to this problem. Below are some of the key benefits offered by these seals:

- No rebating or drilling needed
- Labour cost-saving
- Only requires a 3½mm gap at head and closing edge and 1mm at hinge edge of door
- Available in a range of colours and wood veneer finishes
- Available in sets for single or double doors
- Can be fitted directly over hinges with no hinge binding
- An alternative version with twin rubber blades is available for larger gaps and distorted doors
- Independently tested to BS476 Part 22 (1987)
- 60 minutes of fire integrity – even with a gap of 11mm at the head of the door!
- Intumescent paper supplied for locks
- Supplied with “FIRE DOOR – KEEP SHUT” self-adhesive labels and panel pins

Fitting these seals will greatly reduce the risk of serious injury and minimise fire damage, preventing fire and smoke from penetrating into escape routes. Firewise is your one-stop shop for passive fire prevention products, from door upgrades to complete refurbishment and new building fire solutions.

DESCRIPTION

A surface-mounted intumescent fire seal or fire/smoke seal available in black, brown, red, white, and real wood veneer finishes. No routing is necessary. Supplied with intumescent paper for use around lock and hinge areas and two labels printed “Fire Door – Keep Shut”.



Step 1: Peel off backing

Step 2: Press to fasten



Step 3: Panel pins finish

USE

This product can be fitted to door frames in minutes. A 3.5mm or greater gap down the closing stile and across the door head is all that is required. Seals fit directly over hinges with no hinge bind and no special gap is necessary on hinge side.

Once fitted, the face of the seal can be painted, although the brush smoke seal must NOT be painted. If the brush seal is painted in error, it is easy to replace. Pins are supplied for pushing into the brush seal, although the brush has a self-adhesive strip at the back.

PERFORMANCE

In a test on an old door with a head gap between 7mm and 11mm, the seal just expanded and remained in place for the whole test. Tested to BS476 Part 22 (1987), achieving an integrity of up to 66 minutes with an 11mm gap at the head of the door.

The intumescent strips included have also been successfully tested to BS476 Part 23 (1987).

ORDERING PREFERENCES

ES/SDS for single door sets
ES/DDS for double door sets
NS/SDS for single door sets
NS/DDS for double door sets

(ES sets are fire/smoke seals, but NS sets are fire seals only).

State whether rebated or open stiles on double doors and the finish required.

Packs are supplied with intumescent paper for use in lock areas and labels printed “Fire Door – Keep Shut”.

If the gap at the closing stile and across the head of the door is less than 3mm, request packs containing only 1mm thick ES/30/PS seals.

Single 1050mm fire/smoke seal strips can be supplied as follows:

ES/25/HS for head and closing stile – 2.5mm thick x 30mm wide x 5mm brush
ES/30/PS for hinge side – 1mm thick x 30mm wide x 3mm brush.

Single 1050mm fire seal strips (no smoke seal) can be supplied as follows:

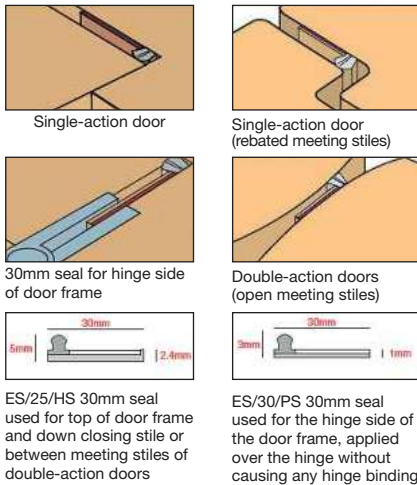
NS/25/HS for head and closing stile – 2.5mm thick x 30mm wide x 5mm brush.
NS/30/PS for hinge side – 1mm thick x 30mm wide x 3mm brush.

Longer brush sizes can be supplied to order – please state size when ordering.

Intumescent Fire & Smoke Seals



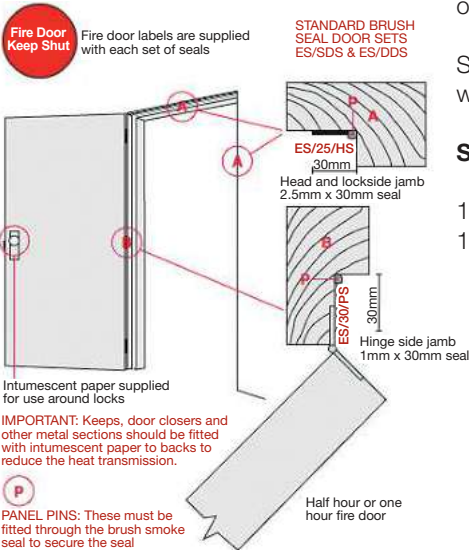
SURFACE-MOUNTED INTUMESCENT/SMOKE SEALS FOR DOORS



ES/25/HS 30mm seal used for top of door frame and down closing stile or between meeting stiles of double-action doors

ES/30/PS 30mm seal used for the hinge side of the door frame, applied over the hinge without causing any hinge binding

PANEL PINS MUST BE FITTED THROUGH THE BRUSH SEAL



APPLICATION

Details of the various applications are shown in the illustrations on the right.

ORDERING REFERENCES

ES/SDS Single door set coloured black, brown, red, or white.

ES/SDS/W Single door set with real wood veneer finish in ash, oak, sapele, or teak.

ES/DDS Double door set coloured black, brown, red, or white.

ES/DDS/W Double door set with real wood veneer finish in ash, oak, sapele, or teak.

State the colour or veneer finish required when ordering.

STANDARD LENGTHS

1000mm Head of door
1100mm Closing stile and hinge side.

BRUSH SEALS IN STANDARD SETS

3mm Hinge side, 5mm Head and closing stile. Longer brushes can be fitted (7mm or 10mm) To order single strips, use the following references:

ES/25/HS Single strip for head of door & closing stile.

ES/30/PS Single strip for hinge side State colour or veneer finish required when ordering.

PANEL PINS SUPPLIED

All sets are supplied with panel pins to fasten through the brush seals (one at each end and at 300mm intervals).

FIREPROOF PAPER SUPPLIED

Fireproof paper is supplied for fitting around the lock to cool it in a fire.

FIRE DOOR LABELS SUPPLIED

Labels printed "Fire Door - Keep Shut" are supplied with each set of seals for single and double doors.

PAINTING AND DOOR SEALS

Intumescent seals can be painted or varnished over, but the brush seal **MUST NOT** be painted over. However, brush seals can be supplied as replacements and they are very easy to fit.

SURFACE FIX INTUMESCENT/SMOKE SEAL

With twin flexible seals for larger gaps or distorted doors

Also available are the ES/SDS/P (single door) and ES/DDS/P (double door) seal sets as shown below left. Ideal for larger gaps or distorted doors.

Fitted in same way as other seals, but with the same type of seal fits across the head and up the stiles. Supplied in 1050mm and 2200mm lengths. Standard colours are black, brown and white.

Many real wood veneer finishes are available on the intumescent. Brush seal is supplied for the meeting stiles on double doors.

Pins are only needed for the brush seals on the meeting stiles of double doors. ES/SDS/P & ES/DDS/P seal sets are supplied with fireproof paper (for fitting around locks) and labels printed "Fire Door - Keep Shut".



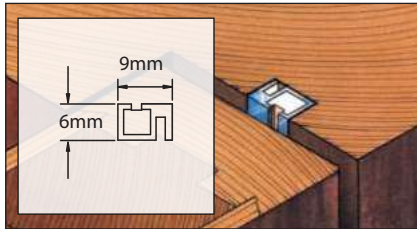
The new ES/SDS/P & ES/DDS/P plastic seals have twin soft rubber smoke seals with intumescent fire seals.

Intumescent Fire & Smoke Seals



SEALMASTER PRODUCT DATA SHEET

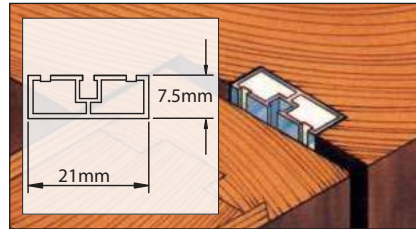
Unique intumescent formulation



SEAL TYPE IF30

IF30 fire seals have been tested and approved by Certifire to conform to BS476 part 22. This is the most demanding 3rd party certification scheme in the industry.

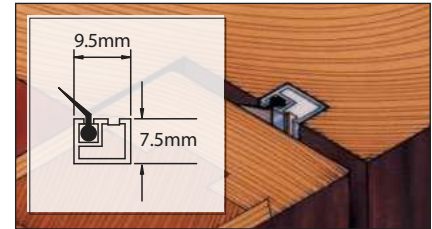
IF30 Intumescent Fire Seal has been tested by TRADA. A 30 minute fire-resistance rating was achieved, when used in conjunction with a 30 minute fire door. Copies of test reports are available on request.



SEAL TYPE IF60

IF60 fire seals have been tested and approved by Certifire to conform to BS476 part 22. This is the most demanding 3rd party certification scheme in the industry.

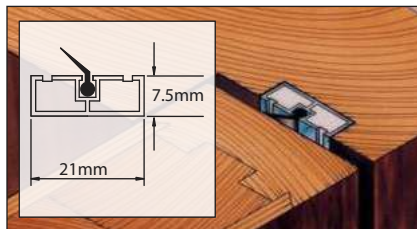
IF60 was tested by TRADA. It was fitted to a 60 minute door assembly and achieved an integrity rating of 71 minutes.



SEAL TYPE N30

N30 fire and smoke seals have been tested and approved by Certifire to conform to BS476 part 22. This is the most demanding 3rd party certification scheme in the industry.

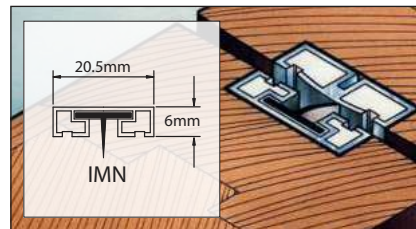
N30, fitted to a 30 minute fire door, was tested by TRADA. It retained stability, integrity and insulation well in excess of the 30 minute rating. Copies of test reports are available on request.



SEAL TYPE N60

N60 Fire and smoke seals have been tested and approved by Certifire to conform to BS476 part 22. This is the most demanding 3rd party certification scheme in the industry.

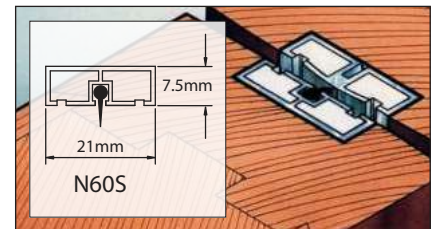
N60, with flame-retardant elastomeric draught/smoke blade insert, was tested by TRADA, in conjunction with 60 minute assembly. Stability and integrity were retained for 71 minutes. Copies of test reports are available on request.



SEAL TYPE IMN/IMP

IMN/IMP fire and smoke seals have been tested and approved by Certifire to conform to BS476 part 22. This is the most demanding 3rd party certification scheme in the industry.

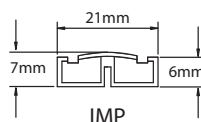
An IMN/IMP combination seal with elastomeric blade insert, has been tested on a double leaf, timber door assembly, by TRADA. A fire resistance in excess of 60 minutes was achieved. Copies of test reports are available on request.



SEAL TYPE N60/IMP

N60/IMP fire and smoke seals have been tested and approved by Certifire to conform to BS476 part 22. This is the most demanding 3rd party certification scheme in the industry.

The N60S seal, has been assessed by TRADA, as being capable of providing 60 minutes integrity when used in conjunction with the IMP seal.



Smoke Seals



THERM-A-SMOKE

Cold smoke seal for use with fire resisting door assemblies

INTRODUCTION

THERM-A-SMOKE is a high density ambient temperature pile seal which has a polypropylene fin for improved smoke control at ambient temperatures. The pile is contained in a PVC casing.

APPLICATION

THERM-A-SMOKE is designed to provide cold smoke control in the early stages of a fire, it is primarily used in conjunction with an intumescent fire seal that is concealed behind the door lipping.

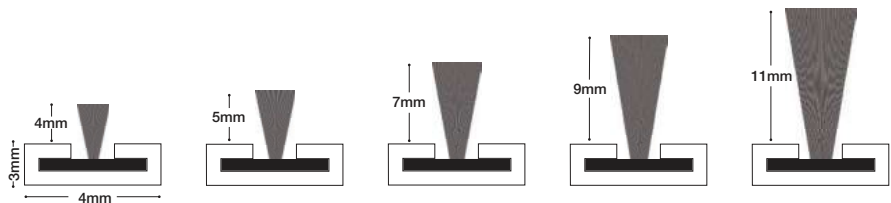
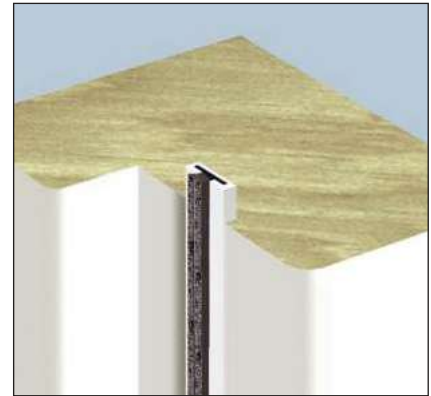
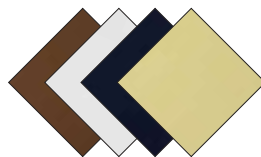
It is recommended that THERM-A-SMOKE is rebated into the door frame. Once the intumescent fire seal has activated, the smoke seal has completed its function.

THERM-A-SMOKE can also be used in refurbishment projects.

In daily life, THERM-A-SMOKE functions as a draught and weather seal, controlling air flow and reducing noise.

AVAILABILITY

THERM-A-SMOKE is supplied as standard in brown, white, black and cream casings.



* Colours may vary slightly between examples illustrated in print, online and actual samples - which will depend upon lighting conditions in situ.

Smoke Seals



RETROFLEX SMOKE & DRAUGHT SEAL

Surface mounted smoke and draught seals

PRODUCT APPLICATION

- Metal Frame/Timber Door
- Timber Frame/Timber Door
- Timber Casement Windows*
- Timber Centre Pivot Windows*

PERFORMANCE BENEFITS

Stable - will not rot, corrode, mildew or change colour due to oxidation. Resists U.V. deterioration.

Pliable - Retroflex adjusts to surface irregularities caused by a build up of paint on mating surfaces or a sash which is not 'plumb' in the frame.

'Self-tightens' - against wind and rain forces to exclude air and water.

Silent - does not vibrate or 'whistle'.

Easy to install - can be fixed with adhesive, staples or nails. Easily cut with scissors.

Unobtrusive - fits into rebate - not seen when door or window is closed.

High impact - will not split if hit by hammer when fixing.

PRODUCT SPECIFICATION

Retroflex is self-adhesive and available in 2.1 Metre lengths in white and black.

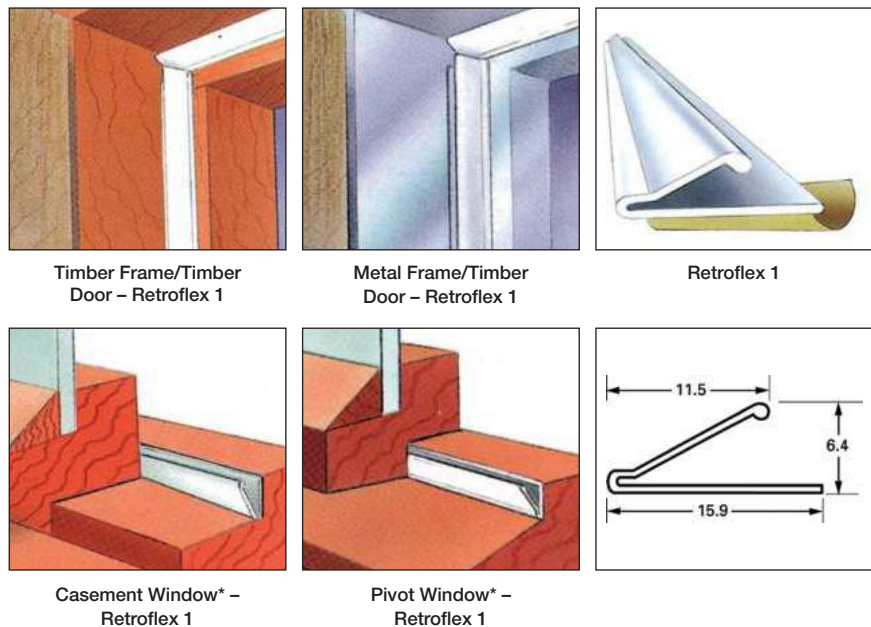
TECHNICAL DETAILS

A non-corrosive flexible seal that will not shrink, crack or take a set in temperatures between -34°C and +54°C. Friction levels are 75% lower than spring metal seals.

TEST DETAILS

Tested at Warrington Fire Research Centre on 14th January 1997 to BS476 Part 31.1. Incorporating a steel frame/timber door. Test Nos. 70340/A and 70340/B.

*For draught proofing purposes only.

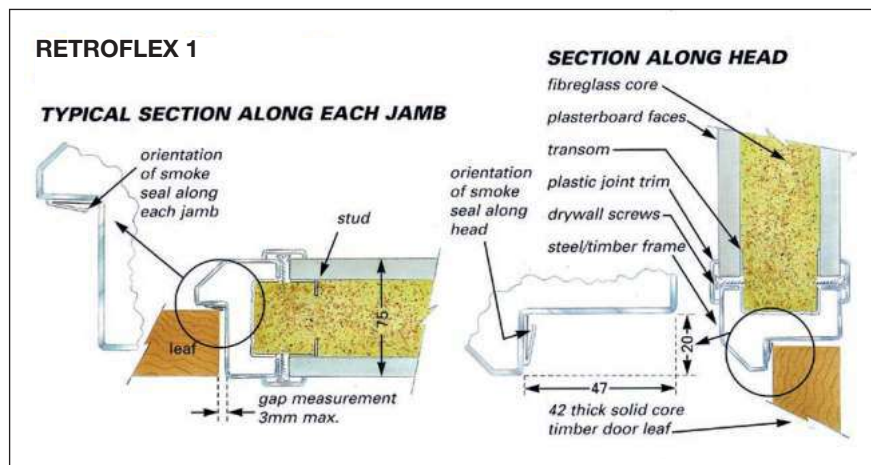


FITTING DETAILS

Remove all flaky paint and rough edges with a medium or fine sandpaper. Remove grease, dust and grime by wiping with a paper towel and methylated spirits (non industrial).

Paper towels are more efficient than cloths in preventing the transfer of dirt from one part of the window to another.

To further enhance adhesion and fixing it is recommended to use an adhesive primer, Scotch Primer 38 or similar are suitable. Extra fixing strength can be achieved by using staples or pins.



Seals for Windows & Doors



CARRIPILE 1, 2 and 3 SMOKE & DRAUGHT SEALS

For doors and window applications

INTRODUCTION

A range of seals specifically designed for sliding applications. Parting Bead is designed for the verticals of box sash windows, with Polyflex PF109 being ideal for the top, bottom and meeting rail. Carripile 1, 2 and 3 can be used as an alternative to Polyflex PF109 and is particularly useful for applications such as patio doors and sliding sash windows.

Parting Bead is manufactured using dual hardness PVC Nitrile, Polyflex from flexi-polymer and Carripiles have a PVCu carrier and polypropylene fin pile which provides an extra barrier against the weather. A particular feature of our Parting Bead is the reverse direction of the two sealing flippers. This ensures perfect sealing to both top and bottom sashes.

Carriers are supplied in 2.2M lengths, finpiles are available in white, grey and brown.

(A full range of Pile Weatherseal with or without fin is available in coil form.



CARRIPILE 1



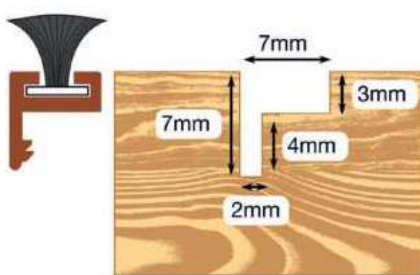
CARRIPILE 2

Carripile 2 can also be surface mounted with good quality contact adhesive or using brass pins

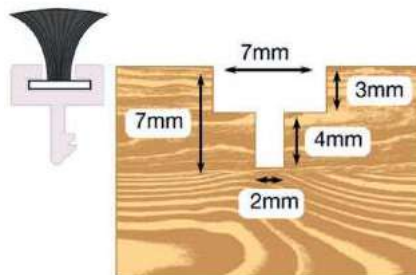


CARRIPILE 3

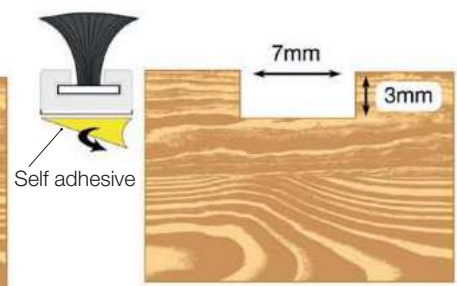
The below rebate sizes need to be routed into the door or frame for flush fit



Carripile 1 Offset leg type



Carripile 2 Centre leg type



Carripile 3 Self adhesive type

Carripile 1		
Finpile size	Ref	Carrier colour
5mm	RP105	black
5mm	RP125	white
6.5mm	RP108	black
6.5mm	RP128	white
8.5mm	RP103	black
8.5mm	RP127	white

Carripile 2		
Finpile size	Ref	Carrier colour
5mm	RP107	brown
5mm	RP114	white
6.5mm	RP102	brown
6.5mm	RP115	white
8.5mm	RP130	brown
8.5mm	RP116	white

Carripile 3		
Finpile size	Ref	Carrier colour
5mm	RP113	black
5mm	RP110	white
5mm	RP106	brown
6.5mm	RP101	black
6.5mm	RP109	white
6.5mm	RP117	brown
8.5mm	RP100	black
8.5mm	RP112	white
8.5mm	RP131	brown

Seals for Windows & Doors



SEAL CARRIER 14 SMOKE & DRAUGHT SEALS

INTRODUCTION

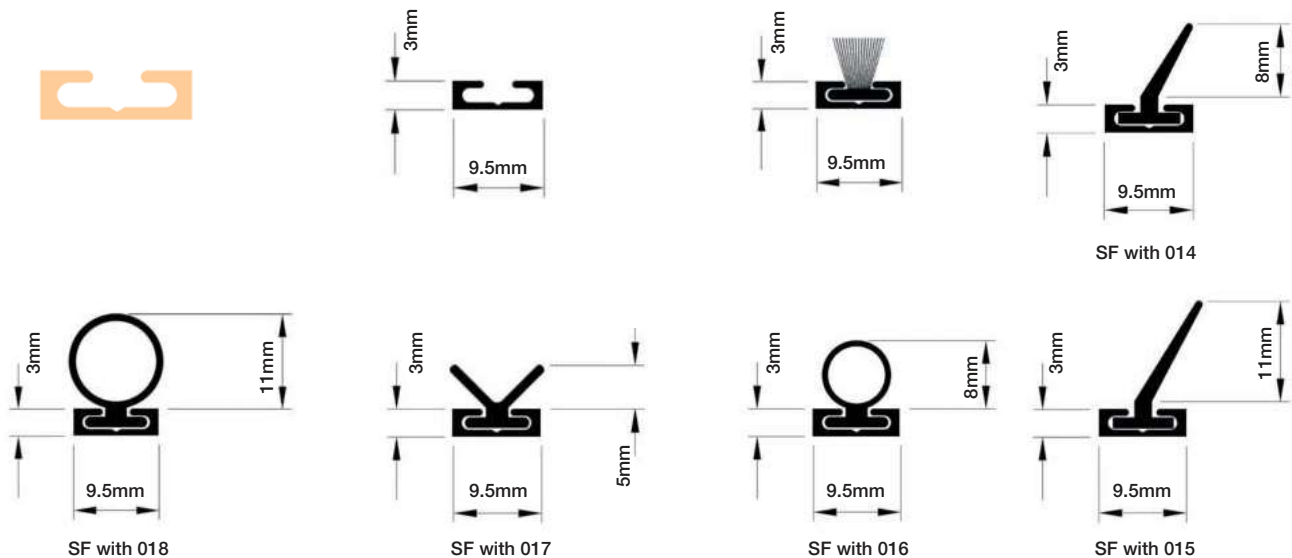
Ideally suited to door jamb and head situations or meeting stiles whether butt or stepped, as either draught or cold smoke seals. All aluminium profile containing a choice of polypile seals, flexible tubes or blades, all of varying dimensions.

There are many seal designs available for special requests please contact our sales office. Brush available in brown and white with or without fin. Standard sizes 5mm, 6.5mm and 8.5mm, other sizes also available.

The product can be surface mounted or fitted into a machined groove.

Installation by standard self adhesive backing or pin fixing. Jamb to be machined out.

Standard Options	Insert 014	Insert 015	Insert 016	Insert 017	Insert 018	Brush 5mm Grey Pile
Satin Silver - SFS		SFS/015	SFS/016	SFS/017	SFS/018	SFS/Brush
Satin Gold - SFG		SFG/015	SFG/016	SFG/017	SFG/018	SFG/Brush



Smoke Seals



ENVIROSEAL SMOKE & DRAUGHT SEALS

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

ENVIROSEAL HOLDERS

Enviroseal holders are designed to accommodate a wide range of available seals. 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 two standard lengths, 1050mm, 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, dark brown and black. 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, surface mounted holders are available in easily cut to size 2134mm lengths. Surface mounted holders are pre-drilled for screw fitting.

EFFECTIVENESS

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

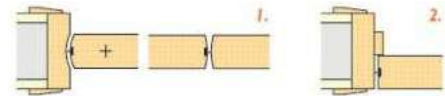
are constrained using the control doorset. Test results are compared against a control doorset and show that the seals are highly effective in reducing airborne noise.

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



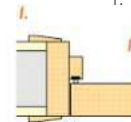
Flexifin
Seals against draught, smoke and fumes. Available with three blade sizes and as a twin blade option, Flexifin is used in the edges of double swing doors, in the stiles of single action double doors and for sliding doors and sash window

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



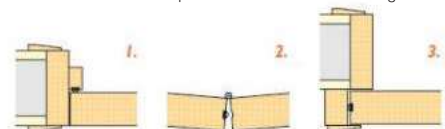
Compression seals
Circular profile seals for sound reducing doors and windows and as buffer seals for sliding and folding doors.

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. Folding door
3. Gaps can be sealed around sliding doors



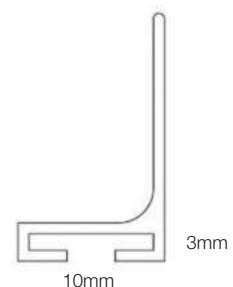
Teardrop seals
Self adhesive semicircular seals that provide effective stopping and buffering. Self adhesive strips mean that the seals can be quickly located and fixed. Teardrop seals are suitable for retrofitting to both steel and wooden doors.

Stop seals

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



Standard PVC Enviroseal holder



Surface mounted aluminium Enviroseal holder

Fire Resistant Glazing Systems



THERM-A-GLAZE 30

INTRODUCTION

Intumescent fire seals are an essential element of a glazing panel in a timber fire door set designed to meet the criteria of BS 476: Parts 20 and 22: 1987. To meet this requirement Intumescent Seals has developed a unique intumescent formulation representing a breakthrough in intumescent product technology.

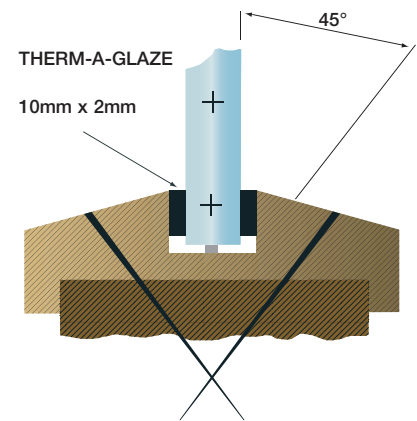
APPLICATION

THERM-A-GLAZE has been developed to provide protection to the glazing panel and timber beading. A strip 10mm x 2mm located between the beads and the glass will provide fire resistant protection in an FD 30 or FD 30S timber fire door when suitable beading has been used. THERM-A-GLAZE can be used without additional protection from

moisture or other atmospheric pollutants. It can be installed in either external or internal timber fire door sets. THERM-A-GLAZE is a flexible material and is very easy to fit. A pair of scissors or knife is all that is required to cut it to size, and its self adhesive backing ensures a simple but reliable method of fixing to the timber beading. THERM-A-GLAZE can be used to protect 6mm Georgian wired glass in apertures up to 900mm x 600mm.

DESCRIPTION

THERM-A-GLAZE is manufactured to a unique chemical formulation based on expandable graphite. The flexible strip is inherently resistant to water and normal environmental conditions so that no external protection is required.



TEST EVIDENCE

Test evidence is available on request.

AVAILABILITY

THERM-A-GLAZE is supplied as a self adhesive strip 10mm x 2mm (other sizes available) and in standard lengths of 2100mm.

THERM-A-GLAZE 60

APPLICATION

THERM-A-GLAZE 60 one hour glazing system has been developed to provide protection to the glazing panel in FD60 and FD60S rated timber fire doors using hardwood glazing beads. The beads do not require any treatment. Depending on the particular leaf construction and doorset arrangement employed, permitted glazed areas may be up to 0.47m².

The glass types that can be used are 6mm thick Georgian wired plate glass, Borosilicate or Ceramic glass. Door constructions incorporating Flaxboard or Particleboard cores require the glazing aperture to be lipped with a minimum of softwood for 54mm thick doors and with hardwood of minimum density 600kgm⁻³ for 45mm thick doors.

DESCRIPTION

THERM-A-GLAZE 60 one hour glazing system comprises of the following components:

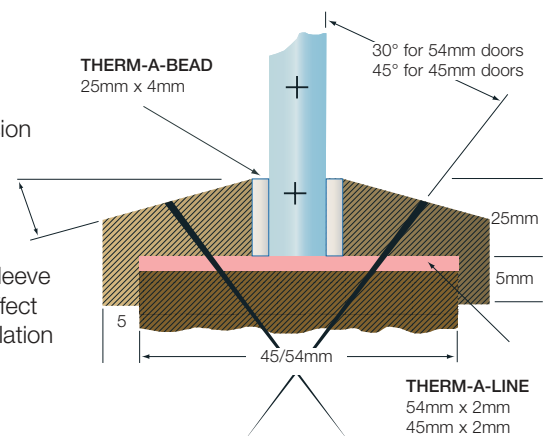
THERM-A-LINE - a specially formulated intumescent with erosion resistant qualities.

THERM-A-BEAD - a high expansion phosphate based intumescent contained in a pvc sleeve designed to provide a masking effect on the beads with maximum insulation between the glass and the bead.

TEST EVIDENCE

THERM-A-GLAZE 60 has been successfully tested to BS 476: Parts 20 and 22 : 1987 in two 54mm FD60 timber fire doors - reference TRADA test FR1632 - 14/7/92.

Door A - laminated softwood core with chipboard facing. Aperture size 650 x 600mm. Integrity failure - 71 minutes.
Door B - flaxboard core, overlaid with non-combustible board and faced with chipboard. Aperture size 650 x 600mm, hardwood lined. Integrity failure - 70 minutes.



AVAILABILITY

THERM-A-GLAZE 60 is supplied as a complete system in the following sizes: THERM-A-LINE 2100 x 54 x 2mm and 2100 x 45 x 2mm (other sizes available) and in standard lengths of 2100mm.

THERM-A-BEAD 2100 x 25 x 4mm.

The pvc sleeve is available in brown, white, cream and black. Both components are supplied as standard with a self-adhesive backing tape.

Fire Resistant Glazing Systems



THERM-A-STRIP

Flexible intumescent strip

INTRODUCTION

THERM-A-STRIP is a low pressure intumescent strip material which has been developed for applications where a pressure forming product is disadvantageous. The degree of expansion is moderate in order to provide some resistance to erosion.

THE PRODUCT

THERM-A-STRIP has been developed to provide excellent sealing properties combined with the benefit of a flexible strip of intumescent material. It is particularly useful in cases where there is a possibility of localized flaming due to combustible products since it generates fire retardant gases when heated.

APPLICATION

THERM-A-STRIP intumescent strip can be supplied in a variety of shapes so that it can be used in a wide range of applications including gaskets for ironmongery protection, locks, latches, bolts, hinges etc. It is also useful in applications where the gap to be filled is small and the fire retardant properties are beneficial such as overpanels and glazing applications.

DESCRIPTION

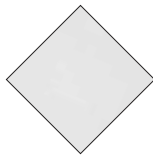
THERM-A-STRIP is a flexible phosphate based intumescent product giving an approximate ten fold increase in volume when exposed to heat. Its activation temperature is around 180°C.

THERM-A-STRIP is supplied in a natural white finish which, because of its resistance to both atmospheric moisture and carbon dioxide, requires no additional surface protection.

The material may be decorated with a wide range of conventional finishes without impairing the performance. It is available with or without a self-adhesive backing strip.

AVAILABILITY

THERM-A-STRIP is supplied as standard white but it can be coloured if required.*



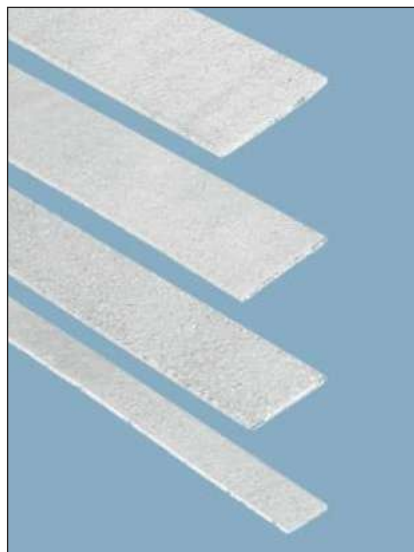
Contact our Technical Department for further information.

Nominal sizes are available in the following dimensions:

10 mm x 2 mm
15 mm x 2 mm
20 mm x 2 mm
25 mm x 2 mm
30 mm x 2 mm
38 mm x 2 mm

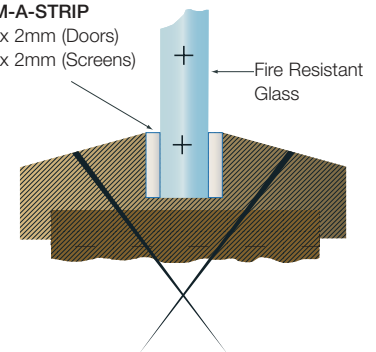
Other sizes are available and in standard lengths of 1050 mm or 2100 mm

Other thicknesses from 1 mm upwards, widths up to 130mm wide and lengths up to 3000 mm are available on request.



THERM-A-STRIP

THERM-A-STRIP
15mm x 2mm (Doors)
10mm x 2mm (Screens)



TEST EVIDENCE

THERM-A-STRIP meets the requirements for fire and smoke performance of BS476 :

parts 20, 22 & 31.1 . It has also passed the more exacting standards required by Certifire. It is currently being evaluated to the requirements of BS EN 1634-1.

Copies of test reports and other evidence are available on request.

RELATED PRODUCTS

When this product is used for 60 minute glazing applications it may be beneficial to use it in conjunction with other products to enhance its performance.

Please contact our Technical Department for further advice.



* Colours may vary slightly between examples illustrated in print, online and actual samples - which will depend upon lighting conditions in situ.

Fire Resistant Glazing Systems



THERM-A-CHANNEL

DESCRIPTION

THERM-A-CHANNEL is a specially compounded intumescent elastomeric material which is extruded into a 12 mm x 15mm channel, forming a glazing gasket which cups the edge of the glass pane. Being elastomeric the gasket is impervious to water and atmospheric moisture.

PERFORMANCE

THERM-A-CHANNEL has been designed and tested for use in the 30 minute glazing applications found in screens and fire doors, using either wired or clear fire rated glass. It is approved for use with glass sized up to 700 x 800mm in FD30 and FD30S fire doors and screens. As with any fire-rated element it is essential that the construction used is of a type previously tested, and therefore the following specifications should be followed:

FIREDOORS

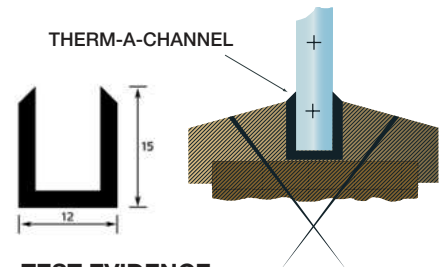
Glazing aperture in Particleboard core doors to be lined with 6mm Hardwood. Beads - softwood, 13mm high x 21mm wide. Fixings 12g steel pins 40mm long at 150mm centres.

SCREENS

Frame - softwood 90 x 45mm. Beads - softwood 13mm high x 21mm wide. Fixings - 12g steel pins, 40mm long at 150mm centres.

INSTALLATION

THERM-A-CHANNEL is simply cut to length to the perimeter of the glass pane. The corners are mitred cutting the side wall only and leaving the base intact. It is then pushed onto the glass edge, no adhesive or sealants are required and finally, the aperture is glazed as detailed under performance.



TEST EVIDENCE

THERM-A-CHANNEL is covered by test report IFCI 290, where a glazed panel 808 x 710mm in a flaxboard core doorleaf, retained by softwood beads attained 36 minutes integrity. Its use in softwood screens is covered by report DIG 9611131 where a softwood screen with central transom attained an integrity rating of 34 minutes.

AVAILABILITY

THERM-A-CHANNEL is available ex-stock in 100m coils.

PYROGLAZE® CHANNEL

Intumescent seals

PYROGLAZE® CHANNEL

PYROGLAZE® Channel is a neoprene based U shaped gasket preformed glazing seal for 30 minute fire protection, easily fitted around the periphery of fire resisting glass. It can be used to glaze apertures in fire resisting doors, screens and partitions.

PYROGLAZE® Channel has been fire tested/ assessed to BS476 Pt 22 1987 providing in excess of 30 minutes fire resistance when used in conjunction with the following glasses:

- Georgian Wired
- Firelite®
- Pyran®
- Pyrobel®
- Pyrobelite®
- Pyroshield®
- Pyroguard®
- Pyrodur®
- Pyrostop®

INSTALLATION

Glazing rebates must be free from dirt, grit or friable materials. PYROGLAZE® Channel should be cut to suit the glass size to be installed. PYROGLAZE® Channel can be cut with a sharp knife or scissors. PYROGLAZE® Channel should be fitted around the edges of the glass.

The first glazing bead should be fixed into position using steel pins 38mm long at 150mm centres. The glass, together with the PYROGLAZE® Channel should be offered up into the opening.

The second glazing bead should be fixed into position using 38mm long steel pins at 150mm centres.

N.B. All pins must be splayed so they fit under the glass.



Pyroglaze® Channel 6	Suitable for glasses 5mm to 7mm thick	50m Coil
Pyroglaze® Channel 10	Suitable for glasses 10mm to 12mm thick	30m Coil
Pyroglaze® Channel 15	Suitable for glasses 14mm to 15mm thick	

Any Timber used in the construction must have a minimum density of 650KG/M³

Fire Resistant Glazing Systems



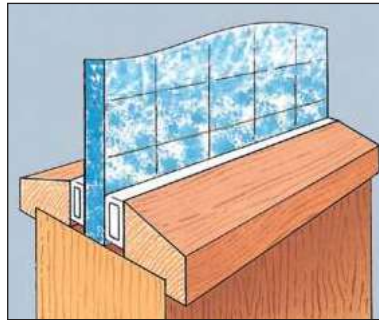
PYROGLAZE® 30 & 60 SEALS

Intumescent seals

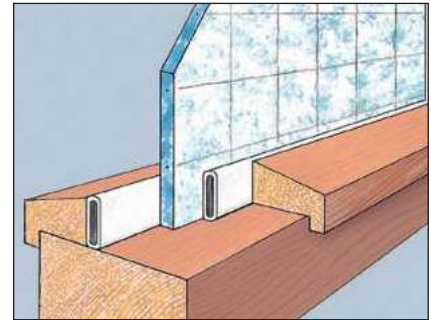
PYROGLAZE® 30

PYROGLAZE® 30 comprises 10mm x 3mm intumescent strips located between 6mm Georgian Wired Glass or 6mm Pyran® Glass Pyrostop®, Pyrobel®, Pyrobelite®, Firelite®, Purodur® and hardwood glazing beads. Has been successfully fire tested to BS476 parts 8 and 22.

Maximum glass size 2,000mm x 1,700mm (G.W.P.P). Glazing beads should be secured using 38mm long steel pins, splayed to pass under the glass at 150-200mm centres. Timber density should be 650kg/m³.



Pyroglaze® 30



Pyroglaze® 60

PYROGLAZE® 60

PYROGLAZE® 60 seals comprise 25mm x 3mm intumescent seals located between a fire resistant glass such as 6mm G.W.P.P. (Pyroshield®), 6mm Pyran®, 9.5mm Fyreguard®, 5mm Firelite®, Pyrostop® double glazed units, Pyrobel®, Pyroguard® and 6mm Pyran® glazed units. Pyrostrip® 100EC should be

used to line the aperture prior to glazing in all fire door applications (52mm x 2mm liner for 54mm thick doors). Glazing beads should be secured using 58mm long steel pins at 100mm centres splayed to pass under the glass. Timber should be a hardwood with a minimum density of 650kg/m³.

PYROSTRIP® 300

Intumescent system

DESCRIPTION

PYROSTRIP® 300 has been developed for use with various types of fire resistant glass, to provide at least 30 minutes fire resistance in accordance with BS476 Part 22: 1987.

PYROSTRIP® 300 is a phosphate based multi-component intumescent system. Under the action of heat, the components react chemically to form a soft, high volumetric expanded char that will seal gaps which occur during a fire.

PYROSTRIP® 300 also has insulating properties to protect substrates such as timber, when exposed to fire. Pyrostrip 300 is 2mm thick.

PYROSTRIP® 300 has achieved in excess of 30 minutes integrity to BS476:Part 22: 1987. Examples of tested construction as follows:

69484/A Glazed aperture 578mm x 908mm in Sauerland Type 38RF door core.

69484/B Glazed aperture 578mm x 908mm in Sauerland Type 38PV door core.

RF 95045 Glazed aperture 370mm x 270mm in softwood laminated door core.

70603 Glazed aperture 730mm x 1755mm (Pyran S) in single acting, double leaf, glazed doorset.

PYROSTRIP® 300 is a non-pressure developing intumescent seal, which produces high volumetric expansion when exposed to heat. The binder system employed in the manufacture of the product means PYROSTRIP® 300 is flexible in its cold state.

PYROSTRIP® 300 intumesces at approximately 160°C.

The blowing agents react and expand the insulating char material to around 40 times its original volume.



PYROSTRIP® 300 seals can be used as a glazing seal within glazed apertures of fire resisting doors.

PYROSTRIP® 300 is available in white and brown and can be supplied as self-adhesive for ease of fixing.

PYROSTRIP® 300 can be supplied in 10 metre coils and is easily cut to length, using a sharp knife or scissors, however, we can cut to length if required.

Fire Resistant Glazing Systems



MONOLUX CHANNEL

DESCRIPTION

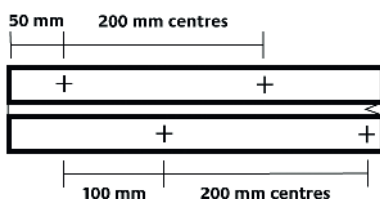
Monolux channels retaining 6mm wire reinforced glass or Pyran glass permit large areas of glazing, meeting the requirements for stability and integrity to BS 476: Part 8, to be installed in fire resisting internal walls and in fire resisting doors. This allows the advantage of borrowed lighting and the ability to identify a fire from the safe side of a protective screen.

Monolux channels are machined in two sizes (44mm and 50mm wide) from Monolux 40 which is noncombustible to BS 476: Part 4. 1970 and Class O to the building regulations. They are profiled and finished with a white intumescent paint which seals the surface and provides additional protection when exposed to fire.

Channels fixed to suitably dimensioned timber frame members (see table) will provide 1/2 hour fire resistance when used with panes of wire reinforced glass up to 1.5m² area or Pyran glass up to 2.31m² area, and up to 1 hour fire resistance when used with panes of wire reinforced or Pyran glass up to 1.3m² area depending on the ratio of height to width.

INSTALLATION

Measure height and width of carcass opening and, to ensure correct fit, of glass measure and note diagonal dimensions. For butt jointed corners cut one pair of firecheck channels to full width of opening, and one pair to full height less 40mm. Drill fixing holes staggered at 200mm centres and 50mm max. from each end.

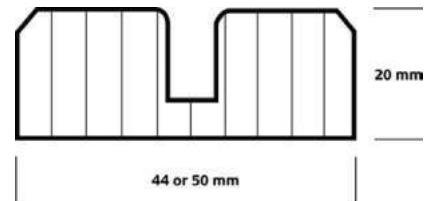


DRILL DIAMETERS

4.0mm in channels, 2.5mm in timber frame for no.6 screws, 4.5mm in channels, 3.0mm in timber frame for no.8 screws.

Fit channels to glass and insert into opening. Temporarily taping channels to glass will aid handling. Secure with no.6 or no.8 woodscrews.

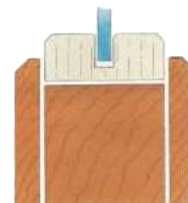
Prepare glass: 6.0mm thick wire reinforced or Pyran glass cut to carcass opening height and width less 17mm (± 2 mm). Cover strips, where required, can be applied. Screw cover strip to one face to facilitate removal if necessary.



Monolux channels minimum dimensions of timber framing to provide given periods of fire resistance. No account has been taken of the structural requirements of the framework



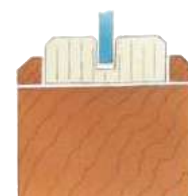
44mm wide Monolux channel on minimum 44mm wide softwood or hardwood frame. 1/2 hour fire resistance (stability & integrity)



50mm wide Monolux channel on minimum 50mm wide softwood or hardwood frame, minimum 10mm thick hardwood cover strips with flame retardant finish. 1 hour fire resistance (stability & integrity)



44mm wide Monolux channel on minimum 44mm wide softwood or hardwood frame, minimum 10mm thick hardwood cover strips or metal trim. 1/2 hour fire resistance (stability & integrity)



44mm wide Monolux channel faced with hardwood quadrant or triangular beads with flame retardant finish on minimum 70mm wide hardwood frame. 1 hour fire resistance (stability & integrity)

Fire Resistant Glazing Systems



CERAMIC FIBRE TAPE

Specialised ceramic fibre glazing tape

DESCRIPTION

Ceramic Fibre Tape is a specialised tape based on ceramic fibres which is supplied on single strand reels for use when glazing a wide variety of insulating and non-insulating fire resistant glass types into internal screens and doors manufactured from timber or steel.

It has a special pressure sensitive contact adhesive which allows it to be repositioned before final fixing. It can also be capped with Silfix U9 to prevent possible degradation of the tape by glass cleaning solutions.

Ceramic Fibre Tape can be subjected to high temperatures but maintain its density and tensile strength. It is supplied in roll form and is white in colour and has been successfully fire tested in accordance with BS476: Part 22: 1987.

KEY FEATURES

- Can provide 30 minute and in some cases 60 minute resistance to the passage of fire and smoke.
- Tested with non-insulating and insulating glass types from all major glass manufacturers.
- Supplied on single strand reels with an "easy peel" backing paper.
- Prevents glass rattle.
- Special pressure sensitive contact adhesive allows it to be repositioned before final fixing.
- Colours available: White.
- Non-toxic.
- Quick, clean & easy to apply - eliminates need for distance pieces.

USES

For glazing of non-insulating and insulating glass into internal timber and steel screens and doors with glass from major manufacturers including Pyrostop, Pyrobelite, Pyroacet, Contraflam etc.

The performance of Firetape Ceramic is dependent on the use of suitable fire resistant glass and suitable frame design. Further information is available from Firewise.

INSTRUCTIONS

Ceramic Fibre Tape is designed to be applied directly to the surface, no special primers or sealers are required.

If Ceramic Fibre Tape is to be capped with silicone, apply the tape to the rebate upstand and bead approximately 3mm below the sightline.

If Ceramic Fibre Tape is to be applied without a silicone capping, apply the tape to the rebate upstand and bead, level with the sightline. Surface preparation: all surfaces must be clean, dry and free from frost, grease and loose materials.

Unwind a convenient length of the reel and remove the backing paper to expose the adhesive. Apply adhesive side of the Ceramic Fibre Tape to the substrate and secure in place using moderate pressure.

Place other joint surface on top of the tape and secure in position.

APPLICATIONS

Properties: Application temperature range: + 5oC to +40oC.

Shelf life: 12 months.



TEST DATA

In fire test 63329 sponsored by Schott Glass Ltd, 2 panes of 6mm thick PYRAN® glass 1400mm wide by 2300mm high and 1200mm wide by 2300mm high achieved 126 minutes integrity. The frame consisted of Jansen mild steel rectangular hollow sections.

The PYRAN® was glazed with 20mm by 6mm (thick) PYROTAPE® compressed to 3mm thick around the perimeter of both faces of the glass.

It can be used to glaze fire resistant glasses, into approved steel fire resisting doors and screens.

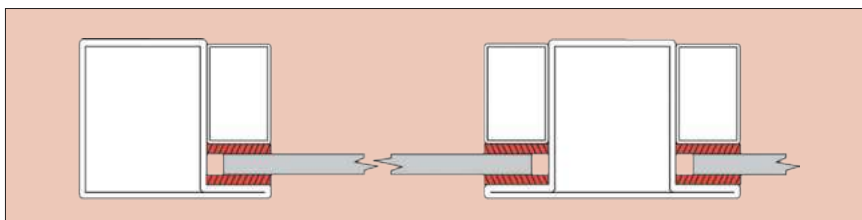
To establish the correct type/method of glazing please consult the glass or frame manufacturer.

PACKAGING

Supplied in:

- 10mm x 3mm x 15m roll
- 15mm x 3mm x 15m roll
- 20mm x 3mm x 15m roll
- 20mm x 5mm x 10m roll
- 20mm x 6mm x 10m roll

Other sizes are available on request.



Fire Resistant Glazing Systems



FIRESTRIP 30 12mm x 3mm

Intumescent strip sealant

DESCRIPTION

An Intumescent Strip Sealant 12mm x 3mm which can provide 30 minute resistance to the passage of fire and smoke when used to glaze a wide variety of glass types into internal doors and softwood or hardwood timber screens. It is non-toxic, can be overcoated with paints and decorative wood stains and is available in 15 metre reels, Mahogany and Off White.

DESIGN INFORMATION - C82960

The glazing material shall be Firestrip 30, 12mm wide x 3mm thick between glass and the beads. Hardwood or non-combustible material setting blocks shall be used to achieve the required edge cover.

Screens:

Screens should be designed using softwood (plus Ash and Iroko) with a minimum density of 560kg/m³ and with a minimum cross section of 80mm x 45mm or hardwood (except Ash and Iroko) with a minimum density of 650kg/m³ and with a minimum cross section of 65mm x 45mm.

Beads:

Choose any type of hardwood that has a minimum density of 620kg/m³. The beads shall be a minimum 21mm x 13mm (slightly larger for Ash or Iroko) and 25mm x 25mm when used with Pyroset. The beads shall be chamfered by 10° when used with non-insulating glasses and square or chamfered by 10° for insulating glasses. Beads shall be fixed with 1.5mm diameter x 32mm long pins or 32mm screws, skew fixed at 45° placed at a maximum of 50mm from each corner and at a maximum of 150mm centers.

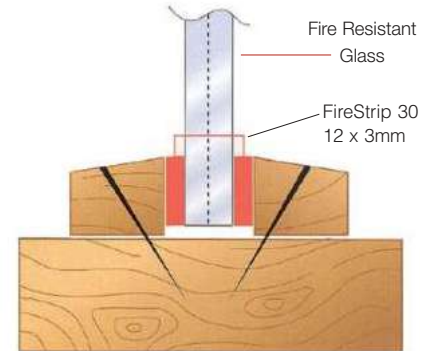
DESIGN INFORMATION

The glazing material shall be Firestrip 30, 12mm wide x 3mm thick between glass and the beads. Hardwood or non-combustible material setting blocks shall be used to achieve the required edge cover.

The glazing beads shall be of Sapele, or equivalent or higher density (610 kg/m³), sections, 22mm wide by 21mm high, chamfered by approximately 13° and fixed using 1.5mm diameter, 50mm long steel pins at a maximum of 100mm centers and angled to pass under the face of the glass.

Firestrip 30 is suitable for installation directly into a solid (high-density) flax board or laminated timber door leaf core. When joinery type door leaves are used, the timber for the rails and stiles shall have a density of at least 400 Kg/m³.

There are a number of alternative framing systems available, which are also suitable for use with Firestrip 30, which may not have specific test evidence. These framing systems are those listed in the CERTIFIRE Product Register as suitable for use with



The FG2 Glazing System
Note: minimum bead size 21mm x 13mm

intumescent based glazing systems and up to the maximum sizes listed for the specific system. When the framing system is determined as suitable using this method, and the system shows sizes smaller than allowable above, the aperture sizes specified in the framing system certificate shall take precedence.

TECHNICAL APPROVALS - Glasses which can be glazed with FIRESTRIP 30 into Timber Framed Screens – BS476: Part 22: 1987 WFRC C82960			
Non-Insulating Glasses MANUFACTURER	GLASS	MAX AREA (m ²)	MAX DIM (m)
CGI International	Pyroguard Clear and wired 7.2mm C730	2.0	2.4
Pilkington Glass	Pyroshield Clear & Texture 6mm	3.6	2.4
	Pyroshield Safety, Clear, Textured 6mm	3.6	2.4
	Pyrodur 10 mm	3.1	2.5
Schott Glass	Pyran S 6mm	3.6	2.45
Caradon Everest Techniglass	Pyroset 6mm	4.2	2.1
	Pyrobelite 7mm	2.9	2.2
Glaverbel	Pyroswiss 6mm	3.0	2.0
Vetrotech St Gobain	Fivestar 5mm	1.5	1.5
Insulating Glasses			
Pilkington Glass	Pyrostop 15mm	2.8	2.0
Glaverbel	Pyrobel 12mm	2.8	2.3
Vetrotech St Gobain	Contraflam 22mm	2.6	2.2

Glasses which can be glazed with FIRESTRIP 30 into Timber Doors – CERTIFIRE No. CF297			
GLASS	Maximum Pane Dimension (mm) aspect ratio other than 1:1	Maximum Pane dimension (mm) at aspect ratio of 1:1	Maximum Pane Area (m ²)
CGI International Pyroguard	875	758	0.57
Pyroshield Clear & Texture 6mm	875	758	0.57
Pyroshield Safety, Clear, Textured 6mm	875	758	0.57
Pyran S 6mm	875	758	0.57
Firelite	875	758	0.57
The aspect ratio of the glass may be unlimited within these pane dimensions			

Fire Resistant Glazing Systems



FIRESTRIP 60 20mm x 3mm

Intumescent strip sealant

DESCRIPTION

An Intumescent Strip Sealant 20mm x 3mm which can provide 60 minute resistance to the passage of fire when used to glaze fire rated glass type into internal doors and timber screens. It is non-toxic, can be overcoated with paints and decorative wood stains and is available in Mahogany and Off White.

TECHNICAL APPROVALS

Firestrip 60 conforms to the following standards:

- EN1634: Part 4:1998.
- EN1364-1: 1999.
- BWF - Certifire Fire Door and Door-set Scheme - Certificate No 297.
- Glass & Glazing Federation Glazing Manual Section 2.8 Fire Resistant Glazing, 13. Table of Tested Products and Materials. 9.1.2 Glazing Materials – Strips.
- FIRAS register of special-ist fire protection materials – manufacturers & suppliers.

PROPERTIES

Application Temperature range: +5oC to +30oC

Shelf Life: 12 months

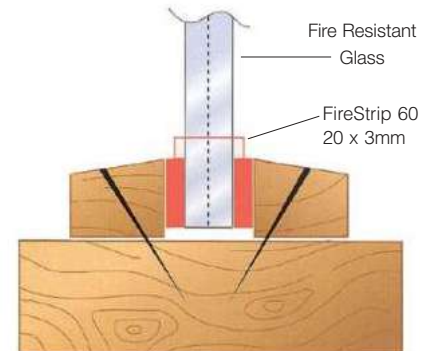
INSTRUCTIONS

Secure one set of glazing beads to act as a rebate if the opening is not already rebated. Pins or screws should be angled at 45o. Apply Firestrip 60 20mm x 3mm on the paper along the rebate upstand of the top rebate by running the edge of the backing paper along the rebate platform so that the strip comes up to the sightline. For larger rebates it may be necessary to lift the paper above the platform to ensure that the Firestrip 60 comes up to the sightline.

Repeat the application to the sides and then the bottom rebate. Remove backing paper. Butt the corner joints, do not overlap. Position setting blocks. Centralise glass in frame on setting blocks. Press firmly around the edge of the glass to ensure that contact with the surface of Firestrip 60 is achieved.

Apply Firestrip 60 to the glass in the same way as it was applied to the upstands by running the edge of the paper along the rebate platform or alternatively direct to the beads. Remove the backing paper.

Bed the beads to the Firestrip 60 by applying pressure to obtain good contact between the strip and the bead. Fix the beads with pins or screws in accordance with the design requirements of the installation. Pins or screws should be angled at 45o to pass beneath the glass. Trim off any Firestrip 60 above the sight line with a sharp knife



The FG2 Glazing System
Note: minimum bead size 21mm x 13mm

PACKAGING

Thickness: 3mm Width: 20mm
Colours available: Mahogany and Off White
Standard Packaging: 15 Metres
Per Reel: 7 Reels per Box.

TECHNICAL APPROVALS - Glasses which can be glazed with FIRESTRIP 60 into Timber Framed Screens – EN1634: Part 4:1998 CF297			
Non-Insulating Glasses MANUFACTURER	GLASS	MAX AREA (m ²)	MAX DIM (m)
Pilkington Glass	Pyrodur 10 mm	1.98	2.2
	Pyrostop 23mm	1.80	2.1
DESIGN INFORMATION – CF297			
Certifire Certificate CF297			

Glasses which can be glazed with FIRESTRIP 60 into Timber Doors - EN1364-1: 1999 CF297			
GLASS	Maximum Glass Height (mm)	Maximum Glass Width (mm)	Maximum Pane Area (m ²)
Pilkington Pyrodur 10mm	1950	867	1.56
Pilkington Pyrostop 23mm	2250	1000	1.80
The aspect ratio of the glass may be unlimited within these pane dimensions			
DESIGN INFORMATION - CF297			
Certifire Certificate CF297 When glazing fire doors for periods of 60 minutes Firestrip 60 must be used in conjunction with a 50x2mm liner			

Intumescent Letterplates



FRAMEMASTER® LETTERPLATES

1 hour intumescent letterplates

Letterplate conforms to the requirement of BS/EN13724:2002

180 degree opening on both sides means that flaps cannot be snapped easily when opening as the flap will be stopped by the face of the door or window profile

Internal water seal prevents water getting into the door or panel

water channels carry rain water away from the post and harmlessly down the sides of the letterplate

Fast Fixing

Brushes face the outside of the door for 3 very important reasons;

1. Makes for better draught proofing
2. It is easier for the postal service to post letters
3. It stops vandals placing unwanted items i.e. fireworks, dog litter in the letterplate cavity.

Galvanised steel frame means the brushes won't rust.

Blind bolts to the exterior prevents the outer frame being unscrewed from the door from the outside.

Scratch resistant surface means that attempts to deface the product using nails, or knives are virtually invisible

Ultra flexible springs means the letterplate will withstand thousands of openings without breaking

Only post gets through our letterplate

Burglars can't unscrew our letterplate

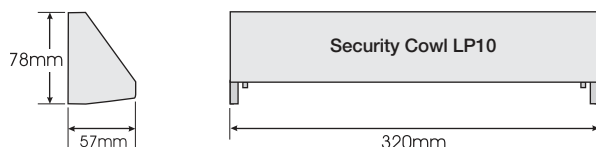
Scratches are hidden on our letterplate

Aperture Required

	Overall size	Postal Dimensions		Black Scratch Resistant Frame						
		Height	Length	Gold Flap	White Flap	Black Flap	Silver Flap	Chrome Flap	PVD Gold Flap	PVD Chrome Flap
40 - 80mm	300mm (12")	42mm	248mm	FMB1248G	FMB1248W	FMB1248B	FMB1248S	FMB1248C	FMB1248PVDG	FMB1248PVDC

SECURITY COWL

Obstructs view, prevents manipulation of locks and inhibits vandalism.



Smoke Seals



THERM-A-PLATE (INTUMESCENT LETTERBOX LINER)

A cost effective method of fire proofing letter apertures in doors

INTRODUCTION

It is increasingly common to find that entrance doors to flats and apartments in tower blocks and houses in multiple occupation, are fire resisting to 30 or 60 minutes rating. As these doors are effectively external doors, many have apertures cut in them to serve as letter boxes, but this unfortunately compromises the doorleaves integrity.

THERM-A-PLATE offers a simple solution to the problem by providing a lining kit for the cut aperture for both 30 and 60 minute constructions.

DESCRIPTION

A THERM-A-PLATE kit comprises of three pieces of THERM-A-FLEX graphite based intumescent material. This material is renowned for its longevity and resistance to degradation by atmospheric influences. The intumescent strips are pre-cut to the correct width for 45mm and 54mm thick doorleaves. The intumescent materials are backed with a high bond strength

self-adhesive tape for ease of installation. For small letter plate apertures up to 50mm high the thickness of the intumescent material is 4mm and for 85mm or 120mm apertures the thickness is 6mm. For the largest aperture 4no. steel pins, 30mm long and 1.5mm diameter are required to fix the top and bottom intumescent strips 50mm from the ends of the aperture and 10mm from the face of the door.

PERFORMANCE

The performance of the THERM-A-PLATE kits has been proven in fire tests carried out to BS476 Part 22 (1987).

Dr\Ap	50x250	85x250	120x300
45mm	67	-	39
54mm	-	70	66

TEST RESULTS

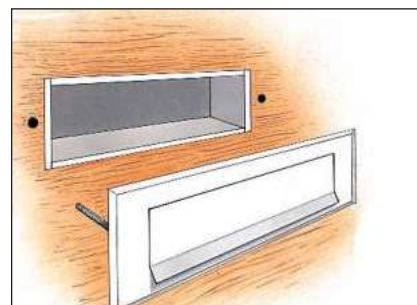
Test results (time to failure in minutes) are shown for 45mm and 54mm doors with different aperture sizes. Test reports DFR 9807141, DFR 9804271, DFR 9810292 and DFR 9809151 are available on request.

AVAILABILITY

THERM-A-PLATE intumescent letter plate kits are produced in five standard aperture sizes to suit both 30 and 60 minute fire doors.

Type	FD30	FD60
50x250	LPTA45	LPTA54
85x250	LPTC45	LPTB54
120x300	LPTC45	LPTC54

Other sizes are available on request.



INSTALLATION

The kit is supplied in pieces backed with self adhesive tape and these are bonded to the inside sides of the aperture.

The faces of the aperture must be clean, dry and dust free for optimum adhesion.

Kits may be trimmed to suit the aperture size as required. It is recommended that metal letter plates are used to comply with the recommendations in BS8214 (1990) and the largest aperture requires a metal tidy but does not have end pieces of intumescent.



Intumescent Fire Box



FIRE BOX

Intumescent metal fire box and flexible bag

DESCRIPTION

Burning paper and liquids put through mail apertures in doors and walls can have devastating consequences, especially if premises are occupied.

Nocturnal arson attacks on homes can be particularly worrying for domestic residents. The rigid firebox or flexible firebag protects mail slots, so homes and business can have the confidence that their premises are guarded against damaging and disruptive arson attacks.

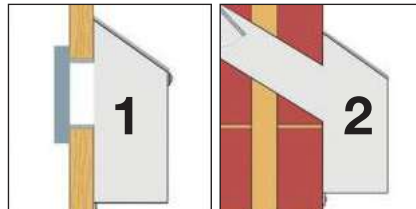
If petrol or other inflammable materials are placed into the box and then ignited, they are extinguished by the easily-renewed intumescent material.

These products are safe to use because they do not contain liquids or gases. The intumescent lining puts out the flames.

USE

The firebox/bag fits onto the back of the door (illustration 1) or wall (optional rigid spout for metal boxes shown in illustration 2).

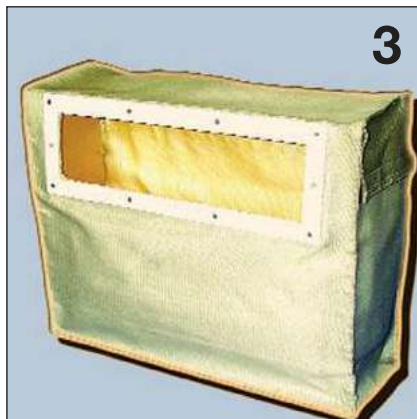
Fire is extinguished by the intumescent material, which can be easily renewed. Rigid metal fireboxes are supplied with a hinged lid and flush lock as standard, but a hinged front door is available as an optional extra.



Use the flexible firebag (illustration 3) in situations where doors open tightly onto walls, allowing full door opening.



Unprotected letterbox fire



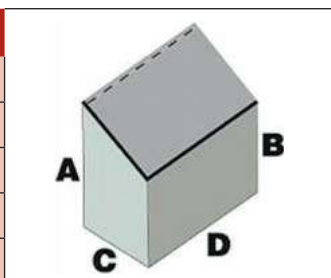
ORDERING REFERENCES

Spouts up to 300mm long can be fitted to pass through walls.

Flush locks are included in the price. Supplied in three standard colours: black, brown, and white (other colours available at extra cost).

Please note that fire boxes with a front door can be made to special order at extra cost.

REF:	A	B	C	D
FB1	360	300	170	375mm
FB2	360	300	90	375mm
FB3	360	300	200	400mm
FB4	675	600	300	600mm
FLEX1	335	335	130	420mm



Intumescent Door Viewers



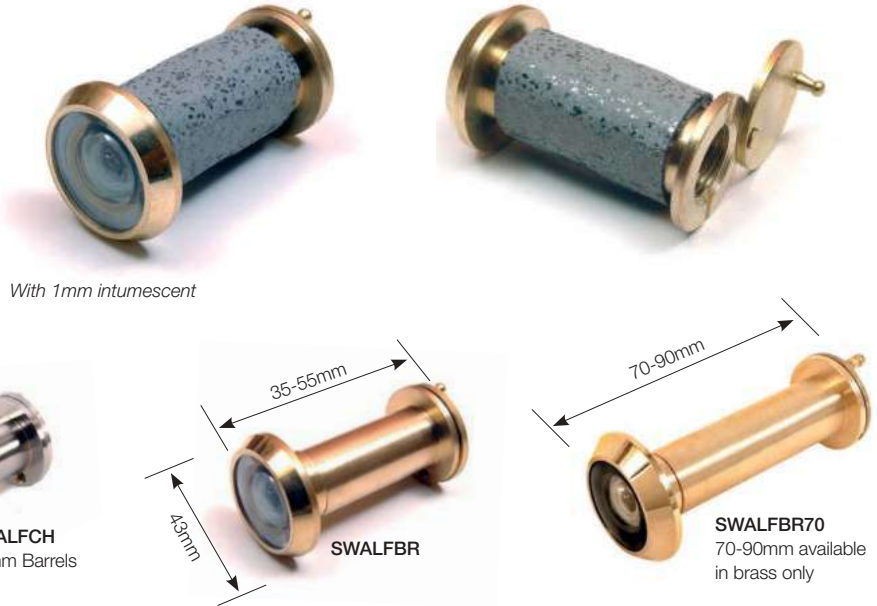
180 DEGREE VIEWERS

1 hour fire check door viewers

DESCRIPTION

We offer 2 types of 1-hour fire check door viewers. We offer an all metal bodied 180 degree viewer with a 14mm barrel for standard door applications. For areas where the occupants are vulnerable, such as the partially sighted or the elderly, we also offer our secure to view models.

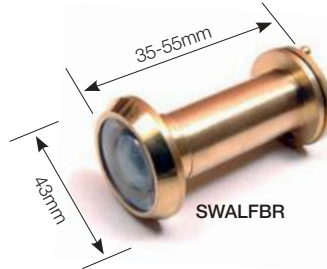
Both of these products come complete with a 1mm intumescent pre cut to size. 1-hour fire check products come with copy fire test certificates on every delivery to give you complete peace of mind. Conforms to DHF TS O2



With 1mm intumescent



SWALFCH
14mm Barrels



SWALFBR



SWALFBR70
70-90mm available
in brass only

SECURE TO VIEW

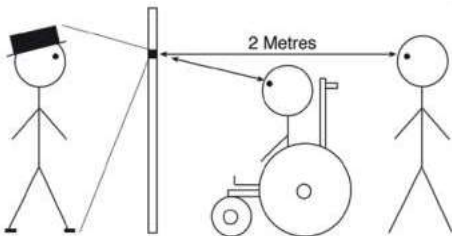
See clearly who is at the door from 2 metres away

ESPECIALLY SUITABLE FOR

- The elderly
- The partially sighted
- The vulnerable
- The disabled



Secured by Design



STVS
38mm Barrels



STVSG



STVSC



STVG

Intumescent Air Transfer Grilles



THERM-A-GRILLE

Up to 60 minutes fire resistance

INTRODUCTION

There is often a requirement for a ventilation aperture to be cut into a fire resisting compartment wall or door. This penetration breaches the integrity of the element so it is necessary to fit a suitable fire resistant ventilator unit.

Therm-A-Grille offers a specially designed solution to the problem by providing a light weight intumescent ventilator core with excellent airflow characteristics and rapid activation in the event of a fire.

DESCRIPTION

Therm-A-Grille consists of two sheets of steel mesh that have been coated with a graphite based intumescent material. The coating thickness has been optimized to ensure rapid activation whilst maintaining a high free area and good air flow rate.

The sheets are folded to form a box section which gives the assembly high strength and rigidity, provides a flange for fixing and also carries an intumescent edge seal. There is very little heat transfer between the two grille plates to ensure good insulation.

Therm-A-Grilles are 38mm thick for fitting to any 30 minute or 60 minute fire door.

PERFORMANCE

The fire performance of Therm-A-Grille has been proved in tests carried out to BS 476 Part 22 1987 where a grille measuring 570 x 570mm obtained an integrity and insulation rating of 66 minutes when mounted in a fire door panel. The free area of the grille is over 50% so the 600 x 600mm size vent has an effective ventilation aperture of 185,000mm².

AVAILABILITY

Therm-A-Grille is available in stock sizes ranging from 100 x 100mm up to 600 x 600mm, in 50mm steps, in any combination of width and height. It can also be produced to special order in any intermediate size.

INSTALLATION

Therm-A-Grille is fitted as supplied into any vertical aperture and does not require any additional mastic sealant



Therm-A-Grille

to its perimeter. Fixing should be by 2" No. 8 steel screws at 150mm centres through the mesh forming the flange.

The grille should be fitted centrally within the thickness of the fire resisting element. For stud and plaster walls or any element where a void is present a steel sleeve should be provided to line the full depth of the aperture. Facia or louvre plates may be fitted to the substrate surface.



AIR TRANSFER GRILLE (COVER PLATE)

FEATURES

Door or wall mounted, Standard or Fireblock air transfer application. Quality 20swg mild steel construction, Wide 43mm flange border.

INTRODUCTION

Firewise presents a range of Mild Steel Louvered Grilles designed to satisfy all types of air transfer application in offices, shops, schools, hospitals and many other commercial projects. Manufactured using modern press machinery and production techniques the Grille is robustly fabricated from 20swg mild steel and comprises of

horizontal louvres set on an 8.5mm pitch with a 30° downward deflection using self tapping screws provided. Suitable for surface mounting in both door and wall applications, the steel construction ensures that the unit is satisfactory for both standard air transfer and fire rated applications where intumescent type fire dampers are utilised.

The wide flange border provides adequate clearance for fixing to the surrounding structure using self tapping screws provided. Slimline and unobtrusive the unit offers



a free area around 75% for economical selection and is readily available in a wide variety of normal sizes. Standard finish is a Stove Enamel Satin Silver or White.

ORDERING SPECIFICATION

Quantity, size (width x height mm), finish.

Intumescent Air Transfer Grilles



SLOTGRILLE

Up to 60 minutes fire resistance

INTRODUCTION

Ventilation and air conditioning ducts that penetrate fire separating elements need to have their integrity maintained. This also applies to fire resisting doors that require the passage of free air through them, such as doors to boiler rooms.

Slotgrille air transfer grilles can provide up to 60 minutes integrity and insulation in accordance with BS 476 Part 22 1987, but still allow 60% free air flow in normal use.

DESCRIPTION

Slotgrilles are manufactured from horizontal slats of high performance intumescent spaced 16mm apart. 38mm thick units provide up to 60 minutes fire resistance.



Circular Slotgrilles are available in standard sizes of 100mm, 125mm, 150mm and 200mm.



Circular Slotgrille

INSTALLATION

Fire resisting doors and partitions

Slotgrille units can be fixed into fire resisting doors or timber stud partitions using a hardwood or steel flange. Alternatively wood screws can be used through the perimeter of the units.

Gaps around the Slotgrille unit greater than 3mm should be fire sealed using an intumescent sealant.



Slotgrille

Ventilation Ducts

Slotgrille dampers must be secured within the ducting using 4 self tapping screws. On circular Slotgrille the screws should pass through the aluminium rings on the outer part of the Slotgrille. Clearance gaps should be sealed using an intumescent sealant

FINISHES

Standard colour white.

Non standard colours red and bronze.

MAINTENANCE

Since there are no moving parts to go wrong, Slotgrilles are easily maintained. Units should be cleaned using a damp cloth.

Grease can be removed by using neat liquid detergent or methylated spirit. Strong degreasing agents should not be used nor should the units be immersed or saturated with water.

ORDERING

Slotgrilles can be ordered by contacting our sales department.

When ordering please state, fire resistance required, width, height and colour.

PERFORMANCE TESTING

Slotgrille	Integrity (mins)	Insulation (mins)
Warrington C67719/A/C	36	36
Warrington C67719/A/E	46	46
Warrington C67719/A/P1	66	66
Warrington C67719/A/P2	66	66
Warrington 103908	90	75
Warrington C106643	V*	V*
TNO 08.20.6.7198/539	66	66
TRADA IT284/E1	31	31
TRADA IT285/C1	66	66

* V = Various

COVER PLATES



Optional cover grilles for walls, doors and ends of ducts pressed steel and aluminium options available.

Intumescent Seals



THERM-A-HINGE / THERM-A-LOCK

A cost effective method of protecting fire door locks and hinges

INTRODUCTION

It has been proved conclusively that the ironmongery fitted to fire doorsets with ratings over FD30 introduces a great weakness to the door's overall performance unless some additional protection is applied over and above that afforded by the normal door edge intumescent strip.

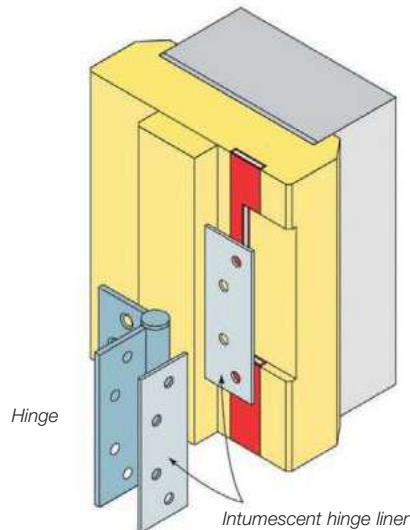
Time and time again, doorsets fail fire performance tests. This is due to premature burn through by the upper and mid-height hinge positions, and whilst this has been recognized officially in BS8214 (1990), there has been no specific guidance offered to specifiers and installers as to what type of intumescent materials to employ.

Pastes and mastics are messy and it is difficult to control the rate of application, plugs are time consuming to fit and the normal 15 or 20 x 4mm seals do not have the extra volume of material required for satisfactory performance.

THERM-A-HINGE & THERM-A-LOCK, offers a tailored solution to the problem of providing a pre-sized backing pad of intumescent material fitting behind the hinge blade and around the lock set.

DESCRIPTION

THERM-A-HINGE & THERM-A-LOCK pads are produced from an exclusive LP material developed as a low pressure intumescent to withstand a full range of environmental conditions and flexible in nature for ease of installation. The material can be manufactured either 1mm or 2mm thick and can be supplied in lengths or pre-cut to match any hinge or lock.



INSTALLATION

THERM-A-HINGE pads should be under hinges on all fire doorsets with a rating of over 30 minutes, the rebate in door edge and frame should be cut 1 or 2mm deeper than normal, to enable the pad to be placed under the hinge blade, with the hinge then ending flush with the timber.

The THERM-A-HINGE pads are fitted under both blades of the hinge and are simply trapped between hinge and timber, fixing screws can simply be driven through the intumescent material. NO adhesives or sealants are required.

THERM-A-LOCK should wrap around the lock assembly like a 'jacket' before inserting into the door leaf. The self adhesive backing and pre-cut sets enable a quick & easy process of installation. No other adhesives or sealants are required.

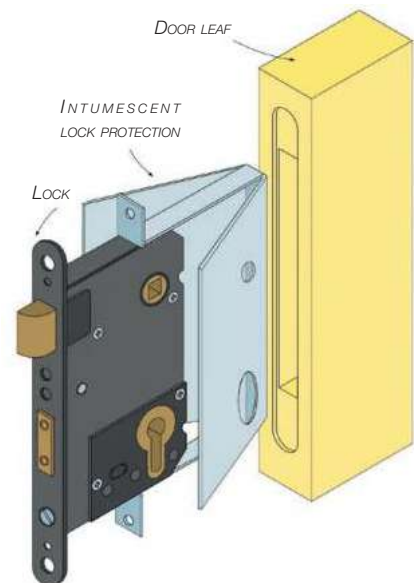
PERFORMANCE

The fire performance of THERM-A-HINGE backing pads has been proven many times in full-scale BS476 part 22 (1987) fire tests on doorsets of 60 minutes construction. Test reports are available on request.

LOCK & LATCH PROTECTION

These provide fire resistance of 30 minutes or 60 minutes when fitted to full size door assemblies and tested in accordance with BS 476 Pt. 22.

We can supply intumescent sleeves to fit all regular UK lock case sizes of 63mm, 75mm and 100mm deep with a common height of 108mm and 56mm centres, generally manufactured to the dimensions given in BS 5872: 1980 figure 4. Other sizes can be provided: please refer to our Technical Department.



AVAILABILITY

THERM-A-HINGE backing pads are stocked in the following sizes;

30mm x 100mm
32mm x 100mm
36mm x 100mm
48mm x 100mm

Supplied 1mm and 2mm thick self adhesive.

THERM-A-LOCK pads are stocked in the following sizes;

130mm x 2100mm
165mm x 85mm x 16mm

Supplied 1mm thick self adhesive.

Intumescent Seals



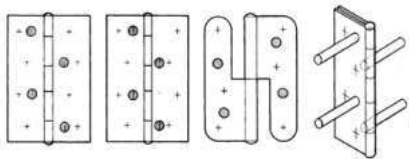
SEALMASTER INTUMESCENT PLUGS

For additional protection at hinges, striker plates and pivot mechanism of doors

HINGES

Two 7mm diameter plain holes are drilled through each plate in addition to the existing screw holes. These holes are offset in order that the plates are not weakened. After fitting the hinges, 6mm diameter x 40mm deep holes are drilled, through the plain holes, into the wood and plugs are inserted flush with the hinge plates

The layout of the countersunk holes for fixing screws in 100mm butt hinges varies according to the manufacturer. Three of the most common are shown here, together with suggested positions for Sealmaster Intumescent Plugs.

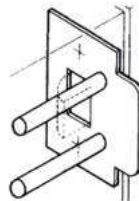


Screw fixing holes + Sealmaster Intumescent Plugs

Where plugs have to be fitted to longer butt hinges this must be at the rate of two extra plugs per 50mm of additional length of hinge.

LOCK/LATCH STRIKER PLATE

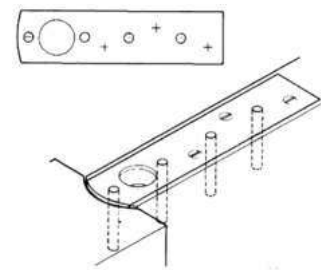
Two 7mm diameter plain holes are drilled in the plate, so as not to weaken it, or affect its normal operation. The plugs are fitted into the wood in the same manner as for hinges. Gaps around mortised areas should be filled with Intumescent Compound or Plaster to reduce fire spread.



Lock/Latch Striker Plate

PIVOT MECHANISM

Intumescent sealing around pivot doors can be completed by incorporating Sealmaster Intumescent Plugs in the top strap assembly. The positioning of the plugs is determined by the shape of the strap and the layout of the screw fixing holes, as these can vary according to make.



Pivot Mechanism

FIRE & SMOKE VENTILATORS

INTRODUCTION

Fire door ventilators permit a free flow of air up to 160m³/hour, and can be fitted within 30 and 60 minute fire doors and walls, whilst maintaining the integrity of the fire compartment. Two models are available, offering a choice of fire or fire and smoke protection and both are easily installed with minimal restrictions on siting.

DESCRIPTION

Both ventilators are manufactured from galvanized steel sheets, with louvre plates on each face. Standard finish is satin aluminium, with coloured finishes to special order.

APPLICATION

Ventilators can be used in new or existing fire doors and can be mounted in a high or low position. An opening of 260mm x 135mm is required and

once the ventilator is in position any gaps should be sealed with Intumescent Compound. Ventilators can also be fitted into walls using special extender units.

OPERATION

The intumescent seal in both units is activated by the high temperatures experienced in a fire. In model VH60/FS a cold smoke shutter which is powered by the fire alarm circuit is triggered on activation of the fire or smoke alarm system. A warning light indicates when the shutter is closed and the power is reinstated.

OPTIONAL MODELS

Model VH60/F provides 60 minute protection against fire and is maintenance-free once fitted. It is ideal where fire, rather than cold smoke is



perceived to be the predominant risk. Where there is a risk of cold smoke, the model VH60/FS, which incorporates a magnetically-operated cold smoke shutter, should be specified.

AUTHORITY

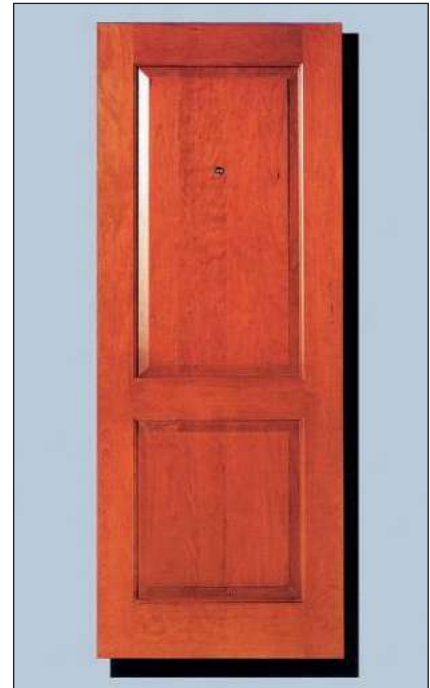
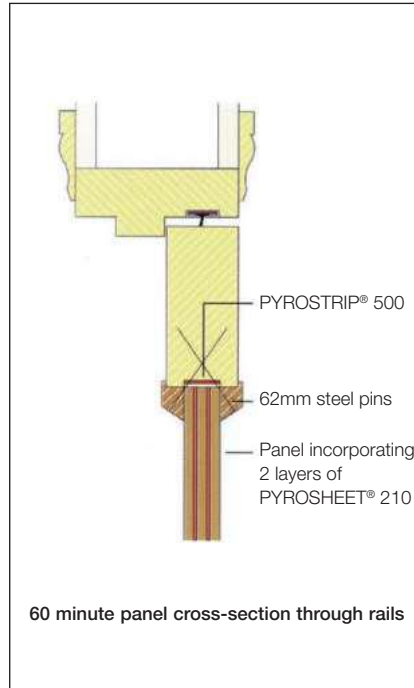
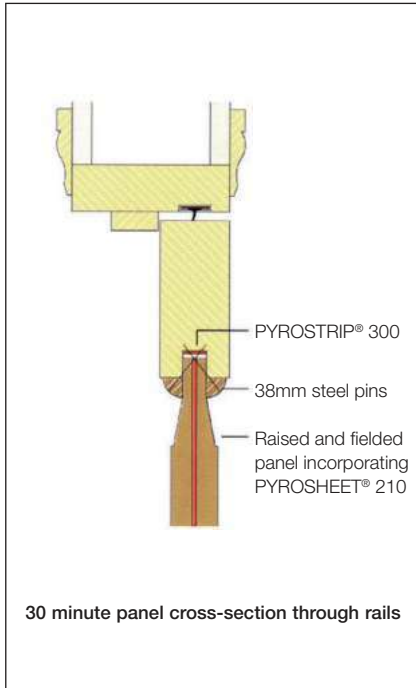
Both models have been tested in 60 minute fire doors by TRADA, the VH60/FS model is also subject to an assessment by international Fire Consultants (IFC).

Door Protection



PYROSTRIP® 210 UPGRADING PANELLED DOORS

Intumescent fire resistant door panels



PYROSTRIP 210

PYROSTRIP® 210 Intumescent fire resistant door panels enables traditional panelled doors to provide 30 and 60 minute fire resistance. PYROSTRIP® 210 intumescent sheets are sandwiched between hardwood, plywood or MDF to provide composite panels suitable for door manufacture and upgrading of existing doors.

PYROSTRIP® 210 enables traditional panelled doors to provide 30 and 60 minute fire resistance. Pyrostrip® 210 intumescent sheets are sandwiched between hardwood, plywood or MDF to provide composite panels suitable for door manufacture and upgrading of existing doors.

PYROSTRIP® 210 is equally suitable for upgrading existing or manufacturing new fire resisting doors. It is rigid and easily cut and is thus much faster and cleaner to work than soft fibrous materials.

PYROSTRIP® 210 is based on an intumescent core of hydrated sodium silicate which expands when heated. Composite sheets are chamfered at the edges and rebated into stiles, muntins and rails. The depth of the rebate should allow for movement of the panel but the gap may present a weakness in a fire.

This is dealt with by incorporating the appropriate intumescent fire seal in the base of the groove. For 30 minute resistance PYROSTRIP® 300 10mm x 2mm is required and for 60 minute resistance PYROSTRIP® 500 20mm x 2mm.

The interaction of the components of panelled doors is critical to the doors' performance. Specifiers and users should ensure good quality workmanship.

PYROSTRIP® 210 intumescent sheet has been tested and assessed to BS 476, Part 22 as well as DIN 4102. PYROSTRIP® 210 panels have also been successfully tested by a number of door manufacturers.

Fire Test Reference	Standard	Resistance
CHILTERN INT FIRE IF 97036A	BS 476 Part 22	30 minutes
CHILTERN INT FIRE FEA 98061	BS 476 Part 22	30 minutes
CHILTERN INT FIRE IF 97036B	BS 476 Part 22	53 minutes
Chiltern Int Fire IF FEA	BS 476 Part 22	60 minutes
SGS FT/10386.1/RP/93	BS 476 Part 22	56 minutes
TRADA/LWF	BS 476 Part 22	34 minutes
Mann McGowan 30.1 66a	BS 476 Part 22	28 minutes

Pyrostrip 210 intumescent sheet has been tested and assessed to BS 476, Part 22 as well as to DIN 4102. Pyrostrip 210 panels have also been successfully tested by a number of door manufacturers.

Door Protection



PYROSTRIP CONCEALED INTUMESCENT FIRE SEALS

Fire & smoke seals for door assemblies

INTRODUCTION

Using Pyrostrip 100EC or 500 range of high performance intumescent seals, it is possible for fire door manufacturers to produce doors, with the intumescent concealed into the door lipping. This allows Architects the opportunity to specify high quality fire resisting doors, without exposed seals conflicting with the decorative finish.

DESCRIPTION

PYROSTRIP 100EC or 500 intumescent seals are nominally 2mm thick and are produced to the necessary width to suit the required fire performance. PYROSTRIP 100 EC is white in colour, and PYROSTRIP 500 is charcoal grey.

APPLICATIONS

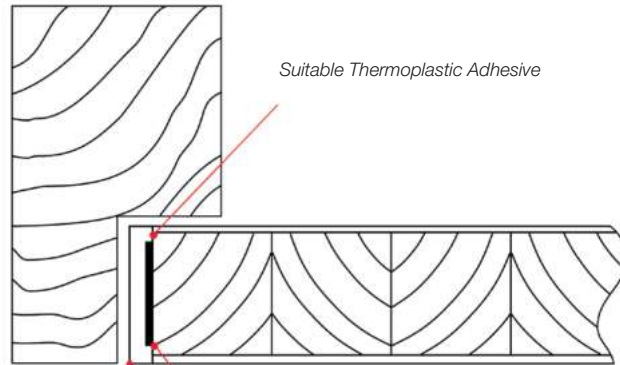
PYROSTRIP 100EC and 500 can be inserted into the back of timber lippings on the hanging and swinging stiles of fire resisting doors. The lipping should be grooved slightly bigger than the seal to allow for shrinkage of the timber.

ACTION

In a fire situation, the adhesive bonding of the lipping softens. As the temperature of the intumescent reaches approximately 100°C it begins to expand pushing off the lipping, wedging it against the door frame. This seals the gap and prevents the passage of smoke, hot gases and flames.

STORAGE

PYROSTRIP 100EC and 500 should be stored flat in dry conditions. The products should be handled with care.



Timber Lipping 6 - 8mm thick

PYROSTRIP 100 EC or 500
FD 30 = 30mm X 2mm
FD 60 = 40mm X 2mm

CONSTRUCTION

It is recommended that the width of the PYROSTRIP should be set between 7 to 10mm in from either face of the door leaf. The timber lipping should be between 6 to 8mm. For FD30 doors, it is possible to have PYROSTRIP concealed along the vertical edges and across the head of the door.

For FD60 doors, PYROSTRIP can be concealed along the vertical edges, but the head of the door/frame must have an exposed PVC encapsulated version. As a general rule the width of PYROSTRIP should be as follows: FD30 30mm x 2mm FD60 40mm x 2mm

The above is based on experience of successful fire tests conducted by numerous fire door manufacturers.

Suitable adhesives must used for bonding the lippings. They should exhibit a thermoplastic nature under fire conditions, such as, 2 pack polyurethane, hot melt adhesives or a suitably modified pva adhesive.

Suitably tested hinges must be used within the construction, to minimise the restriction of expansion of the PYROSTRIP in these areas.

PERFORMANCE

PYROSTRIP 100EC and 500 has been successfully fire tested to BS476 parts 8 and 22, NEN 6069, by various door manufacturers. A brief summary of some of the tests are as follows:

TESTS			
IT 198B	PYROSTRIP 500	30mm x 2mm	39 minutes
W 39230	PYROSTRIP 100EC	30mm x 2mm	39 minutes
FR 743/1	PYROSTRIP 100EC	30mm x 2mm	64 minutes
FR 650	PYROSTRIP 100EC	32mm x 2mm	40 minutes
FR 657	PYROSTRIP 100EC	32mm x 2mm	43 minutes
FR 643	PYROSTRIP 100EC	25mm x 2mm	35 minutes
FR 784	PYROSTRIP 100EC	38mm x 2mm	64 minutes

Door Protection



SEALMASTER FIREFACE

Upgrading doors - "The first non-intrusive, undetectable and fully reversible solution"

INTRODUCTION

Fire spreads more rapidly through period and historical buildings than most others. The widespread use of timber flooring, panelling or laths and other combustible materials such as horse hair and straw explains part of the reason why. The ability of period doors to slow the spread of fire can make a critical difference.

Traditionally, door panels were constructed of wide sheets of solid timber between 6mm and 15mm thick. Often the panels were jointed and those which were glued typically used an animal glue (which loosens under heat). These doors tend to fissure in the first few minutes of a fire allowing it to break through.

Upgrading doors' fire resistance to 30 minutes gives vital extra time for people to escape the building and for the emergency services to arrive. It also reduces the potential for damage by fire, smoke (and water). The challenge has been how to achieve this without replacing doorsets or 'fletching' (splitting door leaves sectionally, sandwiching incombustible boards within and reassembling them - a costly and highly intrusive method). Sealmaster's new FireFace membranes offer the first non-intrusive, undetectable and fully reversible solution.

FireFace membranes were developed by Sealmaster for English Heritage following a review of fire safety in the wake of the Windsor Castle blaze.

OBJECTIVE OPINION

Today, FireFace is specified by English Heritage, Heritage Scotland and other leading authorities. It has been featured in a RIBA Journal article and described by House & Garden magazine as a 'Brilliant British Brainwave'.

In 1999, the Design Council selected FireFace membranes as Millennium Products and exhibited them on the Spiral of Innovation during 2000 in

London. FireFace was chosen by the Conran Design Group as one of the UK's top 120 products and exhibited by the British Council on a year long tour of foreign capitals. FireFace has also been covered in other publications such as the Design Council's book Here's to the best of British and the Sharing Innovation Network's online databank.

No other product even comes close.

EVALUATING DOORS

The extent to which a period door requires additional protection to achieve a 30 minute fire rating depends on a number of factors, such as the components' dimensions, the density and 'char rate' of the timber. Some may require little or no surface protection whereas others may not be suitable to upgrade because the panels are too thin (eg less than 6mm in some softwoods) or the rails etc. may be too small to prevent failure through distortion and warping under heat.

Since fire follows the path of least resistance, other weak points should also be protected - particularly the frame to leaf gaps, glued joints, ironmongery and glazed apertures. Care should also be taken to ensure that any voids around the doorset are adequately protected. For example, between the door frame and adjoining masonry, below or between floorboards etc. Sealmaster has developed a comprehensive range of products for these applications, designed with fire safety, conservation, economic and aesthetic priorities equally in mind.



(Above) The Spiral of Innovation, featuring FireFace among some of the 1,012 Millennium Products selected by the Design Council.

(Above) FireFace being applied to paneled doors in Kenwood House, Hampstead, London.

Door Protection



SEALMASTER FIREFACE

Upgrading doors - "The first non-intrusive, undetectable and fully reversible solution"

WHAT IS FIREFACE?

FireFace is a thin membrane which is adhered to both sides of thinner or jointed timber door panels and to timber wall panelling to provide up to 30 minutes' fire resistance. FireFace can later be removed without damaging the fabric of the timberwork.

Both types of FireFace membrane contain a thin layer of reinforced intumescent material, developed by Sealmaster for this application.

During a fire, the intumescent compound swells and chars, insulating the surface of the timber beneath and retarding the effects of heat on the door's integrity. Between the intumescent layer and the timberwork, a specialised woven layer ensures that even if the panel fissures under intense heat, the risk of 'flaming' is avoided. (Flaming takes place when hot gases escape through a panel and combust on the unexposed face.)

FIREFACE OPTIONS

FireFace is available in 2 types. FireFace Plus is the thinnest at a mere 1.8mm and offers a woodgrain surface which can be decorated, stained or veneered for a seamless match with surrounding timberwork. FireFace Standard offers a flat felt finish and is suitable for areas where aesthetic considerations are not such a high priority.

PERFORMANCE

Sealmaster FireFace membranes conform to the strict conventions of the ICOMOS Vienna and Burra Charters. They have passed exhaustive tests carried out in accordance with BS 476 on new and old panelled doors. FireFace has proven a reliable solution when applied to painted surfaces and to softwood panels as thin as 6mm including those with a central unglued joint.

FITTING FIREFACE

FireFace is easily applied without damaging the fabric of the door. It can be fixed beneath or between beads and mouldings. A solvent based contact adhesive is available.

Small gaps and joins are made good with Sealmaster Masterseal - a gun-applied intumescent compound which can be sanded and decorated.

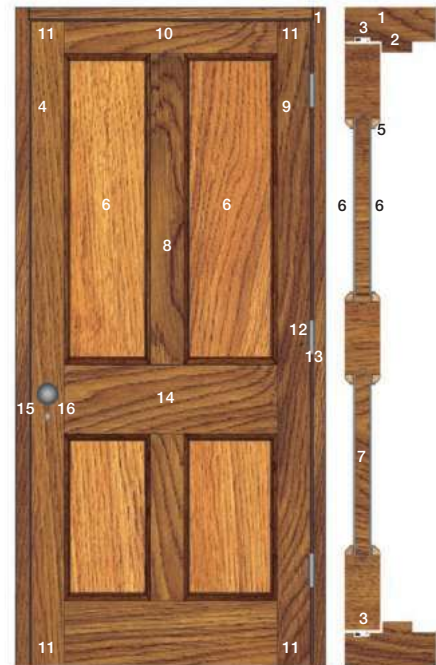
Both types of FireFace can be decorated with emulsion or oil-based paints to match in. FireFace Plus can also be stained or veneered.

LEADING SPECIFIERS CHOICE

FireFace membranes protect many of the most important ancient and historical buildings in the UK and elsewhere. Amongst those we are at liberty to mention are:

Stormont Castle. Hampton Court Palace. Somerset House. Trinity College, Cambridge. Tower of London. Kenwood House.

FireFace Specification		
	FireFace Standard	FireFace Plus
Fire rating (minutes)	30	30
Non-Invasive & reversible	Yes	Yes
Overall thickness (mm)	2.0	1.8
Surface texture	flat felt	woodgrain
Suitable for painting	Yes	Yes
Suitable for staining	No	Yes
Suitable for veneering	No	Yes
Tear-resistant reinforcement	Yes	Yes
Fixed between or below beads	Yes	Yes



Key

1. Door frame
2. Door stop
3. Intumescent fire & smoke seal
4. Closing stile
5. Moulding
6. FireFace intumescent membrane
7. Door panel
8. Muntin
9. Hanging stile
10. Top rail
11. Hidden screw reinforcement
12. Hinge
13. Intumescent hinge protection
14. Middle rail
15. Intumescent latch protection
16. Intumescent lock protection
17. Bottom rail



FireFace on raised / fielded panels



FireFace on flat panels

Door Protection



FIRE RATED DOOR EDGE GUARDS

Outstanding wear and damage protection

PROVEN FIRE PERFORMANCE

Fitted with intumescent fire and smoke seals which are vandal-resistant yet easy to replace, these profiles are ideal for maintaining fire integrity and can be used on the front and back edges of fire resisting doorsets.

STYLISH & DURABLE

PVC-u option features a PVC-u sheath on a timber substrate for outstanding performance and aesthetics, these elegant profiles can withstand a mechanical sharp edge impact of 60kg at 5 m/sec.

VERSATILE IN USE

Rounded profiles are intended for meeting stiles on double doors and back edges of double swing pivot doors. Square profiles are designed for single doors or on double doors where there is the need to cut around locks and hinges.

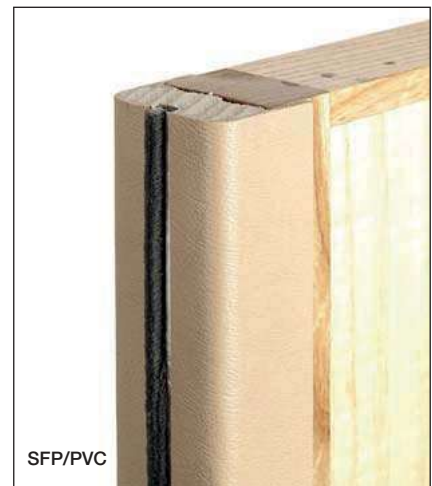
BENEFITS

- Fire tested to BS476: Part 20 & 22 for 30 & 60 minutes
- PVC-u option tested to withstand mechanical sharp edge of 60kg at 5 m/sec
- Reduces maintenance costs
- Differentiates door edge for DDA compliance
- A viable long-term solution to combat high and medium impact stress

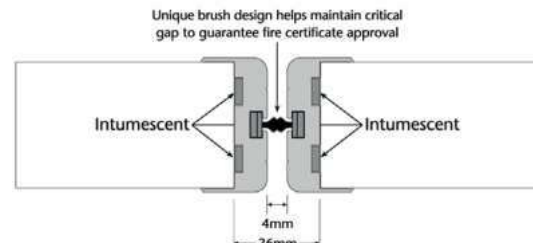
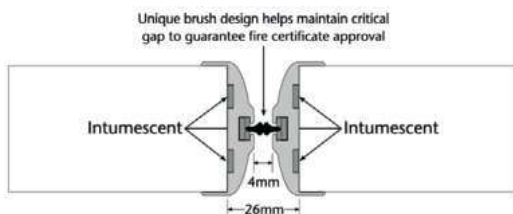
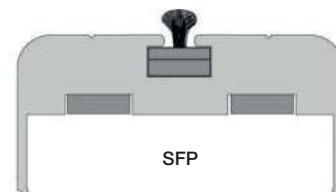
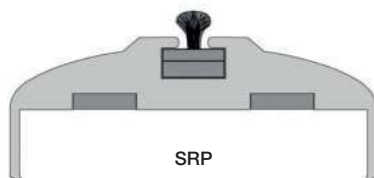
COLOURS & FINISHES

Standard finish is Satin Anodised Aluminium (SAA), other anodised finishes or colour coating available. Profiles can be supplied with either neoprene blade or blank intumescent as opposed to brush seal if preferred.

PVC-u option available in a choice of smooth or textured finishes in a wide range of colours.



Order Code	Description	Length (mm)	Width (mm)
SRPA44	Rounded Protector Profile	2100	44
SRPA55	Rounded Protector Profile	2100	55
SFPB44	Flat Protector Profile	2100	44
SFPB55	Flat Protector Profile	2100	55



Door Protection



NON-FIRE RATED DOOR EDGE GUARDS

Security and protection for non-fire rated doorsets



ECONOMY FOR NON-FIRE

For general use on all standard non-fire doors these plain, square profile edge guards help to keep costs down. Protecting both the front and back door edges, they also accommodate cut outs for locks and other door fittings.

IMPROVED SECURITY

Designed to prevent intruder access for improved security these square profile security door edge guards incorporate a specially designed security astragal, which closes over the meeting stile to protect both the door and frame from attack by jemmying.

BENEFITS

- Reduces maintenance costs
- Absorbs direct impact
- Available in aluminium and PVC-u
- Security against intruder access

COLOURS & FINISHES

Standard finish is Satin Anodised Aluminium (SAA). Other anodised finishes or colour coating available.



The profile protects the front and back edges of the door

Order Code	Description	Length (mm)	Width (mm)
SPPC44	Plain Non-Fire rated Protectors	2100	44
SPPC55	Plain Non-Fire rated Protectors	2100	55

Door Safety



FINGERSAFE DOOR SAFETY SYSTEMS

A unique, patented, inconspicuous and easy to install protection system designed to prevent fingers being trapped in opening and closing doors.

INTRODUCTION

With some 30,000 reported incidents of amputated, mutilated or damaged fingers per year, Fingersafe is designed specifically to prevent fingers being damaged in opening and closing doors. Besides the cost in trauma, treatment and disability, the owner or manager of a facility could be held responsible and incur litigation or claim for personal injury. Having identified the need in the market, Fingersafe was invented by the company in 1990 and a patent granted in 1992. Fingersafe is established nationally and internationally as a world leader in door safety.

APPLICATIONS

Fingersafe is suitable for use in all butt-hung doors, including fire doors, where door closers are used and where there are high levels of use. Specific buildings using Fingersafe are schools and other educational facilities, childcare and healthcare centres and it is also suitable for the elderly and infirm. It is commercially specified for restaurants, supermarkets, fast food outlets, government buildings, public houses and bars.

AUTHORITY

Fingersafe is the subject of Agrément Cert. No.ADS022/02, Underwriters Laboratories Ltd (UL) Classification UL25KL and is also the subject of the following patents: European patent No. 0611410, USA patent No. 5,419,084, UK patent No. 2275291, Australia patent No. 9123114, South Africa patent No. 932123. The company is a member of RoSPA and is ISO 9000 approved.

DESCRIPTION

Fingersafe offers no resistance or restriction to the door operation and allows 180 degree opening. It offers draught exclusion and is a smoke inhibitor. It is available as two full height strips for use on each side of a butt hinged door.

MK1A is a flexible, concertina fitting, positioned on the inward side of the door and fixed to the door frame and the inside hinged edge of the door itself. When the door is closed the fitting is compressed, but when the door is opened the fitting extends and provides a protective covering over the hinge space. MK1A units are installed via a fixing strip which allows easy access to the hinge for maintenance.

MK1B is a flexible, curved fitting, positioned on the outward side of the door and fixed to the door frame and the outside edge of the door. When the door is closed the fitting forms a closed seal over the hinge. When the door is opened this fitting compresses and provides a stiffened protective covering to the hinge and the space between door and frame. MK1B units have a built-in fixing strip.

MK1C units use the standard Fingersafe module together with this NEW fixing strip, allowing it to fit bi-fold doors, doors which fit flush to the frames and PVC-U doors.

The products are manufactured from PVC-U and flexible PVC-U; specifications are available on request. Dimensions Stock length is 2030 mm (6' 8"). Other lengths are available on request. Appearance Fingersafe is available in an extensive range of colours at no extra cost, with special colours available on request.

Dimensions Stock length is 2030 mm (6' 8"). Other lengths are available on request. Appearance Fingersafe is available in an extensive range of colours at no extra cost, with special colours available on request.

PERFORMANCE

Unlike an inferior finger shield or wrap around device, Fingersafe allows even a fire door to open to 180 degrees and will not implode into itself under pressure and actually ejects fingers from the opening.



Fingersafe is 4 hour fire tested by Underwriters Laboratories Ltd (UL), Classification UL25KL.

Fully resistant to UV light, Fingersafe will not tarnish. Fingersafe is compatible with all types of doors except double pivot. Extensive in-house and on-site testing exceeds 3/4 million operations. Testimonials of product durability are available on request.

SITWORK

Installation Simple to install in only 10-15 minutes.

ECONOMICS

Guarantees A two year guarantee on fair wear and tear is offered - supply only.

SUPPLY

Products can be supplied nationwide direct from the company with three to four days delivery from order.

SERVICES

A sample will be supplied to a potential client's building for evaluation purposes.

Technical Literature Leaflets, working models and full length samples available on request

REFERENCES

A list of projects and clients worldwide is available from the company.

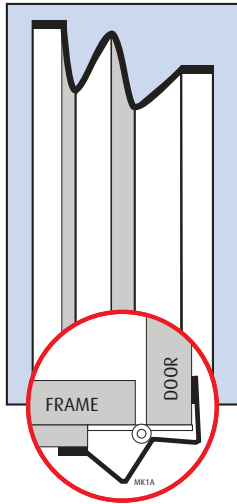
Door Safety



FINGERSAFE DOOR SAFETY SYSTEMS

Fingersafe door safety finger protection guards prevents accidents

MK1A



FOR HINGE OPENING SIDE

Available length: 1930mm (6ft 4in)
2032mm (6ft 8in)

Allowing a full 20cm (8in) door opening

MK1A – for standard butt-hung doors

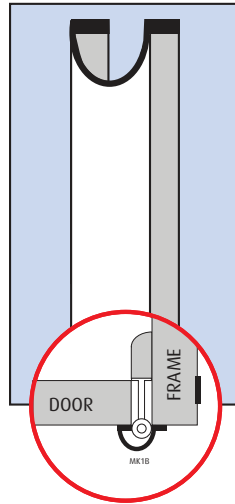
The world's only door safety product that actually ejects fingers from the opening hinge side of a door.

This product will fit wood, aluminium, metal, stainless steel, uPVC and Crittal doors, a full 180 degrees to a maximum opening of 20mm (8") and can be adapted to fit doors or gates with a maximum opening of 40mm (16"). It will also fit rising butts.

*** Please note (MK1B)**

NOT ALL DOORS REQUIRE THIS PRODUCT. If a door opens onto a wall, MK1B will not be required as the gap on that side cannot be accessed. If the hinge side can be accessed then check that there is a gap wide enough to allow a small finger to be inserted. If not, MK1B will not be needed. It is not necessary to buy this product in sets, hence you only buy what you need.

MK1B



FOR HINGE PIN SIDE

Available length : 1930mm (6ft 4in)
2032mm (6ft 8in)

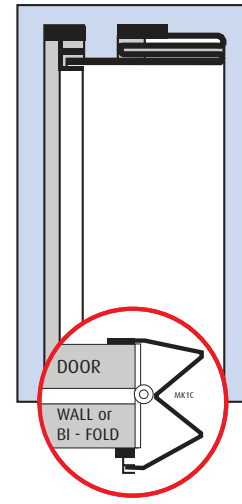
Allowing a full 20cm (8in) door opening
MK1B accommodates parliament (extended) hinges

MK1B* – for hinge pin side of door

It will fit over a standard parliament hinge and can also be adapted for larger openings.

Initially developed for the American Government this model fixes to the door frame and outside edge of door forming a protective seal over the hinge. We can supply special models to cover parliament hinges.

MK1C



FOR BI-FOLD FLUSH FIT DOORS & UPVC DOORS

Available length : 1930mm (6ft 4in)
2032mm (6ft 8in)

Allowing a full 20cm (8in) door opening

MK1C – for bi-fold and flush fit doors

This model uses the MK1A module but has a unique fixing strip which keeps the product flat against the door and ejects fingers every time. Particularly popular in the marine industry. Made from PVC-U and TPE (Thermo Plastic Elastomer) it is fireproof, weatherproof, resistant to UV and acts as a draft excluder and smoke inhibitor.

Available in the following colours:



Intumescent Fire & Smoke Seals



LORIENT FIRE & SMOKE SEALS

Fire & smoke seals for door assemblies

INTRODUCTION

Doors must have gaps between the leaves and the frame and between the bottom of the door and the floor. These gaps allow the door to operate; however, they also allow the passage of smoke and fire.

A Lorient sealing system provides a working, effective and attractive solution.

INTUMESCENT SEALS

An intumescent seal fitted to the top and sides of a door will, in the event of a fire, expand and seal the gaps around the door to provide an effective barrier to fire and hot gases.

COLD SMOKE SEALS

Smoke travels further than the fire itself and also travels at a much higher speed. These characteristics are the main causes of casualties and property damage. Effective smoke seals provide protection all around the door, including the threshold. As well as providing a permanent barrier to the smoke, they will also provide useful thermal or acoustic insulation.

SODIUM SILICATE INTUMESCENT

The intumescent material used in Lorient seals is sodium silicate based. This type of material has been proven in many hundreds of tests world-wide. It exhibits outstanding reliability and durability and, when exposed to fire, it remains stable at temperatures in the region of 1,000°C.

FINISHES

Lorient seals are available in a wide range of standard colours as well as attractive woodgrain and metallic finishes. If a specific finish or colour is required for your project, Lorient has the technical ability and resources to produce it, even in relatively small quantities.

TEST EVIDENCE

All Lorient fire and smoke seals have been tested in accordance with BS 476 Pts 20/22 and Pt 31.1 on a complete range of fire door configurations; single leaf, double leaf, single acting, double acting, latched and unlatched. Smoke seals have also been tested for acoustic performance in accordance with BS EN ISO 140-3:1995.

SELECTION FROM PRODUCT RANGE

Lorient offers a choice of fire seal only and combined fire and smoke seal profiles. For optimum acoustic, smoke and fire protection, the DS or Finesse™ seal is always recommended. Other profiles also available:



Offered in standard sizes of 10 x 4mm, 15 x 4mm, 20 x 4mm and 25 x 4mm. Other sizes available.

SMOKE & ACOUSTIC SEALS

Where fire doors have an intumescent sealing system providing protection against fire and hot gases, smoke seals can be retrofitted to provide protection against cold smoke and noise pollution.



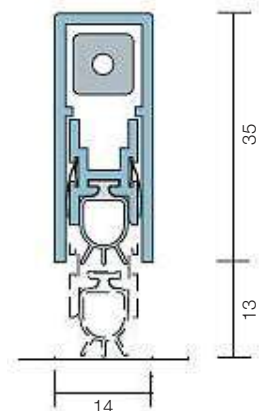
Batwing®



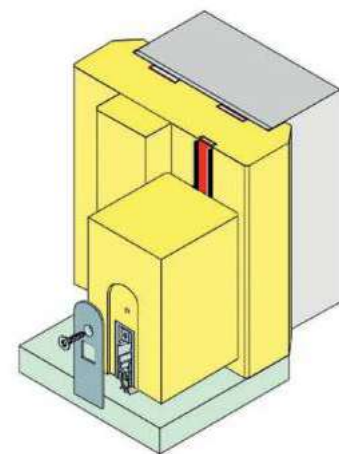
Firtree®

The Lorient Batwing® has long set the standard for smoke and acoustic containment for door assemblies. But now, with the new Curved Fin Batwing®, Lorient have proved that the best can be made even better! Its distinctive straight fins have now been re-engineered into a subtle curved design, providing easier operation, and increased durability while retaining all the smoke and acoustic benefits of the original Lorient Batwing®.

THRESHOLD SEALS (Door Bottom)



IS8010 si



LP1504DS with IS8010 si

Lorient can also supply a range of seals to provide protection against cold smoke transferring to an adjacent compartment at the threshold.

Threshold seals are also available for effective acoustic containment.

THIRD PARTY ACCREDITATION

Lorient fire and smoke seals are British Board of Agrément and CERTIFIRE approved (CF330/CF136) for use on timber-based fire door assemblies.

Intumescent Fire & Smoke Seals



LORIENT ACOUSTIC FIRE & SMOKE SEALS

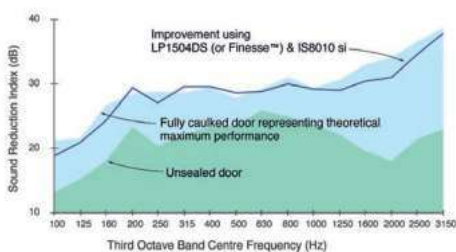
DS and Finesse™

INTRODUCTION

The new Lorient DS and Finesse™ seals offer the ultimate in acoustic, smoke and fire protection.

- Unique dual fins provide continuous acoustic and smoke protection at ironmongery points – vital for life safety, and essential for meeting the acoustic requirements of Approved Document E
- Successfully tested for fire and smoke performance in accordance with BS 476 Pt.22: 1987 and BS 476 Pt.31.1: 1983
- Low frictional resistance for ease of operation, to help meet the accessibility requirements of Document M
- Carries both BBA and CERTIFIRE (CF330) certification
- Acoustically tested in accordance with BS EN ISO 140-3: 1995, and proven to meet the requirements of Document E. Will achieve a rating of 31dB Rw when tested on a typical FD30 door assembly, in conjunction with an IS8010 si threshold seal (see graph below)

Standard Architectural Solid Door Core



DS ACOUSTIC, SMOKE & FIRE SEAL

Three seals in one – the complete solution for acoustic, smoke and fire containment.

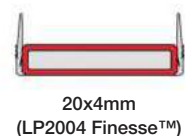
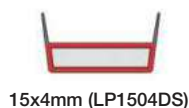
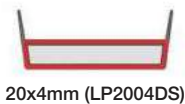
- A range of popular sizes to cover both 30 and 60 minute applications
- Available in a range of standard colours, with black fins – to blend or contrast with surroundings as required
- The unique shape of the DS range allows the product to be stacked, ensuring a smooth delivery to site, minimal storage space and protection of the fins



FINESSE™ ACOUSTIC, SMOKE & FIRE SEAL

These exceptional seals combine performance and durability with superior aesthetics.

- Also successfully tested for fire and smoke performance in accordance with BS EN 1634-1: 2000
- Tested for durability over 1,000,000 cycles on a full-size door assembly without breakdown
- A choice of sizes to cover both 30 and 60 minute applications
- Available in standard colours plus woodgrain and metallic finishes with translucent fins as standard, to blend discreetly into the door or frame – ideal for upgrading doorsets in heritage projects



Acoustic Smoke Seals



LORIENT ACOUSTIC SMOKE SEALS

Batwing® and Firtree™

LORIENT CURVED FIN BATWING®

For fifteen years the Lorient Batwing® has been at the forefront of smoke and acoustic containment solutions for doors. But now, the Lorient Batwing®'s distinctive straight fins have been uniquely re-engineered into a subtle curved design, for even lower frictional resistance, to help meet the requirements of Document M, without losing any of the benefits of smoke and acoustic protection.

- New shape minimizes open/ close resistance
- Symmetrical design ensures fins are always in contact with two surfaces of door leaf, creating an air chamber to provide excellent acoustic properties
- Effective smoke seal up to 200°C
- Flexible elastomeric fin material springs back to original shape to provide durability in service
- Highly durable; tested for over 1,000,000 cycles on a full size door assembly without break-down – exceeding standard testing procedures
- Aggressive self-adhesive backing tested on many surfaces, including MDF
- Fully tested for performance and durability under the third party certification schemes CERTIFIRE (CF136) and British Board of Agrément
- Available in a variety of colours including black, brown, cream, silver grey or white. Other colours to special order
- Available in standard lengths of 1m and 2.1m. Single doorset pack consisting of 1 x 1m and 2 x 2.1m. Other lengths to special order
- Min / max gap size required: 3mm/ 4mm

ACOUSTIC PERFORMANCE

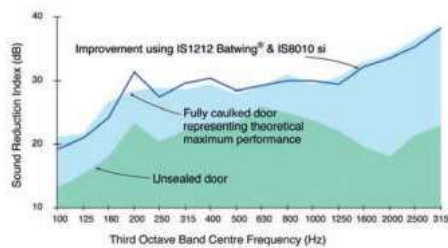
Acoustically tested in accordance with BS EN ISO 140-3:1995. Tests were undertaken on a typical FD30S door assembly, in conjunction with the IS8010 si automatic threshold seal, the Curved Fin Batwing® performed to 31dB Rw (see improvement in graph below).

Weighted Sound Reduction (Rw): 31dB

Sound Transmission Class (STC): 31dB

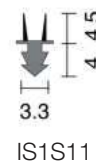
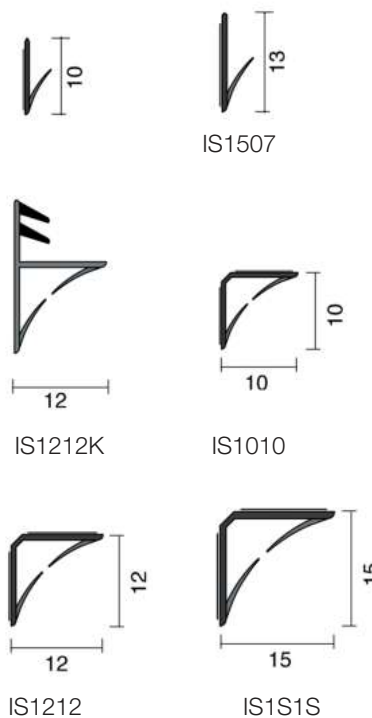


Typical Architectural Solid Core Door



FIRTREE™

- The Firtree™ provides additional cold smoke protection around the perimeter of fire rated doors
- Smoke seal material: Elastomeric fins
- Available in standard lengths of 1m and 2.1m
- Available in black only
- Min / max gap size 3mm/ 4mm



Visit www.batwing.biz for further information



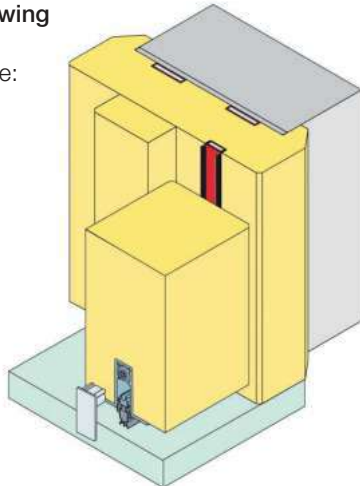
LORIENT ACOUSTIC SOLUTIONS

Example recommended acoustic solutions

Acoustic Solutions for Fire Rated Doors 30 Minutes

Single leaf, single swing

Acoustic performance:
Rw = 31dB
STC = 31dB

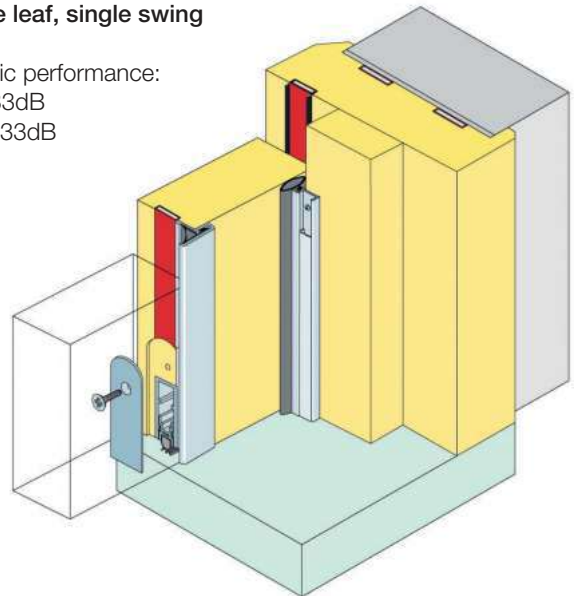


LP1504DS acoustic, smoke and fire seal + IS8005 si automatic threshold seal

Acoustic Solutions for Fire Rated Doors 60 Minutes

Double leaf, single swing

Acoustic performance:
Rw = 33dB
STC = 33dB

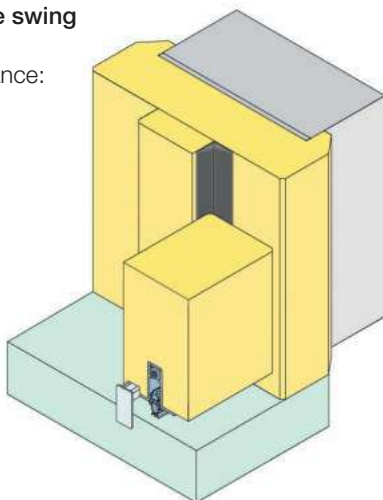


LP2004DS acoustic, smoke and fire seal + LP2004 fire seal + IS7120 perimeter seal + IS7061 meeting stile seal + IS8010 si

Acoustic Solutions for Non-Fire Rated Doors

Single leaf, single swing

Acoustic performance:
Rw = 31dB
STC = 31dB

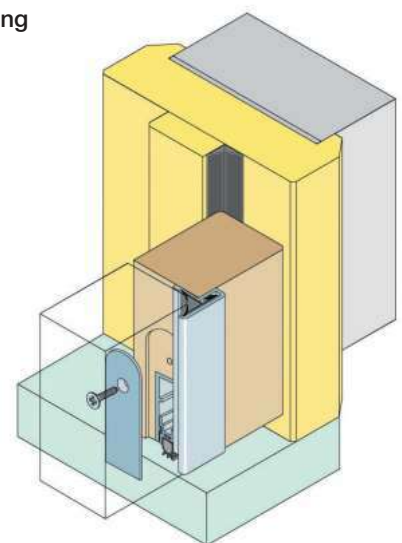


IS1212 Batwing® + IS8005 si automatic threshold seal

High Performance Sealing Solutions for Specialist Doors

Double leaf, single swing

Acoustic performance:
Rw = 37dB
STC = 37dB



IS1212 Batwing® + IS7061 meeting stile seal + IS8010 si automatic threshold seal

DOC E PACKS

Each Doc E Pack contains everything required to seal one door assembly. Packs are available for both acoustic and smoke containment, or for acoustic, smoke and fire. A choice of threshold seal sizes is offered for compatibility with standard door widths.

Threshold Seals



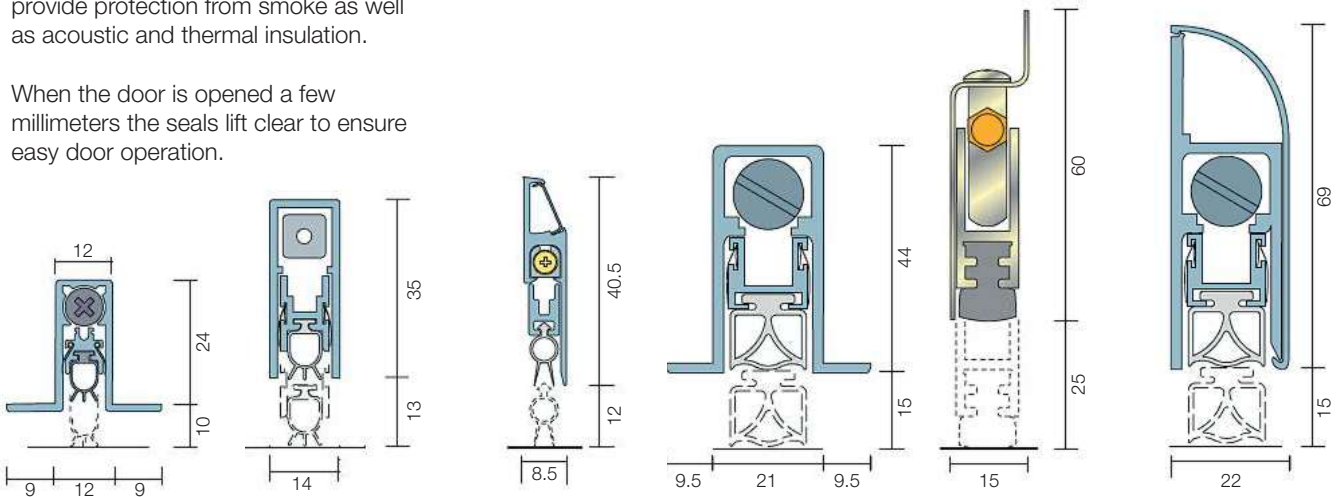
LORIENT ARCHITECTURAL ACOUSTIC SEALS

Integrity™ Architectural seals

AUTOMATIC THRESHOLD SEALS

These spring-loaded, self-levelling seals provide protection from smoke as well as acoustic and thermal insulation.

When the door is opened a few millimeters the seals lift clear to ensure easy door operation.



IS8005 si



IS8010 si



IS8080



IS8100 si



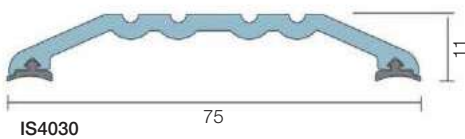
IS8070S



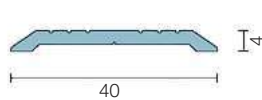
IS8091 si

THRESHOLD PLATES

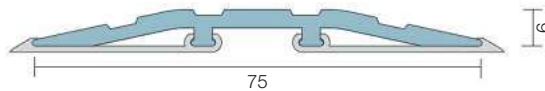
The range includes a wide choice of threshold plates and ramps, for use with virtually all known door types. Many are also available in a unique non-slip safety finish.



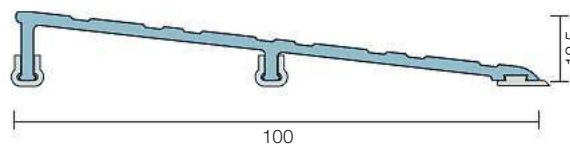
IS4030



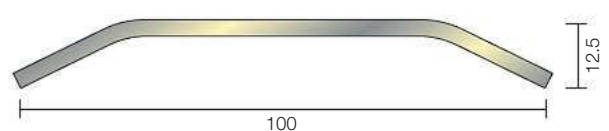
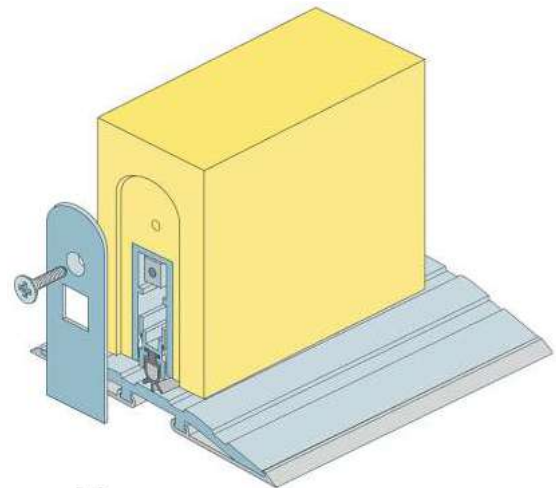
IS4130



IS4010



IS4070



IS4050S, Stainless steel

Threshold Seals



LORIENT ARCHITECTURAL SEALS

Integrity™ Architectural seals

DOOR SEALING SYSTEMS

The Integrity™ Architectural Seals range has been designed and extensively tested to ensure outstanding protection against sound, smoke, rain, fire, light, draughts, dust, and even insects.

Manufactured to professional quality specifications, Integrity™ seals have been developed particularly for use in commercial, industrial and public buildings.

Integrity™ Architectural Seals are frequently multipurpose and, unlike many other seals, can be adjusted without the need to remove the door.

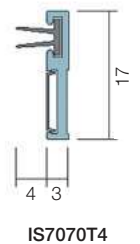
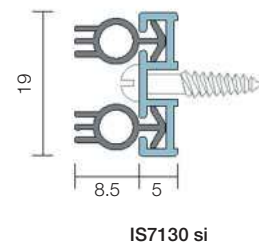
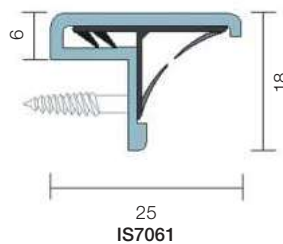
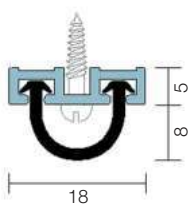
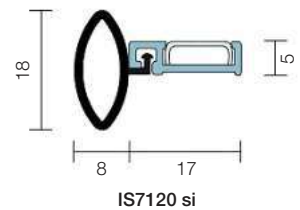
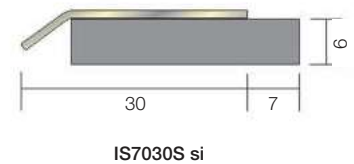
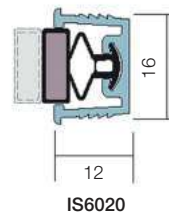
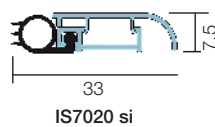
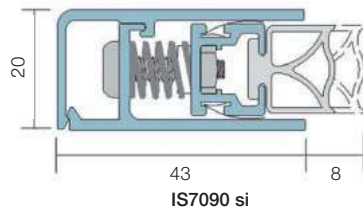
Finishes available include silver or bronze anodized aluminium and stainless steel.

THRESHOLD SEALS

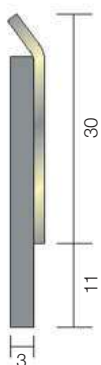
These are designed to seal the gap between the bottom of the door and the floor.

PERIMETER SEALS

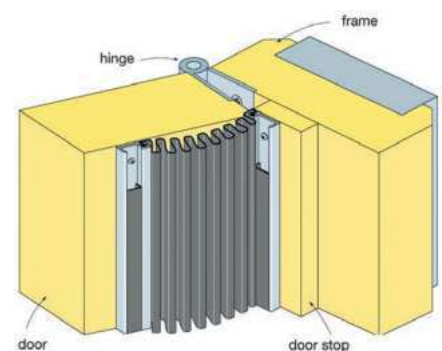
These are designed to seal the gap between the door and the frame, or between two doors. A wide range is available to suit virtually any door, including up and over, revolving, sliding and roller shutter types.



IS3015 si



SPECIALITY SEALS



Fire Resistant Glazing Systems



LORIENT FIRE RESISTANT GLAZING SYSTEMS

Glazing seals

INTRODUCTION

The Lorient range of fire resistant glazing systems can be used to specify and manufacture glazed doors, screens and partitions, providing from 30 to 120 minutes protection.

A wide range of components has been developed and tested under the conditions of BS 476 Pt 20/22. Full details are available from Lorient.

SYSTEM-36

System-36 consists of a U-shaped intumescent gasket with a range of standard glazing beads. Flexible enough to be fitted to curved corners and circular vision panels, a range of sizes are available to suit glass from 4mm to 23mm in thickness.

Special designs can be manufactured for particular applications.



System-36 in door leaf using wired glass

SYSTEM-63

A variant of System-36 designed specifically for cost-effectively incorporating circular glazed apertures into 60 minute fire resistant doors.

SYSTEM-321

System-321 is a unique clip-together glazing system, which contains everything required to glaze one aperture in an FD30 door leaf simply, safely and efficiently.



System-321

FLEXIBLE FIGURE 1

Flexible Figure 1 consists of an intumescent glazing strip with appropriate beads, designed for use with glazed apertures in 30 minute doorleaves.



Flexible Figure 1 in door leaf

SYSTEM-90 PLUS

System-90 PLUS utilises a U-shaped PVC carrier which contains an intumescent core. A secondary intumescent liner and various glazing beads complete the system, which is suitable for glazed doors, screens and partitions.

System-90 PLUS can be supplied in a wide range of standard colours.



System-90 PLUS in door leaf using wired glass

SYSTEM-69

A variant of System-90 PLUS, System-69 is specifically for use with doors and screens whose frame and glazing beads are made of high density mineral composite material.

Contact the Lorient Technical Department for more information.

THIRD PARTY ACCREDITATION

All Lorient glazing channels have been approved under the CERTIFIRE independent appraisal scheme and have been extensively tested with many different fire resisting glass types; in door leaves and timber or composite framed screens including shared transoms and mullions.



CF184/CF185
CF201/CF202
CF325/CF327

Intumescent Downlighter Covers



DOWNLIGHTER COVERS

Intumescent downlighter covers and cages

DESCRIPTION

With the increased use of downlighters, the integrity of the plasterboard and suspended ceilings can be reduced to approximately 4 minutes protection.

Downlighter covers are used to restore the integrity required by British Standards. The covers are available in many standard sizes, and other sizes can be made to order. They are easily installed in about five minutes from below or above the ceiling. With cable entries on top, the intumescent covers are ventilated to avoid light fittings overheating. Cables can also be passed under the rim of the cover for connections to transformers. Only the light fitting penetration is required to be protected, not the transformer.

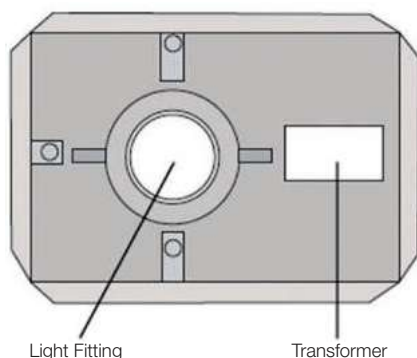
USE

For use over downlighters and loudspeakers, to maintain the integrity of fire-rated ceilings.

PERFORMANCE

This product has been tested employing the general procedures of BS476 Parts 22, 23, and 23 (Clause 5) (1987), in various ceiling and floor constructions. Integrity results of up to 240 minutes have been achieved. Also tested to NEN 6069 (1997).

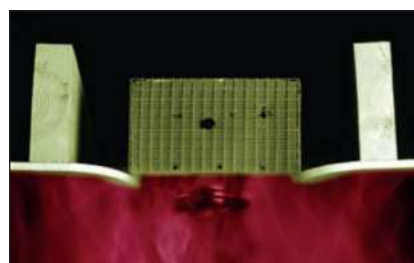
DSLVCovers are made to measure for use where transformers or chokes are connected to the light fitting. Tested to BS476 Parts 22, 23, and 23 Clause 5 (1987). Integrity 88 minutes.



ORDERING REFERENCES

Standard Light Fitting				Light Fitting & Transformer Combined			
Reference	Length	Width	Height	Reference	Length	Width	Height
DLC0	150mm	150mm	120mm	DSLVA	300mm	100mm	120mm
DLC1	130mm	130mm	70mm	DSLVB	300mm	180mm	140mm
DLC2	130mm	130mm	100mm	DSLVC	300mm	220mm	140mm
DLC3	130mm	130mm	140mm	DSLVD	300mm	300mm	140mm
DLC4	180mm	180mm	130mm				
DLC5	180mm	180mm	170mm				
DLC6	260mm	260mm	120mm				
DLC7	260mm	260mm	230mm				
DLC8	300mm	300mm	170mm				
DLC9	350mm	350mm	230mm				

NB: Allow clearances around light fittings: 40mm horizontal / 15mm vertical. Special sizes made to order.



Where the cover can be fitted over a suspended ceiling in roof areas or where floorboards are already lifted, use the Fire Cage. There are two types: one for light fittings (FC) and the other for light fittings with transformers (FC/R). A new acoustic type is available, see overleaf for details.

Acoustic Downlighter Covers



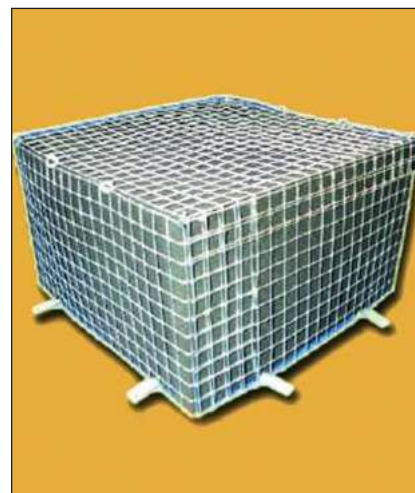
ACOUSTIC DOWNLIGHTER COVERS

Acoustic downlighter covers and cages

DESCRIPTION

Sound absorption and fire protection of downlighters can now be achieved with the Acoustic Downlighter Cover and Fire Cage range. After a long period of research and testing, the problem of protection and overheating has been solved.

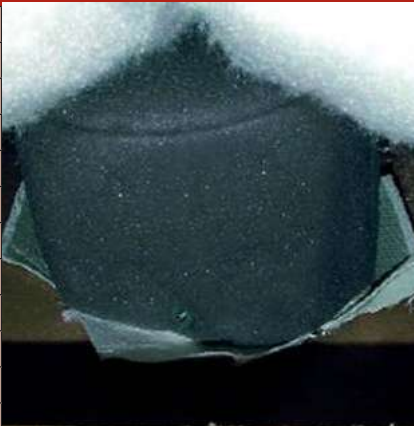
The new covers allow light fittings to operate without overheating, whilst maintaining the fire rating integrity of the ceiling to which they are fitted, thus enabling 30 minutes or 60 minutes of fire rating to be maintained.



USE

Acoustic Downlighter Covers can be used in areas that require good absorption of airborne and impact sound, such as businesses and shops below residential apartments and between floors of residential apartments. Acoustic covers have been fully tested at The Building Test Centre. Reports are available on request.

ORDERING REFERENCES	
Cloth Type	Downlighter Cover Size
Reference	Diameter x Height
DLC0/AC	150mm x 120mm
DLC1/AC	130mm x 70mm
DLC2/AC	130mm x 100mm
DLC3/AC	130mm x 140mm
DLC4/AC	180mm x 130mm
DLC5/AC	180mm x 170mm
DLC6/AC	260mm x 120mm
DLC7/AC	260mm x 230mm
DLC8/AC	300mm x 170mm
DLC9/AC	350mm x 230mm



Special sizes made to order.

ORDERING REFERENCES								
Cage Type	Standard Light Fitting			Light Fitting & Transformer Combined				
	Reference	Length	Width	Height	Reference	Length	Width	Height
FC 1/AC	190mm	190mm	140mm		FC 1R/AC	365mm	190mm	140mm
FC 2/AC	190mm	190mm	190mm		FC 2R/AC	365mm	190mm	190mm
FC 3/AC	240mm	240mm	140mm		FC 3R/AC	415mm	240mm	140mm
FC 4/AC	240mm	240mm	190mm		FC 4R/AC	415mm	240mm	190mm
FC 5/AC	300mm	300mm	140mm		FC 5R/AC	475mm	300mm	140mm
FC 6/AC	300mm	300mm	190mm		FC 6R/AC	475mm	300mm	190mm
FC 7/AC	300mm	300mm	250mm		FC 7R/AC	475mm	300mm	250mm
FC 8/AC	340mm	340mm	140mm		FC 8R/AC	515mm	340mm	140mm
FC 9/AC	340mm	340mm	250mm		FC 9R/AC	515mm	340mm	250mm
FC 10/AC	390mm	390mm	195mm		FC 10R/AC	565mm	390mm	195mm

Special sizes made to order.

Intumescent Gaskets



INTUMESCENT GASKETS

For PVC & metal electrical outlet boxes in ceilings & walls

PRODUCT APPLICATION

Intumescent gaskets are essential in metal or plastic boxes where cables pass back through a wall. Gaskets must be fitted to all dry lining boxes in partition walls. Without these gaskets, fire can spread into the partition within 4 or 5 minutes. Where cables run through back-to-back boxes in brick or block walls, flames can pass through within 6 minutes, resulting in a wall or partition only having 6 minutes of fire integrity.

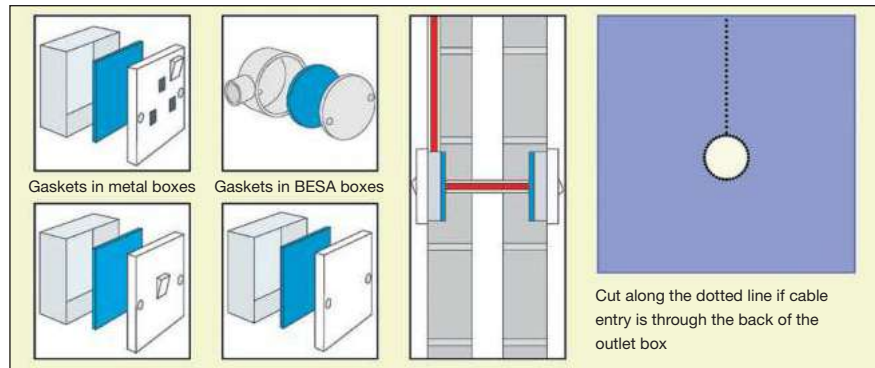
Gaskets for use inside metal or plastic boxes are made to the size of the box and come with self adhesive fixing on the back. Once the backing paper has been peeled off the fixing strip, the gasket can be adhered to the inside of the box. Holes can be cut into the gasket with a sharp knife to receive cables, or the gasket can be cut to fit the back of the box if cables are already fitted (see A).

Dry lining boxes in walls have two pads per box, made to size and adhered top and bottom (see B). Ceiling rose boxes for plasterboard ceilings can be protected by means of an intumescent cover which folds up and is passed through the hole in the ceiling. A hole is then cut in the cover to receive the cables, which are then pulled through the cover, box, and ceiling before connecting the ceiling rose (see C).

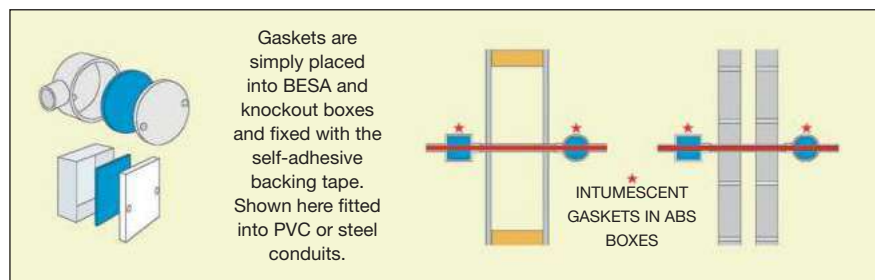
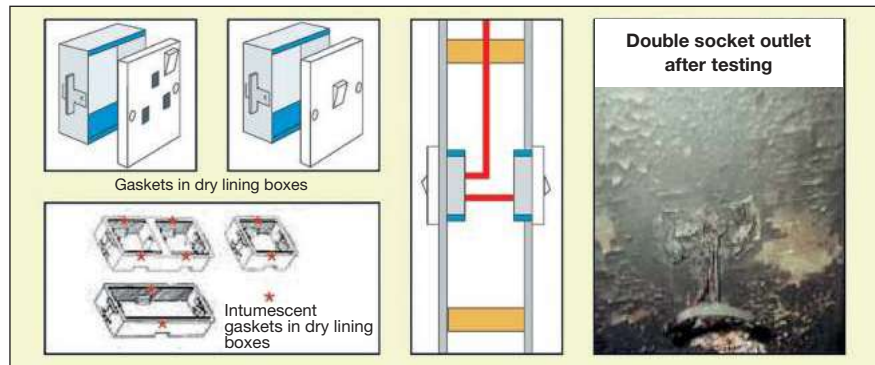
Acoustic protection covers are also available. Ceiling rose gaskets to fit over the ceiling rose or hook plate should be fitted where more than two cables pass through the ceiling. A hole is made in the gasket through which the cables are passed.

The backing paper of the self-adhesive fixing strip is then peeled off and the gasket is adhered to the ceiling. The pendant or light fitting can then be fitted (see C).

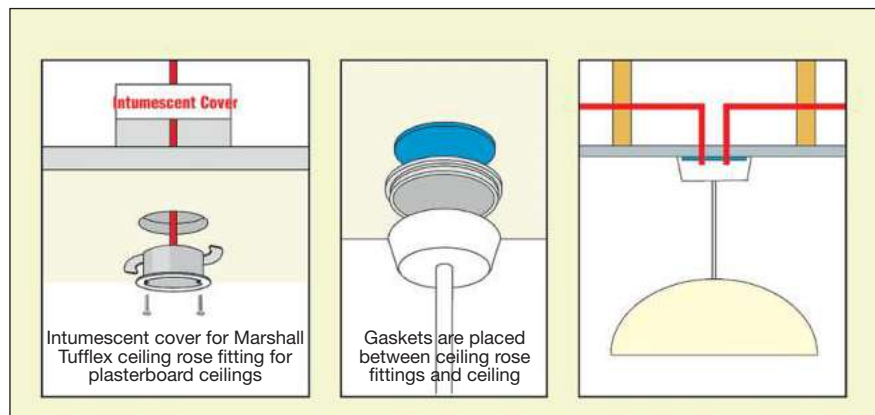
A: SOLUTIONS FOR BLOCK AND BRICK WALLS



B: SOLUTIONS FOR PLASTERBOARD (DRY LINING) WALLS



C: SOLUTIONS FOR PLASTERBOARD CEILINGS



Intumescent Gaskets



INTUMESCENT GASKETS

For PVC & metal electrical outlet boxes in ceilings & walls

ORDERING REFERENCES

INTUMESCENT GASKETS		
REF	DIMENSIONS	DEPTH
ABG33/2	75mm x 75mm	50mm
ABG44/2	100mm x 100mm	50mm
ABG44/4	100mm x 100mm	100mm
ABG64/2	150mm x 100mm	50mm
ABG66/2	150mm x 150mm	50mm
ABG66/4	150mm x 150mm	100mm
ABG99/2	225mm x 225mm	50mm
ABG99/4	225mm x 225mm	100mm
ABG1212/2	300mm x 300mm	50mm
ABG1212/4	300mm x 300mm	100mm
GASKETS FOR STANDARD METAL BOXES		
REF	DESCRIPTION	
BEG	For standard BESA boxes	
DPG	For double metal boxes	
SPG	For single metal boxes	
CRG	For ceiling roses	
INTUMESCENT GASKETS AND COVERS		
REF	DIMENSIONS	SET COMPRISES
SSB	Gasket set for single shallow box	2 gaskets per set
DSB	Gasket set for double shallow box	2 gaskets per set
SDB	Gasket set for single deep box	2 gaskets per set
DDB	Gasket set for double deep box	2 gaskets per set
TDB	Gasket set for twinned single deep box	4 gaskets per set
3DB	Gasket set for triple deep box	4 gaskets per set
MTC	Square intumescent cover for Marshall-Tufflex or similar dry-lining box	
MTC/A	Square acoustic and intumescent cover for Marshall-Tufflex or similar dry-lining box	

PROTECTION FITTED



COMPLIANCE WITH REGULATIONS

All of these products comply with the revised 17th edition of the IEE Regulations and Document B of the UK Building Regulations. These are the requirements:-

Where cables, conduits, trunking, or other items of a wiring system pass through ceilings, floors, roofs, or walls of a building, any part of the hole that is left around the electrical material shall be

made good to the same degree of fire resistance as that required for the element being passed through.

Additionally, internal barriers that give the same degree of fire resistance shall be installed in busbars, busbar trunking, conduits, ducting, socket and switch boxes, and trunking, where the ceilings, floors, roofs, and walls have a specified fire resistance.

Intumescent Gaskets



DRY LINING BOXES WITH INTUMESCENT GASKETS

For PVC & metal electrical outlet boxes in ceilings & walls

PRODUCT APPLICATION

Intumescent gaskets are essential in metal or plastic boxes where cables pass back through a wall. Gaskets must be fitted to all dry lining boxes in partition walls. Without these gaskets, fire can spread into the partition within four or five minutes. Where cables run through back-to-back boxes in brick or block walls, flames can pass through within 6 minutes, resulting in a wall or partition only having six minutes of fire integrity.

Gaskets for use inside metal or plastic boxes are made to the size of the box and come with self-adhesive fixing on the back. Once the backing paper has been peeled off the fixing strip, the gasket can be adhered to the inside of the box.

Holes can be cut into the gasket with a sharp knife to receive cables, or the gasket can be cut to fit the back of the box if cables are already fitted (see A first page).

Dry lining boxes in walls have two pads per box, made to size and adhered top and bottom (see B first page).

Ceiling rose boxes for plasterboard ceilings can be protected by means of an intumescent cover which folds up and is passed through the hole in the ceiling. A hole is then cut in the cover to receive the cables, which are then pulled through the cover, box, and ceiling before connecting the ceiling rose (see C first page).

Acoustic protection covers are also available. Ceiling rose gaskets to fit over the ceiling rose or hook plate should be fitted where more than two cables pass through the ceiling. A hole is made in the gasket through which the cables are passed. The backing paper of the self-adhesive fixing strip is then peeled off and the gasket is adhered to the ceiling. The pendant or light fitting can then be fitted (see C first page).

ORDERING REFERENCES

SHALLOW (35mm) OR DEEP (44mm) DRY LINING BOXES COMPLETE WITH FITTED INTUMESCENT GASKETS	
REF	DESCRIPTION
GBOX/S	Single shallow box with fitted intumescent gasket
GBOX/D	Double shallow box with fitted intumescent gasket
GBOX/T	Twin shallow box with fitted intumescent ga
GBOX/SD	Single deep box with fitted intumescent gasket
GBOX/DD	Double deep box with fitted intumescent gasket

COMPLIANCE WITH REGULATIONS

All of these products comply with the revised 17th edition of the IEE Regulations and Document B of the UK Building Regulations. These are the requirements:-

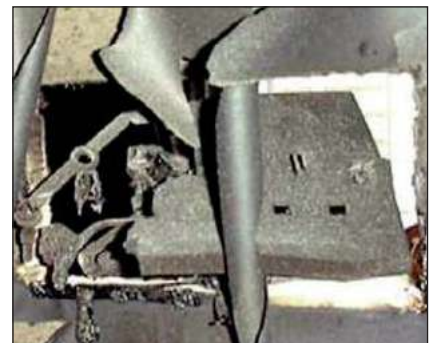
Where cables, conduits, trunking, or other items of a wiring system pass through ceilings, floors, roofs, or walls of a building, any part of the hole that is left around the electrical material shall be

made good to the same degree of fire resistance as that required for the element being passed through.

Additionally, internal barriers that give the same degree of fire resistance shall be installed in busbars, busbar trunking, conduits, ducting, socket and switch boxes, and trunking, where the ceilings, floors, roofs, and walls have a specified fire resistance.



Protected box



Unprotected box



Unprotected box



Protected box

Acoustic Protection



ACOUSTIC PROTECTION COVERS

Tested at BTC in accordance with BS EN ISO 140-3 (1995) & rated BS EN ISO 717/1 (1997) meeting acoustic criteria

INTRODUCTION

Whether old or new, many buildings suffer from sound penetration through their walls. With the development of timber-framed houses, the problem of sound transmission in walls has worsened and needs to be addressed urgently.

The new acoustic protection covers are made from 15mm thick acoustic sponge and are designed to encase electrical outlet boxes in the wall cavity and insulate against airborne sound. The covers are available in single-gang, double-gang, and twin-gang versions.

QUICK AND EASY FITTING

The acoustic sponge covers can be used equally well in new installations and in refurbishment applications. To fit, pass the flexible acoustic sponge cover through the hole in the wall while holding the retaining cord to ensure the cover does not fall into the cavity (the cord can be cut off after the cover is fixed).

Then secure the acoustic cover by pressing the supplied pins through the holes of the zintec metal retaining brackets and into the plasterboard. Push the cable into the electrical outlet box for connection and secured the outlet box in position.

PERFORMANCE

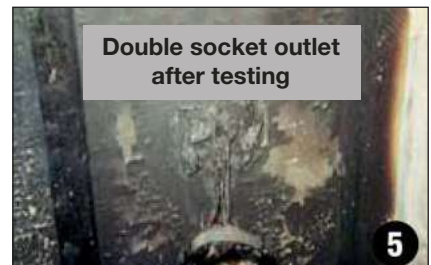
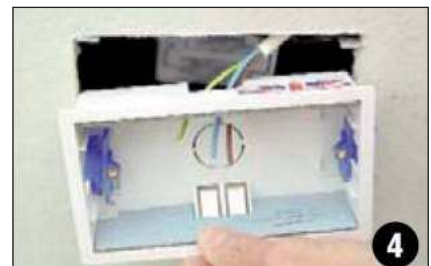
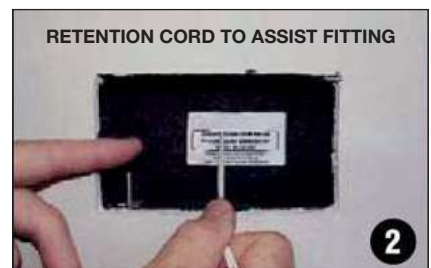
Tested 19-20/1/2004 at Building Test Centre (Ref: BTC13224A) in accordance with BS EN ISO 140-3 (1995) and rated in accordance with BS EN ISO 717/1 (1997) in a Gyproc twin-frame high-performance wall measuring 3.6m x 2.4m with 214mm internal depth.

Acoustic covers comply with the requirements of 'Robust Details'.

DRY LINING BOXES, GASKETS, AND ACOUSTIC COVERS

Dry lining boxes are the perfect escape route for flames in a fire, because the front plate will sag and allow flames to travel along the path of the cables and into the cavity, to adjoining rooms and the floor above, increasing the risk to life and property.

New dry lining boxes with pre-fitted intumescent gaskets expand in a fire and act as a fully-resistant fire barrier (see illustrations 1 to 5). Intumescent ceiling rose covers are also available (see illustration 6).



Unprotected



Protected



ACCEPTED BY 'ROBUST DETAILS' SIZES AVAILABLE TO SUIT ALL BOXES

Acoustic Protection



ACOUSTIC COVERS

Dry lining fitting instructions



Compress the cover ready to insert into the aperture.



Insert cables through the cover. Hold onto the string to prevent the cover from falling into the cavity. Picture shows view from inside the cavity, where several cables have been inserted into the cover.



Continue to hold onto the string and cover, then push the fixing pins through the metal brackets and into the plasterboard.



Once the cover is fixed, cut the string and remove from the cover.



Insert cables into the socket housing.



Connect cables to the socket front plate.

Metal box fitting instructions



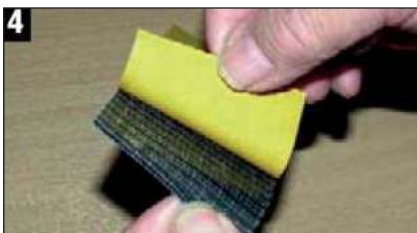
Compress the cover ready to insert into the aperture.



Insert cables through the cover. Hold onto the string to prevent the cover from falling into the cavity. Picture shows view from inside the cavity, where several cables have been inserted into the cover.



Continue to hold onto the string and cover, then push the fixing pins through the metal brackets and into the plasterboard. Afterwards, cut and remove the string.



Remove the backing paper from fire protection gasket.



Insert the gasket into the metal box housing.



Cables can be inserted through the fire protection gasket into the socket housing and then the cables can be connected to the socket front plate.

EFFECTIVE ACOUSTIC & FIRE PROTECTION TESTED AT AVON FIRE AND RESCUE SERVICE.

Products for protection of downlighters, electrical boxes, and trunking were given rigorous tests by Avon Fire & Rescue Service at their fire training centre, witnessed by a substantial number of ECA, IEE, & NICEIC delegates. Each test clearly identified

the huge potential risk of fire spreading from room to room via electrical fittings. Protection is absolutely vital, in order to prevent the spread of flames in a building.

DON'T FORGET - Pads or Pillows for Electrical Trunking, Pillows for Cable Trays, Pads or Pillows for Busbar Trunking and Downlighter Covers, both fire and acoustic-rated.

Intumescent Wraps



FIROBLOK INTUMESCENT FLEXIBLE WRAPS

Wraps, sleeves for ducting, pipes and electrical trunking

DESCRIPTION

Firoblok sleeves are designed to protect cables and metal/plastic pipes and ventilation trunking passing through fire-rated ceilings, floors, or walls made from block, brick, or concrete, and hollow plasterboard floors and walls. They are flexible, allowing contraction and expansion of water pipes, and give protection from corrosion caused by close contact with cement, cement blocks, plaster, and other corrosive building materials.

A silver coloured reinforced covering contains the intumescent material so that it expands inwards and crushes into melting PVC pipes, trunking, ducts, etc in the heat of a fire. They also absorb heat from fire and help prevent metal pipes, services, and armoured cables from overheating.

The sleeves are supplied in 100mm, 150mm, 200mm, or 500mm lengths. They can be easily cut with a sharp knife and they should be installed level with the surrounding ceiling, floor, or wall. In the case of a fire, the intumescent material will expand, sealing the gap between the cable or pipe and its surrounding ceiling or wall. See also Product 7 (intumescent wraps) and Product 25 (cable protection system for cavity walls).

USE

For services passing through fire-rated ceilings and walls (especially where contraction and expansion allowance is required, e.g. water/gas pipes). Also for use in brick, block, concrete, and hollow floors or walls.

PERFORMANCE

This product underwent a fire resistance test employing the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of 130 minutes in solid walls, 67 minutes in hollow walls, and 4 hours in concrete/ block ceilings/walls. Also tested to EN1366-3 (2005), EN1363-1 (2000), and EN13501-2 (2004)

Preparation and Fitting Guide



1 Measure the depth of the opening and mark this on the wrap. You cut off just what you need with no waste.



2 Cut the wrap to the marked depth with a sharp knife.



3 Lift the self-adhesive flap to reveal a marked line along the depth of the wrap.



4 Cut along the marked line with a sharp knife to open up the wrap for fitting onto the trunking or ducting.



5 Check that the wrap fits comfortably around the trunking and introduce this combination into the opening.



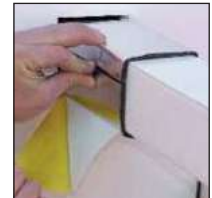
6 Whilst holding the wrap in place, remove the backing from the self-adhesive strip.



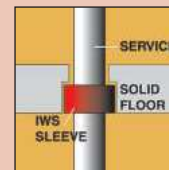
7 Firmly fasten the self-adhesive strip over the join of the wrap.



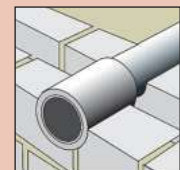
8 Finally, push the wrap into the opening until it is level with the surface.



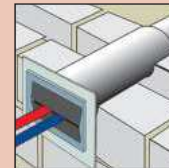
SOLID FIXING



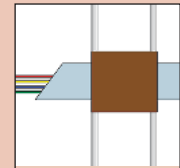
Product 110 shown in a concrete floor construction.



For walls classed as a risk on one side only, cut the sleeve to size and place on risk side.



IWS sleeves can be fitted through walls for protection from both sides. Sleeves for cables require a protective insert (IWS/C) to prevent puncture. Smoke seal plates are also available.

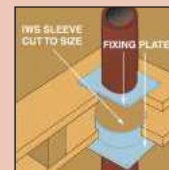


A square sleeve can be supplied for cable trunking protection.

HOLLOW FIXING



The IWS sleeves can be fitted through hollow plasterboard walls. Sleeves used for cables require a protective insert (IWS/C) to prevent puncture.



Fixing plates must be used in wooden floors.

ORDERING REFERENCES

For Cables, Pipes and Trunking		
Reference	Internal Diameter	External Diameter
IWS 18	18mm	26mm
IWS 25	25mm	30mm
IWS 33	33mm	45mm
IWS 40	40mm	50mm
IWS 50	50mm	59mm
IWS 55	55mm	65mm
IWS 60	60mm	75mm
IWS 83	83mm	97mm
IWS 90	90mm	105mm
IWS 100	100mm	116mm
IWS 115	115mm	131mm
IWS 150	150mm	170mm
IWS 165	165mm	189mm
IWS 215	215mm	265mm

Ventilation Ducting		Plastic Electrical Trunking	
Reference	Size (mm)	Reference	Size (mm)
110V/15	110 x 54	110T/11	25 x 25
110V/26	204 x 60	110T/22	50 x 50
110V/29	220 x 90	110T/33	75 x 75
110V/22	234 x 29	110T/32	75 x 50
110V/32	308 x 29	110T/42	100 x 50
110V/67	692 x 70	110T/43	100x75
		110T/44	100 x 100

Both types are available in 100mm, 150mm, 200mm, and 500mm lengths.

Passive Fire Protection



FIREWISE ACOUSTIC INTUMESCENT MASTIC

Halogen free, polymer emulsion based sealant

DESCRIPTION

Firewise Mastic is a halogen free, polymer emulsion based sealant that swells when subjected to temperatures in excess of 125°C and forms a char coat that restricts the passage of smoke and fire. It is easily applied and dries to a flexible and smooth surfaced material which is readily over paintable. It has excellent adhesion to a wide range of substrates and will not harden or crack with age.

APPLICATIONS

Firewise Mastic forms a fire and smoke seal in joints up to 35mm wide without slumping. It is ideal for sealing joints in and around internal partitions, lap joints in fire-rated cladding and for sealing between fire doors and fire-rated walls. It is recommended that a sealant depth of at least 15mm be applied. If the sealant is to be overpainted, building regulations may require a fire resistant coating.

APPLICATION INSTRUCTIONS

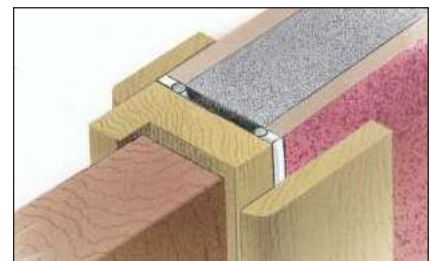
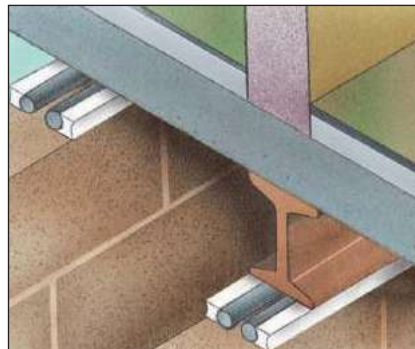
To achieve a high quality joint, clean all surfaces, remove dust and ensure surfaces are dry. Non porous surfaces should be degreased using a suitable degreasing agent. Highly porous surfaces should be sealed with a suitable primer. Apply masking tape to each side of joint and gun sealant firmly into joint, smoothing off with a wetted spatula. Masking tape should be removed within 10 minutes of application.

SPECIFICATION COMPLIANCE

Firewise Mastic has been independently tested to the following assessments:

BS EN 1366-3: 2004 & BS EN 1366-4: 2006 Tested at Bodycote Warrington-Fire, report No. 173658A achieving 4 hour integrity and insulation rating for a range of linear and penetration seals.

An indicative fire test based on BS476 Part 20 at Warrington Fire Research and achieved a 4 hour fire rating (integrity)



for a range of vertical and horizontal joints up to 35mm wide between various non-combustible construction materials. A 1 hour fire rating (integrity) was achieved for a range of vertical joints up to 25mm wide between combustible materials (timber).

Naval Engineering standard test NES 711, issue 3 and achieved an average toxicity index of 0.44.

Sound tested for acoustic performance values and achieved values of between 46 and 55 dBA indicating the sealant should uphold acoustic performance requirements of most normal partitioning systems.

The product has also been tested by Warringtonfire for the requirements of London Underground specification LUL1042 for toxicity smoke emission and oxygen index. The results are below the limit required by London Underground Ltd.

LIMITATIONS

Firewise Mastic is not suitable in joints where movement exceeds + or - 15% of joint width, or in external joints.

COVERAGE

1 tube is sufficient to produce approx. 4m using a 12mm x 6mm bead.

AVAILABILITY

Available in: 310ml tubes, 25 per box. Colours: White or Brown

STORAGE

Store in cool dry conditions. PROTECT FROM FROST.

TECHNICAL DETAILS	
Movement Accommodation	+ or - 15%
Skinning Time	15 minutes to 1 hour depending on conditions
Cure Time	5 to 15 days for 15mm x 20mm bead
Hardness Shore A	25-30
Temperature Resistance	-20°C to + 70°C
Paintability	with most paints
Application Temperature	+ 5°C to 40°C
Cleaning	Uncured sealant with water
Shelf Life	minimum 12 months
Specific Gravity	1.62 - 1.66

Passive Fire Protection



Fire rated gun grade or hand held expanding polyurethane foam

FEATURES & BENEFITS

- 2 hour fire rating tested to BS476 Part 20 and DIN 4102 Pt 1 (B1)
- Suitable for filling, sealing and insulation of joints and gaps in a variety of fire rated construction applications
- Forms a strong bond to concrete, brickwork, stone, plaster, wood, fibre concrete, metal, PVC and polystyrene
- Rapid curing formulation: Foam is tack free within 10 minutes, and can be cut or trimmed within 45 minutes (gun grade) and 60 minutes (hand held)

DESCRIPTION

FM110 (gun grade) and **FM417** (hand held) are fire rated gun grade and hand held expanding polyurethane foam. They can provide up to 2 hours fire resistance in linear joints, has excellent thermal and acoustic insulation properties and forms a strong bond to most construction materials.

USAGE / PURPOSE

FM110 and **FM417** are a modified one component polyurethane foam suitable for the filling / sealing of joints and gaps requiring fire rated properties. These include the perimeter sealing and fixing of fire resistant windows and doors and the sealing of mechanical and electrical service penetrations through compartment walls and floors.

LIMITATIONS

FM110 and **FM417** are not UV resistant and should be protected from sunlight with a suitable opaque sealant, filler or paint. As with all PU foams, it does not bond to polythene, Teflon®, siliconised or wax- like surfaces.

AVAILABILITY

Colour: Beige

Packaging:
880 ml pressurised canister (12 per box)



PREPARATION

Always carry out a test to confirm compatibility prior to use. Protect floor coverings with paper or a plastic film. The surfaces must be dry, solid, stable and capable of carrying the load of the panels to be installed. Remove all loose particles, dust and grease. A speedier cure can be attained by moistening the substrates if needed.

APPLICATION

FM110 - Shake the canister vigorously at least 20 times. Remove the protective cap and screw canister onto the PU foam gun.

Joints should be underfilled to allow for post expansion of the foam. Fill to approximately 80% of joint depth for optimum results.

FM417 - Shake the canister vigorously at least 20 times. Leaving the cap on the can, screw the nozzle firmly into the connector on the top of the trigger. Remove safety catch and pull the trigger to activate can.

Joints should be underfilled to allow for post expansion of the foam. Fill to approximately 50% of joint depth for optimum results.

Technical Information		
	Test Method	Result
Composition		Polyurethane Foam
Water absorption	EN 1609	0.2%
Limits canister temperature		+5°C to +30°C (gun grade) +10°C to +30°C (hand held)
Limits ambient temperature		+5°C to +35°C (gun grade) +10°C to +35°C (hand held)
Density		20 - 30 kg/m ³ (gun grade) 25 - 35 kg/m ³ (hand held)
Tack free time	3 cm in width at 23°C and 50 % RH	10 minutes
Cutting time	3 cm in width at 23°C and 50 % RH	45 minutes (gun grade) 60 minutes (hand held)
Loading time		24 hours
Tensile strength	DIN 53455	81 kPa (gun grade) 129 kPa (hand held)
Compressive strength (10%)		46 kPa (gun grade) 59 kPa (hand held)
Elongation at break		19% (gun grade) 18% (hand held)
Thermal conductivity	EN 12667	36 mW/m.K
Temperature resistance		Short Term: -40°C to +130°C Long Term: -40°C to +90°C

Passive Fire Protection



INTUMESCENT PIPE COLLARS

Up to 4 hours protection

PERFORMANCE BENEFITS

- Provide up to 4 hours fire resistance.
- Available for use on PVCu and non-PVCu plastic pipes.
- Unaffected by moisture.
- Standard & non-standard sizes available.

INTRODUCTION

Firewise Pipe Collars are designed to prevent the spread of fire from one compartment to another where plastic pipes penetrate separating walls and floors and provide up to 4 hours fire resistance.

Firewise Pipe Collars consist of a split hinged powder coated steel shell, which contains the heat reactive intumescent material. The unit is held closed around the pipe by a toggle and latch for ease of closure by the installer.

PERFORMANCE

When exposed to the heat of a fire, the intumescent material contained within the Pipe Collar expands and exerts pressure on the melting plastic pipe, causing the opening to be closed off and thus preventing the spread of fire from one compartment to another.

Firewise Pipe Collars have been comprehensively tested and assessed in accordance with BS 476: part 20: 1997 for up to 4 hours fire resistance and have certification for a wide range of plastic pipes including PVCu, HDPE, MDPE, PP, ABS. They are available in the widest range of sizes for standard and non-standard pipe diameters, have been tested for use in plasterboard partitions and timber floors and are unaffected by moisture or atmospheric Carbon Dioxide.

APPLICATION

Firewise Pipe Collars are suitable for use in any building which has plastic pipes penetrating fire rated compartment walls and floors. (For installation details please refer to technical data sheet).

Typical types of buildings where Pipe Collars are commonly used are flats and Apartment Blocks, Hotels, Hostels, Halls of Residence, Prisons, Office Blocks, Hospitals, Airports, Retail Centres, etc.

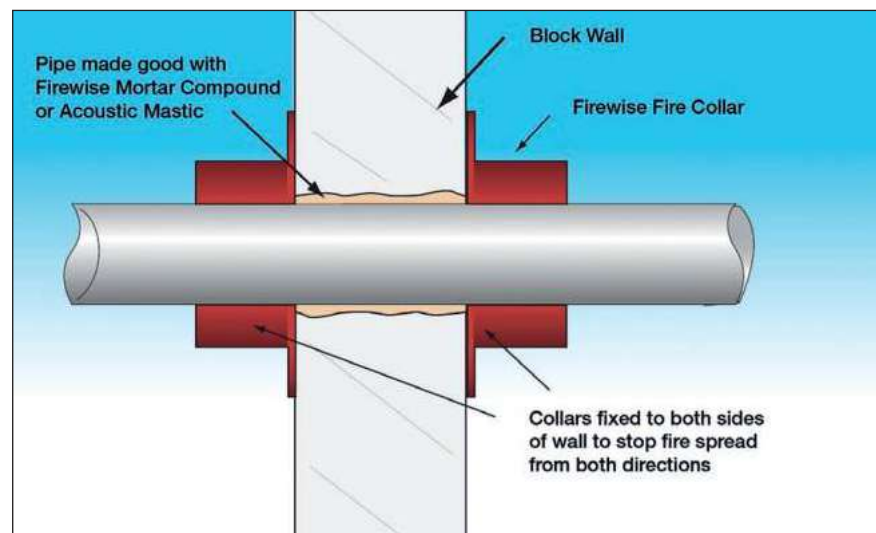
SPECIFICATION

“Supply and install Firewise Pipe Collars to provide up to (1, 2, 3 or 4) hours fire resistance to suit diameter of PVCu / HDPE / MDPE / PP / ABS pipes in accordance with the manufactures recommendations”.



PVCu Pipe Sizes (Nom. Diam.) Standard Sizes	
55mm	110mm
82mm	160mm
125mm	200mm

Micro Collar Range
15mm, 22mm, 38mm and 42mm.
Other sizes are available on request.



Passive Fire Protection



INTUMESCENT PIPE WRAPS

Up to 4 hours protection

INTRODUCTION

Intumescent pipe wraps offer a low cost, easily installed alternative to metal-cased pipe collars. They have been designed for use on uPVC thermally-softening pipes in situations where the wrap will be fully 'cast in' to the structural element.

DESCRIPTION

Based on a graphite intumescent material which provides a high pressure force to close the penetration as the pipe softens in a fire.

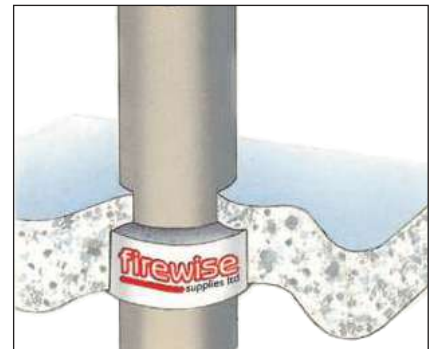
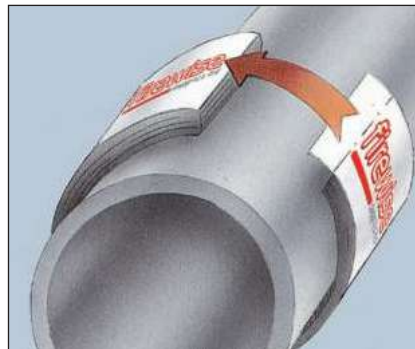
This fibre-reinforced material exhibits an excellent resistance to erosion and enables extended periods of fire resistance to be achieved. Its intumescent reaction commences at 190°C with low smoke emission and no halogen by-products from combustion being produced.

The pipe wrap utilises several layers of intumescent mat dimensioned to suit the pipe diameter, backed with a pvc tape and fitted with self-adhesive togs for fastening. They are resistant to water and most liquids commonly found in the building environment.

INSTALLATION

Intumescent pipewraps are simply wrapped around the circumference of the pipe to be protected and the ends joined with the self-adhesive tag.

It is then moved along the pipe to a position within the floor slab 12mm from the underside; or centrally within a wall but no more than 52mm from each side.

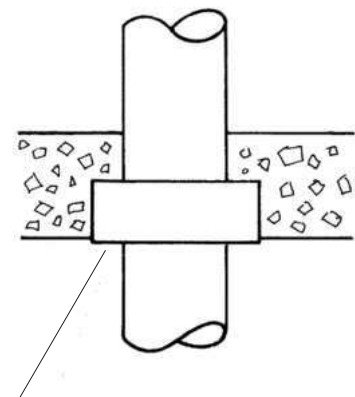


Finally, the pipe wrap is grouted in place with sand/cement mortar to give a neat finish to the pipe penetration and to facilitate decoration. Care must be taken to ensure that the wrap is not damaged by any rough edges or sharp projections in the masonry or by the trowel.

PERFORMANCE

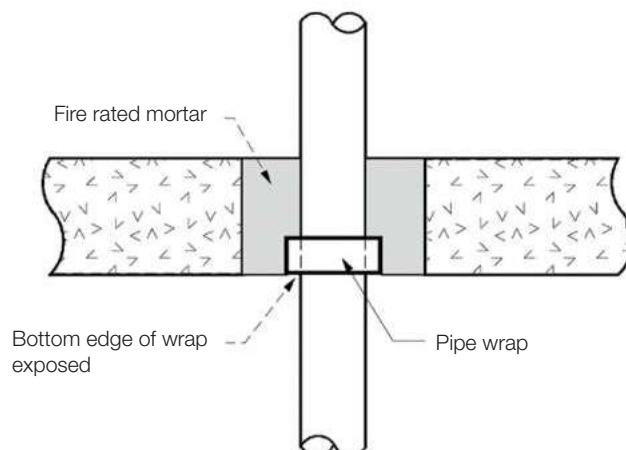
Intumescent pipe wraps have been independently tested on both vertical and horizontal pipes, following the temperature and pressure conditions specified in BS476: part 20:1987. They are approved for use on uPVC pipes of 55, 82, 110 and 160mm OD and certified for fire resistance of four hours in both wall and floor elements.

Test evidence is available on request.



The underside face of the pipe wrap should always be left visible

Pipe Wraps Sizes (Nom. Diam.) Standard Sizes	
55mm	110mm
82mm	160mm
125mm	200mm



Passive Fire Protection



FIRE RATED BOARDS

FEATURES & BENEFITS

- Comprehensively tested and assessed in accordance with BS476 part 20: 1987 for up to 4 hours fire resistance
- Ease of installation - dry trade
- Lightweight
- Simple retro-fitting of additional services
- Tested for acoustic performance

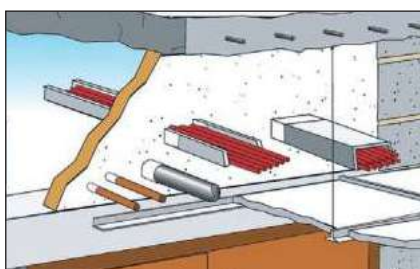
INTRODUCTION

Firewise Fire Rated Boards are designed to prevent the spread of fire from one compartment to another where mechanical and electrical services penetrate separating walls and floors, and provide up to 4 hours fire resistance.

Firewise Fire Rated Boards consist of a high density mineral fibre slab which is factory pre-coated with a water based, fire resistant coating. When used in conjunction with Firewise fire rated coating and mastic, the boards provide an effective fire barrier for large multiple-service openings.

PERFORMANCE

When exposed to the heat of a fire, the excellent thermal insulation properties of Firewise Fire Rated boards provide an effective barrier, preventing the passage of fire and elevated temperatures. The fire resistant coating and mastic seal around services and board joints provide a further barrier to the passage of cold smoke.



Fitted around service penetrations in bulkhead above fire door (2 hour protection - single layer)

APPLICATION

Firewise Fire Rated Boards are suitable for use in any building which has single or multiple services penetrating fire rated compartment walls and floors. Typical types of building where Firewise Fire Rated Boards are commonly used are Retail Stores and Shopping Centres, Communication and Broadcasting facilities, Commercial Buildings, Power Stations and Control Rooms.

Firewise Fire Rated Boards can be used in walls or floors. (For installation details please refer to technical data sheet)

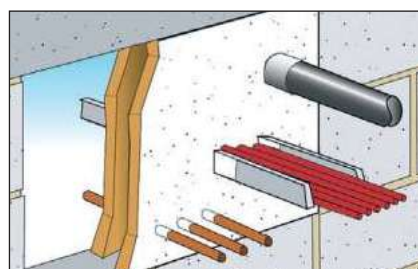
SPECIFICATION

Supply and install Firewise Fire Rated Boards to provide up to (1, 2, 3 or 4) hours fire resistance to all floor/wall openings. Installation to be in accordance with the manufacturers recommendations.

FIRE RATED COATING & MASTIC

The use of Firewise Fire Rated Coating and Mastic is an essential element in the performance of the system. The mastic provides an ideal medium for filling the small gaps between cables, pipes etc. thus contributing to the effectiveness of the fire and smoke sealing performance.

The Fire Rated Coating is used to coat the services, the edges of all openings, and the cut edges of the Fire Rated Boards to ensure that the system is adequately bonded together and to the substrate so as to form an effective fire barrier.



Fire-stopping service penetrations in block walls (4 hour protection - double layer)



PACKAGING

Packed individually in a protective PVC bag. Size: 1200 x 600 x 60mm.

GENERAL BENEFITS

- Excellent fire resistance from single thickness Batt
- Standard size: 1200 x 600 x 60mm
- Suitable for sealing large wall and floor voids containing most commonly used services
- Can be used as a blank seal
- Tested for use in masonry and dry wall constructions
- Lightweight and simple installation
- Maintenance free
- 180kg density base material provides additional benefits of a smoke and acoustic seal

Passive Fire Protection



FIREWISE FIRE RATED MORTAR

Lightweight mortar compound

PERFORMANCE BENEFITS

- Comprehensively tested and assessed in accordance with BS476 part 20: 1987 for up to 4 hours fire resistance.
- Can provide a loadbearing seal when used with suitable reinforcement.
- Easy to install.
- Simple retro-fitting of additional services.

INTRODUCTION

Firewise Fire Rated Mortar is a lightweight mortar compound which is designed to prevent the spread of fire from one compartment to another where services penetrate separating walls and floors, and provides up to 4 hours fire resistance.

Firewise Fire Rated Mortar consists of a specially blended powder which is supplied in easy to handle paper sacks. When mixed with water, Firewise Fire Rated Mortar forms a trowelable or pourable mixture which is easy to install and has excellent workability characteristics.

PERFORMANCE

When exposed to the heat of a fire, the excellent thermal insulation properties of Firewise Fire Rated Mortar provides an effective barrier, preventing the passage of fire and smoke. Unlike sand and cement mortars or concrete, the special formulation resists shrinkage and cracking, and is not subject to spalling in a fire situation.

During installation and the curing process, Firewise Fire Rated Mortar actually expands ensuring that an excellent seal is possible even in irregular openings.

APPLICATION

Firewise Fire Rated Mortar is particularly suitable for reinstating compartment floors where HVAC ducts, pipes and electrical services have been installed. Small holes and imperfections of fit can easily be 'made good' using Firewise Fire Rated Mortar.

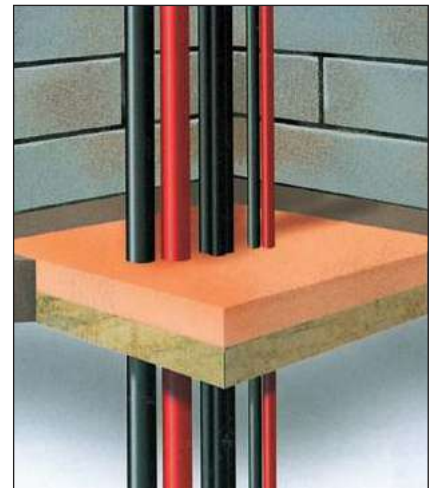
Typical buildings where Firewise Fire Rated Mortar is commonly used are Multi-story buildings with service risers, Communication and Broadcasting Facilities, Hospitals, Hotels and Apartment Blocks, Power Stations and Control Rooms. Firewise Fire Rated Mortar can be used in walls or floors.

(For installation details please refer to technical data sheet).

SPECIFICATION

Supply and install Firewise Fire Rated Mortar to provide up to (1, 2, 3 or 4) hours fire resistance to floor/wall openings.

Installation to be in accordance with the manufacturers recommendations.

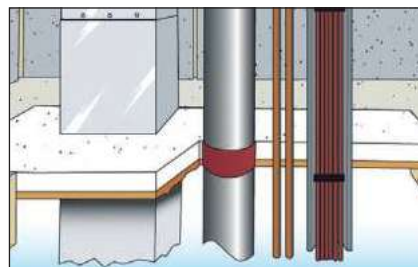


USAGE

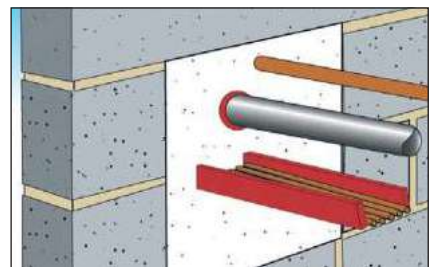
1000kg = 1cbm

Seal Thickness	Kg per sq.	metre
1mm	1kg	N/A
50mm	50kg	2
100mm	100kg	4

Fire Performance	
100mm thick with no shutter	4 hours insulation + 4 hours integrity
75mm thick with no shutter	2 hours insulation + 4 hours integrity
50mm thick with m.f. shutter	4 hours insulation + 4 hours integrity



Firewise compound poured onto permanent fibre shutter in floor



Firewise compound trowled into wall

Passive Fire Protection

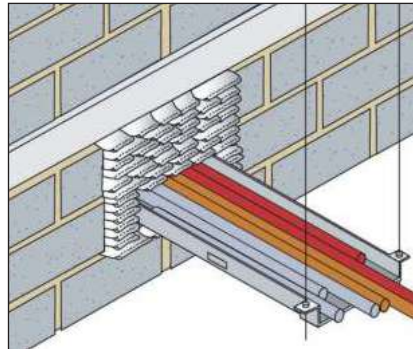


FIREWISE INTUMESCENT PILLOWS

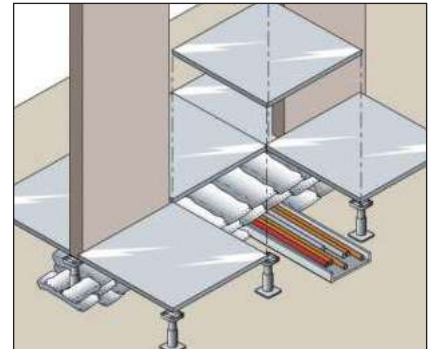
4 hours' fire integrity and 2 hours' insulation rating



Firewise Intumescent Pillows



Firewise Intumescent Pillows friction fitted between services and firewall



Firewise Intumescent Pillows forming cavity barrier underneath raised access floor

INTRODUCTION

Firewise Intumescent Pillows will provide up to 4 hours' fire protection to metal services and cables passing through compartment floors and walls.

- Simple to install
- Easy to remove and reinstate whilst changing services
- Maintenance free
- Dry System

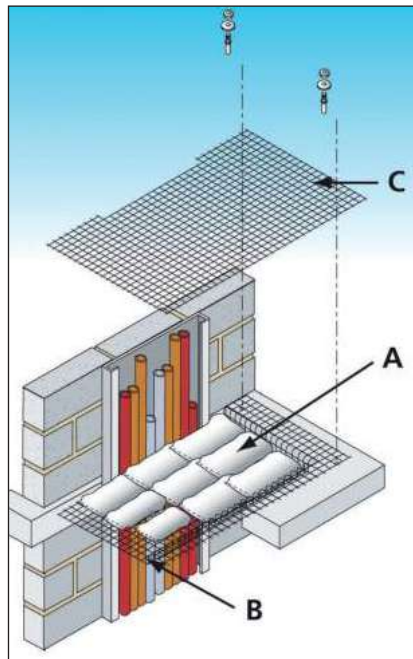
DESCRIPTION

Firewise Intumescent Pillows are simply packed tightly in between penetrating services and the wall. In a floor, pillows are additionally supported by means of a mesh support system. (See diagram)

Under fire conditions, Firewise Intumescent Pillows expand to form an effective seal around service penetrations.

Firewise Intumescent Pillows are suitable for use with:

- Metal pipework
- Cable trays
- Electrical trunking (inside and outside)



Firewise Intumescent Pillows supported by mesh cage

Labels

A = Firewise Intumescent Pillows

B = Basket of galvanised steel wire mesh 50mm x 50mm squares, wire diameter 2.5mm mesh basket mechanically fixed to floor slab

C = Wire mesh as above, overlapping basket mesh and tied together with steel wire

ESTIMATING QUANTITIES

Pillows are available in four sizes and the table below outlines approximate quantities of each size to fill one m² area.

Pillow size (mm)	Approximate number
300 x 200 x 30	165 per m ² opening
300 x 150 x 30	220 per m ² opening
300 x 100 x 30	330 per m ² opening
300 x 50 x 30	660 per m ² opening

FIRE RATING

Firewise Intumescent Pillows will provide 4 hours' fire integrity and 2 hours' insulation rating as tested in accordance with BS476 Part 20.

SPECIFICATION

Install Firewise Intumescent Pillows to provide up to 4 hours rating where services pass through fire rated walls and floors. Installation to be fully in accordance with manufacturer's instructions.

TO ORDER

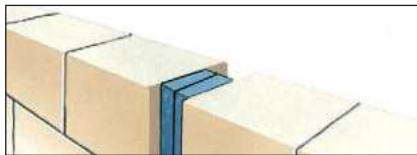
Contact Firewise with details of hole sizes, penetrating services and quantities.

Passive Fire Protection



XPANFOAM INTUMESCENT EXPANSION JOINT SEAL

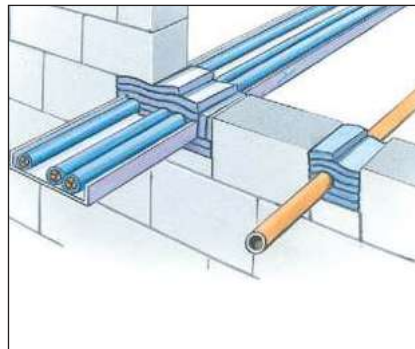
Easy to install, moisture resistant and flexible



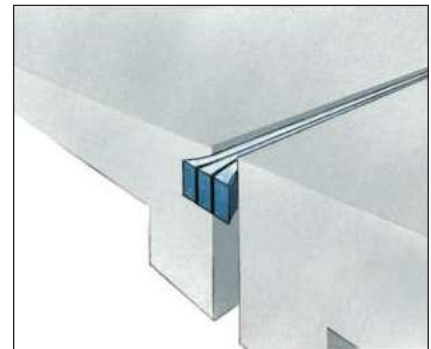
Vertical joint



Wall to floor junction



Cable tray penetration



Floor slab joint

DESCRIPTION

Xpanfoam is made from an open-cell fire retardant foam, which is then coated both sides with an expandable graphite intumescent sealant, containing special binders which maintain complete flexibility. The material is non-toxic and installers need no special protective clothing for installation work.

DURABILITY

Xpanfoam is extremely durable, totally resistant to environmental conditions, both on site during construction and as an integral part of a building. Tests show that many years after installation, Xpanfoam will still be ready to activate in a crisis.

MOISTURE RESISTANCE

Even after undergoing total submersion in water, and then being subjected to freezing conditions, Xpanfoam activates reliably at the designed temperature.

IN ACTION

Xpanfoam functions as a filler for movement joints, and is completely unaffected by normal environmental conditions or atmospheric moisture. At the designed temperature, the intumescent coating begins to expand on the fire side of the joint. During this reaction, the fire resistant foam gradually compresses and is replaced by the expanding mass of intumescent graphite. Thus fire is prevented from penetrating rapidly into the joint.

APPLICATIONS

The product is recommended for:

- Filling fire rated expansion joints in fairface brick and blockwork walls.
- Filling expansion joints in compartment floors.
- Filling gaps in curtain walling adjoining compartment walls, floors and roofs.
- Sealing around pipework, ductwork and cable trays where services pass through fire resisting walls and floors.

DESIGN SUPPORT

Not only does Xpanfoam restrict penetration of fire and smoke; it also meets other requirements, such as structural movement, thermal and acoustic properties.

PERFORMANCE

Independent fire resistance tests to BS 476: Part 20: 1987 have proved Xpanfoam's integrity for periods up to four hours. These cover pipe penetrations, cable tray assemblies and apertures in blockwork ranging from 20mm to 100mm. Report data is available on request.

HOW TO SPECIFY

The table shows the straightforward way to fire-stop movement joints with Xpanfoam. To identify the depth of Xpanfoam required for any application, cross reference the width of joint with the integrity to be maintained. For example: if the requirement is 20mm joint with a two hour rating, specify Xpanfoam 20mm joint x 2 hours.

The chart represents worst-case scenarios. Where depth of fill is in excess of customer requirements (ie 30mm in the above example) our experts will be pleased to advise on the precise volume needed in specific instances.

Performance of Xpanfoam in any structural substrate

FIRE RESISTANCE					
Gap Width	1hr	1.5 hrs	2 hrs	3 hrs	4 hrs
	Depth of Xpanfoam fill				
10	25	25	25	35	40
20	25	25	30	40	50
30	25	25	30	40	50
40	30	30	35	45	55
50	35	35	45	60	75
60	35	35	45	65	90
70	40	40	50	75	105
80	40	40	50	85	105
90	45	45	55	85	105
100	50	50	60	85	105

Linear dimension in mm

Fire Protection



THERMOCOAT

Intumescent paint for structural steel and cast iron

APPLICATION

Thermocoat may be applied by brush, roller or airless spray. To achieve a quality finish and minimise application time spray application is recommended.

Prior to application the contractor should contact Firewise and obtain a basecoat application schedule.

The basecoat should be applied according to this schedule using a wet film gauge.

Max. Relative humidity 80%.
 Min. Temp 6°C
 Min. Steel Temp. 3°C above Dew Point
 Max. Thickness per coat; brush 600 microns
 Max. Thickness per coat; spray 2000 microns (S)
 Max. Thickness per coat; spray 1400 microns (W)

RE-COAT TIMES (Minimum)

Brush/roller application:

Surface dry: 2 hours
 Recoat: 4 hours
Overcoat with flame retardant finish: 10 hours

Spray application:

Surface dry: 4 hours
 Recoat: 10 hours
 Overcoating with flame retardant finish: 48 hours

SPRAY EQUIPMENT

Airless Spray Pump

Graco 5000 Or 70500
 Filter size 30 mesh
 10mm hose 3/8" diameter with no whip end

Tip Size

317-319 (6" fan) - Narrow surfaces
 417-419 (8" fan) - Broad surfaces

Equipment Cleaner

Thermoguard S-Gun Wash Thermocoat
 W - Water

Note: Filters should be cleaned regularly.

AVAILABILITY

Thermocoat is available ex-stock in 5 litre and 20 litre/25kg containers. Thermoguard Flame Retardent High Build Decorative finish is available in 21/2 litre and 5 litre containers.

BS 5750/ISO 9000 QUALITY ASSURED

Thermocoat is manufactured under the principles of BS 5750/ISO 9000.

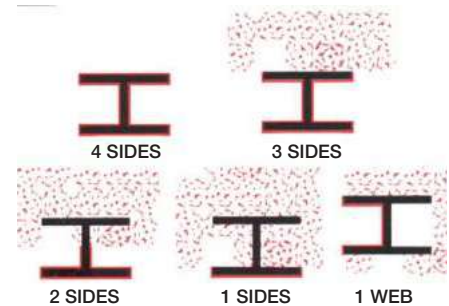


STEEL TERMINOLOGY

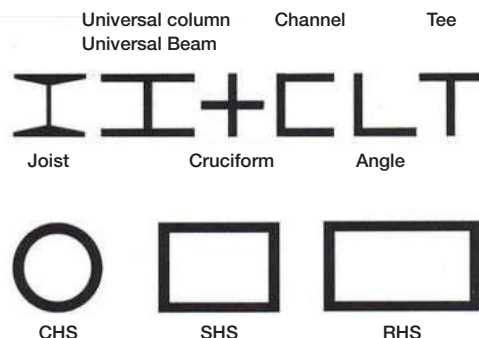


FIRE EXPOSURE

Surfaces coloured red are exposed to a fire.



STEEL TYPES



Fire Protection



THERMOCOAT

Intumescent paint for structural steel and cast iron

DESCRIPTION AND USE

Thermocoat is a thin decorative intumescent paint system providing fire resistance to structural steel and cast iron. The unique range of hard, high quality, weather resistant finishes enhance a building's architectural or historic features.

ECONOMY AND SPEED

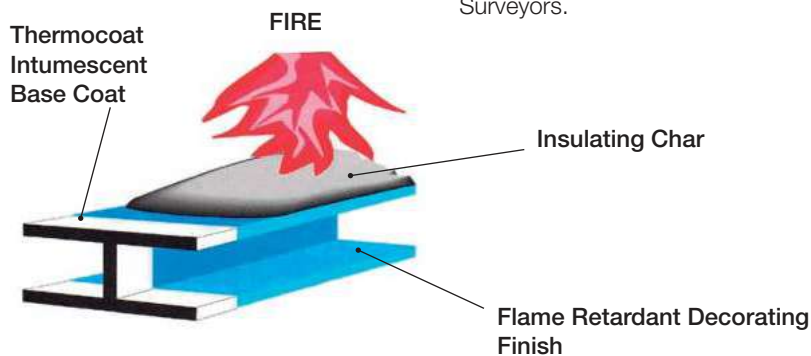
½ hour and 1 hour fire resistance can be achieved with a single applications of Thermocoat. 1½ hour fire resistant can be achieved with just two coats of Thermocoat.

FLAME RETARDANT DECORATIVE FINISH

Eggshell: BS4800 + RAL.
One-coat gloss: BS4800 + RAL.
Metallic: Steel, gunmetal, rust, silver, gold.
Non decorative: N.A - For dry, hidden areas only.

HOW IT WORKS

Heat in a fire triggers a catalytic reaction causing expansion of an insulating char layer up to 50 times the paint film thickness. This keeps the steel below its critical temperature thus maintaining the structural stability of the building.



FIRE TESTING

Assessment is based upon certified fire tests at the Faverdale Technology Centre and Fire Research Centre (Fire Test Laboratories) to BS476 Part 21 - Fire Resistance of loadbearing elements of structure for 30 mins., 60mins., 90mins. and 120 mins.

FIRE CERTIFICATION

Thermoguard issue a Certificate of Supply upon request for each project for Insurance, Fire and Building Control Authority and Client Records.



ESTIMATING SERVICE

Thermoguard's experienced Estimating Department provides realistic, confidential guidance on project costings to Contractors and Quantity Surveyors.



TECHNICAL ADVISORY SERVICE

Thermoguard's Technical Department provides expert advice and assistance with all aspects of specification and application.

PREPARATION AND PRIMERS

Steel and cast Iron should be free from rust and millscale and primed with Thermocoat high-build primer 75 microns DFT or other metal primer compatible with intumescent paints. Galvanised steel should be degreased and primed with a suitable etch primer.

Thermocoat High-Build/Metal Primer may be left without further coatings or decorated with conventional paints where fire resistance is not required.

TO SPECIFY

Apply Thermocoat to achieve ½ hr., 1hr., 1 1/2hr., 2hr. Fire Resistance with Thermoguard Flame Retardant One coat / Eggshell / Metallic / Non decorative finish according to manufacturer's instructions.

Note: One coat of Dualcoat plus one coat of Onecoat are recommended for external or aggressive industrial environments.

Fire Protection



FLAME RETARDANT PAINT

DESCRIPTION AND USE

A range of decorative flame retardant paint finishes for use over Thermoguard Wallcoat, Timbercoat and Thermocoat to protect, decorate and complete these fire protection systems.

Thermoguard Flame Retardant Paints assist in the control of fire hazards caused by combustible materials such as wood and paint in buildings by releasing a flame extinguishing gas upon contact with a fire.

Suitable for use direct to bare or sound previously painted non-combustible substrates.

FINISH AND COLOUR RANGE

WATER BASED

Acrylic eggshell: BS 4800, plus RAL.
Vinyl Matt: BS 4800, plus RAL.
Vinyl Silk: BS 4800, plus RAL.

OIL BASED

Gloss: BS 4800, plus RAL.
Eggshell: BS 4800, plus RAL.
One-Coat: BS 4800, plus RAL.
Metallic: Steel, gunmetal, rust, silver, gold

TO SPECIFY

Prepare and apply Thermoguard Wallcoat, Timbercoat or Thermocoat, with Thermoguard Flame Retardant chosen finish according to manufacturer's instructions.

N.B. Where Flame Retardant Paint alone is deemed to provide adequate protection –

Apply to ceilings:

Either 2 coats of Flame Retardant Vinyl Matt.
Or 2 coats of Flame Retardant Vinyl Silk.

Apply to walls:

1 coat of Flame Retardant Acrylic Undercoat plus
1 coat of Flame Retardant Acrylic Eggshell.

COMPOSITION

Antimony Oxide flame retardant agents. Acrylic, Alkyd and Vinyl binders.

High opacity pigments (metallic finish contains inert acrylic resins and metal powders.)

FIRE TESTING

Tested to:

BS476 Part 7; Class 1 surface spread of flame.
BS476 Part 6; Fire propagation.
Designated Class 0 in accordance with U.K. Building Regulations.



COVERAGE

Gloss, eggshell, acrylic eggshell, vinyl matt and silk: 10 – 12m sq. / litre.

Metallic: 6 – 7m sq. / litre.

APPLICATION

Brush, roller, conventional and airless spray. Metallic finish should be roller or conventional spray applied, stirring continuously.

Ensure surfaces are clean, dry and sound.

Minimum application temperature 6°C. Do not apply when condensation may form.

Thoroughly abrade old gloss or eggshell paints.

MINIMUM DRYING TIMES:

(Touch)

Water-based: 2 hours.
Oil-based: 6 hours.

(Re-coat)

Water-based: 4 hours.
Oil-based: 2 hours.

Fire Protection



FIRE VARNISH

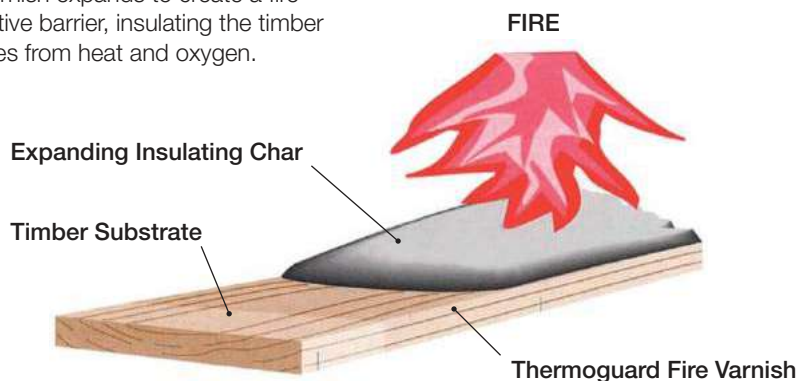
Class 1 and class 0 intumescent varnish

DESCRIPTION AND USE

Thermoguard Fire Varnish is an exceptionally clear lacquer for decorative fire protection of prepared timber and timber derivative surfaces. Its special formula provides a hard, durable finish suitable for panelling, boarding, doors, floors, furniture etc. It's clear finish enhances the natural beauty and fire protects new and previously varnished internal timber surfaces.

INTUMESCENT FIRE PROTECTION

When exposed to a fire Thermoguard Fire Varnish expands to create a fire protective barrier, insulating the timber surfaces from heat and oxygen.



FINISH

Thermoguard Fire Varnish Overcoat is available in gloss, satin and matt.

TO SPECIFY

Simply State:

Prepare and apply Thermoguard Fire Varnishes to Class 1/Class 0 with gloss/satin/matt finish according to the manufacturer's instructions (N.B. for wet areas apply Gloss Overcoat over the Fire Varnish).

FIRE TESTING

Tested to:
BS476 Part 7; Class 1 surface spread of flame.
BS476 Part 6; Fire propagation.
Designated Class 0 in accordance with U.K. Building Regulations

PREVIOUSLY VARNISHED SURFACES

Thermoguard Fire Varnish has good adhesion and can be applied over existing varnished surfaces. Preparation requires through abrading with wet or dry abrasive paper to provide a key.

Wash down with warm detergent solution and rinse with clean warm water. Allow to dry.

APPLICATION

Counter-sink and stop or seal bare Ferrous metal fixings and fittings. Mix the base and activator components in ratio 2:1. Stir base and add activator slowly; continue stirring vigorously until a homogeneous mix is obtained. Usable pot life 1 ½ - 2 hours.

Brush, roller or spray. Apply 1 or 2 coats of Thermoguard Fire Varnish. After 12 hours (min.) apply 1 coat of the appropriate Topcoat. Contact Thermoguard for spray equipment advice. Ensure surfaces are clean and dry. Maximum timber moisture content 18%. Maximum relative humidity during application and drying 8°C. Minimum surface temperature 3°C above dew point.

Clean equipment with water immediately before and after use. Ensure adequate ventilation during drying.

ENVIRONMENTAL HEALTH & SAFETY

Thermoguard Fire Varnish is a low odour, water-based system, thus making it 'user and environmentally friendly'

FIRE CERTIFICATION

Thermoguard issue a Certificate of Supply upon request for each project for Insurance, Fire and Building Control Authority and Client Records.

COVERAGE

Class 1 – Apply Thermoguard Fire Varnish at 6.5m sq. per litre (150 m wet).

Class 0 – Apply Thermoguard Fire Varnish at 6.5m sq. per litre (150 m wet).

Apply Fire Varnish Gloss, Satin or Matt Overcoat at 12m sq. per litre. For humid areas apply Thermoguard Fire Varnish Gloss Overcoat over the Thermoguard Fire Varnish.

COMPOSITION

Clear intumescent compounds.
Clear Epoxy resin binders.

STAINS

Compatible with most stains, dyes and liming wax.
The use of acid fast wood dyes is recommended. Where other types of stains or stained varnishes have been used contact our Technical Department.

Fire Protection



TIMBERCOAT

Class 1 and class 0 intumescent paint

DESCRIPTION AND USE

Intumescent paint for bare or previously painted timber and timber derivative surfaces where surface spread of flame or fire propagation need to be controlled.

INTUMESCENT FIRE PROTECTION

When exposed to a fire Thermoguard Timbercoat expands to create a fire protective barrier, insulating the timber surfaces from heat and oxygen.

QUALITY ASSURANCE

Thermoguard Timbercoat is manufactured under the principles of BS 5750/ISO 9000

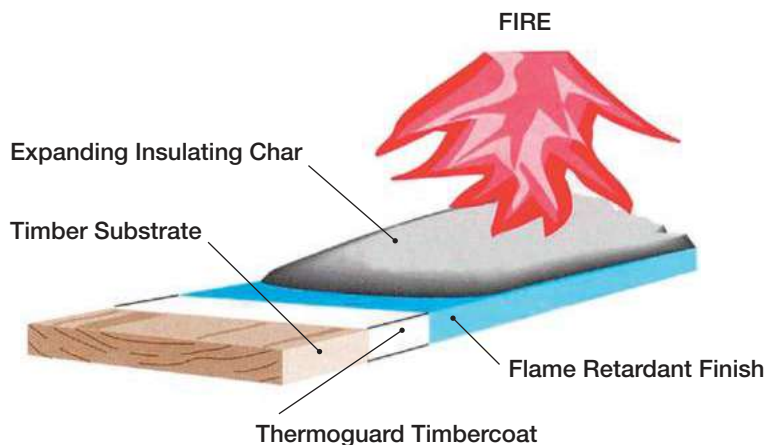
TO SPECIFY

Simply state:

Prepare and apply Thermoguard Timbercoat to Class 1/Class 0. Apply Thermoguard Flame Retardant (insert chosen finish) according to manufacturer's instructions.

FIRE CERTIFICATION

Thermoguard issue a Certificate of Supply upon request for each project for Insurance, Fire and Building Control Authority and Client Records.



FINISH AND COLOUR RANGE

Thermoguard Timbercoat is overcoated with the following decorative finishes:

Thermoguard Flame Retardant:

Gloss: BS 4800 + RAL.

Eggshell: BS 4800 + RAL.

Vinyl Matt: BS 4800 + RAL.

Acrylic Eggshell: BS 4800 + RAL.

Anti-graffiti system:

Most BS4800 colours.

Metallic: Steel, gunmetal, rust, silver, gold.

FIRE TESTING

Tested to: BS476 Part 7; Class 1 surface spread of flame. BS476 Part 6; Fire propagation. Designated Class 0 in accordance with U.K. Building Regulations.

COVERAGE

Class 1 and Class 0:
Apply 2 coats of Thermoguard Timbercoat at 7m sq. per litre per coat.

APPLICATION

Apply in 2 coats by brush or roller or spray.

Airless spray – Graco 1500 or 5000 with 0.015” tip.

Pressure pot – Devilbiss J.G.A 502 gun, 402-FF needle, 705 aircap, FF nozzle.

COMPOSITION

Intumescent compounds.
Intumescent paint resin binders.
High opacity pigments.

ENVIRONMENTAL HEALTH & SAFETY

Thermoguard Fire Varnish is a low odour, water-based system, thus making it 'user and environmentally friendly'

Fire Protection



WALLCOAT

Intumescent for walls and ceilings

A COST EFFECTIVE ANSWER TO A SERIOUS PROBLEM

Inherently non-combustible surfaces such as plaster-board and brick can become a potential fire hazard due to repeated redecoration with conventional paints.

Different paint types from a variety of manufacturers have generally been used over many years with less than thorough preparation. In a fire thick layers of old paint tend to delaminate rapidly catching and spreading fire around a building. In extreme cases a lethal "flash-over" fireball effect is created.

The resultant risk to life and property can be greatly reduced at minimum cost using a combination of Thermoguard Wallcoat, an insulating "intumescent" barrier coating and Thermoguard flame retardant paint.

DESCRIPTION AND USE

Thermoguard Wallcoat is an intumescent undercoat for application to previously painted plaster, Artex, board, brick and concrete walls and ceilings. Overcoated with Thermoguard flame retardant paint it insulates old paint films from fire, controlling the spread of flames along walls and ceilings.

TO SPECIFY

Simply state:

Prepare and apply Thermoguard Wallcoat and Thermoguard flame retardant acrylic eggshell/vinyl matt/vinyl silk/anti-graffiti finish according to manufacturer's instructions

APPLICATION

Apply 1 coat Thermoguard Wallcoat at 8M2/litre plus either:

1 coat Thermoguard Flame Retardant Acrylic Matt at 10 M2/ litre:
or 2 coats Flame Retardant Acrylic Eggshell at 10M2/litre per coat:
or 2 coats Flame Retardant Anti-Graffiti or Hygiene Finish at 10M2/litre.

Max. Relative Humidity 75%.

Min. Temperature 6°C.

Min. Surface Temperature 3°C above dew point.

FIRE TESTING

Tested to BS476 Part 7; Class 1 surface spread of flame.

BS476 Part 6; Fire propagation.

Designated Class 0 in accordance with U.K. Building Regulations.

INTUMESCENT AND FLAME RETARDANT FIRE PROTECTION

When exposed to a fire Thermoguard flame retardant paint releases a flame extinguishing gas which instantly protects the surface. Simultaneously heat activates Thermoguard Wallcoat underneath causing it to expand and create a fire protective barrier, insulating old paint films from heat and oxygen.

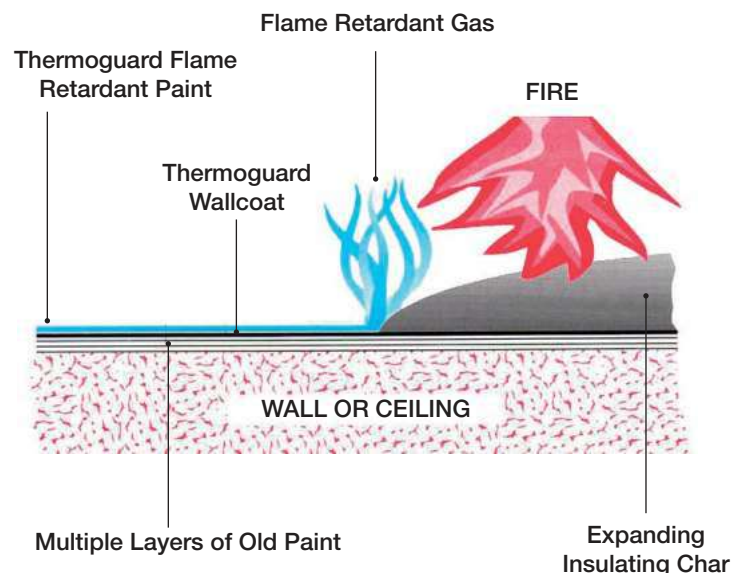
FINISH AND COLOUR RANGE

Full BS4800 + RAL colour range.

Thermoguard Wallcoat is tinted to match the finishing colour. Thermoguard flame retardant paint is available in BS4800 + RAL colours, in acrylic eggshell, acrylic matt, anti-graffiti and hygiene finishes. Please refer to separate data sheet. A clear flame retardant anti-graffiti glaze is also available.

FIRE CERTIFICATION

Thermoguard issue a Certificate of Supply upon request for each project for Insurance, Fire and Building Control Authority and Client Records.



Fire Protection



ROCKWOOL FIRE BARRIER

FIRE CAVITY BARRIER FOR ROOF VOIDS, LOFT AREAS AND SUSPENDED CEILING VOIDS

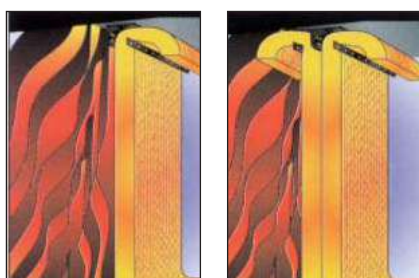
INSULATION & INTEGRITY FIRE CAVITY BARRIER

A versatile, flexible curtain which provides an insulation, smoke and fire cavity barrier. It consists of a rock mineral wool reinforced fleece which is stretched between perimeter fixings and wire stitch jointed for maximum effectiveness.

Rockwool Fire Barrier is 50mm thick and supplied in a roll size 4000mm x 1000m. Rockwool Fire Barrier can be used as a half hour fire and cavity barrier in a single 50mm blanket or up to one and a half hours when two 50mm blankets are used together.

Rockwool Fire Barrier has been tested or conforms to the following standards:

BS 476: Part 4, 1970 Non Combustibility or Building Materials
BS 476: Part 6, 1989 Fire Propagation of Building Materials
BS 476: Part 7, 1987 Surface Spread of Flame
BS 476: Part 22, 1987 Fire Test for Building Materials in Non Load bearing Elements of Construction.



30 min

60 min

The half-hour cavity barrier was tested to BS 476: Part 22 at Warrington Fire Research Centre in 1987 (Report NO. WARRES 41584). The test showed a 62 minutes stability and integrity before being discontinued, and 20 minutes insulation.

The one-hour cavity barrier was tested to BS 476: Part 22 at Warrington Fire Research Centre in 1989 (Report No. WARRES 46351). This test showed 105 minutes stability and integrity before being discontinued, and 90 minutes insulation.

Versatile

Tested to BS476, Part 22

Easy to handle

Simple to fix

Rockwool Fire Barrier can be supplied with aluminium foil facing on one or both sides, to provide excellent smoke barrier characteristics and improved acoustic attenuation properties. When used as a cavity barrier the minimum provisions when tested to the relevant part of BS 476 are 30 minutes integrity and 15 minutes insulation with each side tested separately.

ACOUSTIC PERFORMANCE (Room to noise reduction)

All values are estimated, based on total system integrity. Typical wet felt ceiling tile in lay-in-grid system - 30dB. As above + 50mm thick Rockwool Fire Barrier vertically hung from the soffit leaving no gaps and with 150mm overlap on top of ceiling - 43dB. Installed as 2, but faced with foil on one side - 45dB. 2 independently hung barriers with foil facing - 50dB.

STRUCTURAL STABILITY

The fire barrier must be hung from structural framework which can resist fire for the same period as the fire barrier system itself. It is very important to continuously support and thoroughly clamp the top edge of the fire barrier to the structural members in preference to the roof decking.

TYPICAL SPECIFICATION

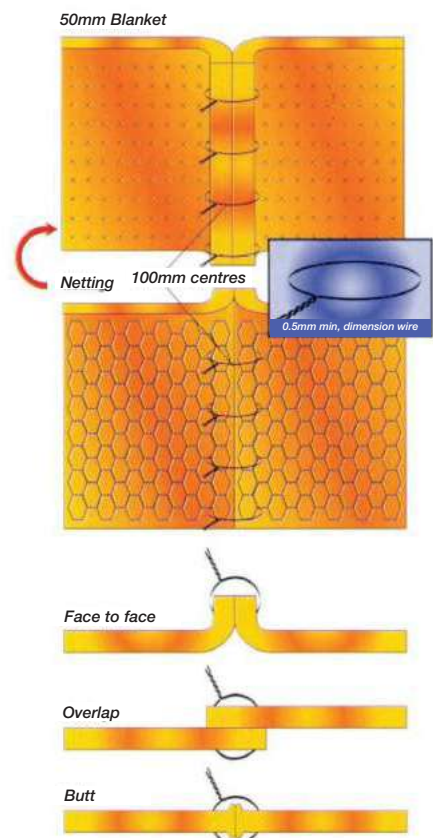
Fire Resistance to BS 476, Part 22 Integrity/Insulation 30 minutes, 60 minutes or 90 minutes.

Unless shown otherwise install barriers to subdivide the ceiling void into areas not exceeding 20Metres in one direction. Fit tightly and fix securely at perimeter and vertical joints leaving no open gaps



Minimum thickness for continuous clamping angle and strap: 1.5mm. Minimum diameter for threaded studs or bolts: 5mm installed at every 400mm interval. Minimum diameter for Lacing Wire: 0.5mm stitching at every 100mm interval along the butt, overlap or face to face joints.

FIXING DETAIL

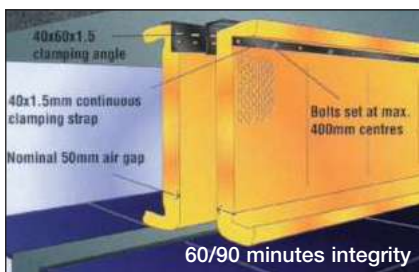
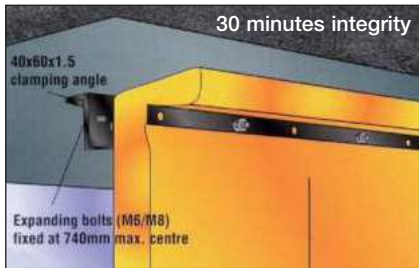




ROCKWOOL FIRE BARRIER

FIRE CAVITY BARRIER FOR ROOF VOIDS, LOFT AREAS AND SUSPENDED CEILING VOIDS

METAL AND CONCRETE

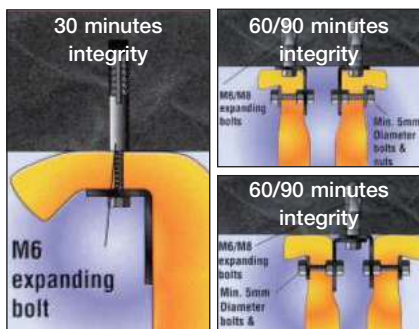


Soffit fixing

When fixing to a concrete soffit, a continuous clamping angle, size 40 x 60 x 1.5mm or 50 x 50 x 1.5mm, should be attached with M6 minimum expanding bolts anchored at 740mm maximum centres. 5mm diameter bolts and nuts should be used to attach Rockwool Fire Barrier to the clamping strap at maximum 400mm centres.

Fixing options

If direct fixing to a concrete soffit without the clamping strap, M6 expanding bolts at 300mm centres to the soffit should be used. Adjacent barriers should be wired tightly together. Rockwool Fire Barrier should also be draped over the suspended ceiling or wired to the grid. Vertical fixing to a perimeter wall should be made with a 1.5mm clamping strap.



Roofing - Troughed metal decking

In roof constructions with troughed metal decking, continuously support and clamp the top edge of the Rockwool Fire Barrier to the structure instead of the roof decking to maintain the fire integrity of the construction. Ensure all open spaces are tightly and securely filled, leaving no visible gaps.



TIMBER

Rafters - 50mm thick

In roof constructions where the timber is 50mm minimum thick, Rockwool Fire Barrier must be tightly butt jointed and stitched. The clamping strap should be attached with M6 screws or bolts at a maximum 300mm centres.

Rafters - less than 50mm thick.

Where the timber is less than 50mm thick, both sides of the truss will require the application of Rockwool Fire Barrier. The clamping straps should be attached with screws at a maximum of 400mm centres.

Transverse to Rafters

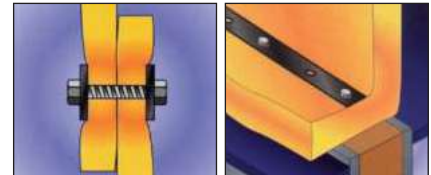
When installing Rockwool Fire Barrier transverse to the rafters, a continuous clamping strap must be secured to the underside of each rafter with M6 coach screws, or similar.

WALL JUNCTIONS

At the junction of separating and external walls in a timber frame construction, Rockwool Fire Barrier should be used to a depth of 300mm to provide a cavity barrier.

PARTITION HEADS

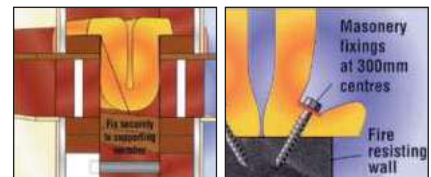
At the head of a fire rated partition, M6 coach screws should be used at a maximum of 400mm centres to attach the clamping strap to the head plate.



LONG DROPS

A drop of up to 6 metres can be achieved using a single length, or jointing in the manner shown. Subsequent lengths of up to 6 metres must use a clamping angle and strap fixing, suspended on hangers which are fixed directly to the soffit and extending downwards to provide a minimum overlap of 50mm at the junction of the fire barrier.

FLOOR JUNCTIONS

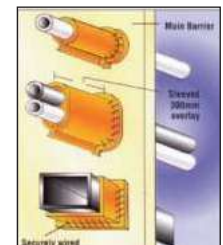


FIRE RESISTING WALLS

If the Rockwool Fire Barrier is used as a continuation of a fire resisting wall it is advisable that mechanical fixing and clamping strap is used.

PIPEWORK DUCTING AND BEAMS

When the area to be treated is penetrated by pipes, ducts or beams.



Rockwool Fire Barrier should be cut to accommodate the infrastructure and then re-stitched using a minimum 0.5mm wire with a 100mm maximum gap between stitches.

The pipe duct or beam is then sleeved one side for the 30 minute barrier and both sides for the 60 minute barrier, with a 300mm minimum overlay wired to the main barrier.



FP CURTAIN FOR 30 AND 90 MINUTE PROTECTION

FIRE BARRIER FOR ROOF VOIDS, LOFT AREAS AND SUSPENDED CEILING VOIDS

SINGLE MEMBRANE INTEGRITY ONLY FIRE CAVITY BARRIER

- Lightweight
- Versatile
- Easily Modified
- Waterproof
- Tested to BS476 Part 22
- Easy to handle
- Simple to fix

A lightweight, flexible, and very strong curtain which provides a smoke and fire cavity barrier. It consists of an aluminium polymer coated glass fabric which is stretched between perimeter fixings and staple jointed for maximum effectiveness.

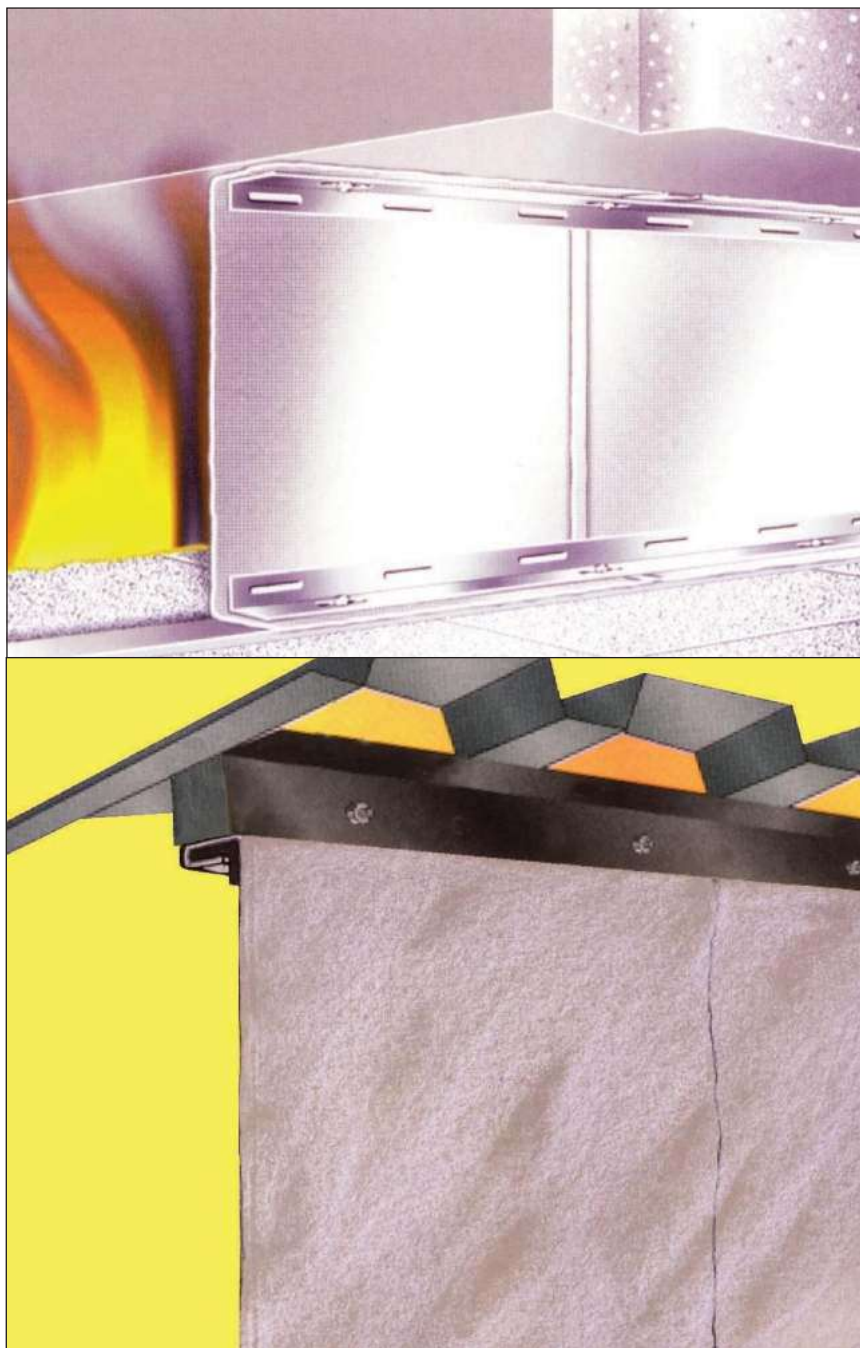
The main areas of use are for sub dividing ceiling voids, between a floor slab and false ceiling, for sub dividing a roof void and for partitioning the void below a raised floor system.

FP Curtain may be used when authorised by a Building Control Officer where insulation is not a pre-requisite.

FP Curtain has been designed to provide:

- A lightweight flexible barrier
- Up to 90 minutes stability and integrity
- Ease of handling in confined spaces
- A barrier which is easily installed using basic hand tools
- Fast track installation with stapled seams
- A product which is free from loose mineral fibres

FP90 and FP30 Curtain has been tested in general accordance with clause 5 BS 476 Part 22: 1987 for stability and integrity.



Passive Fire Protection



FIREWISE
SUPPLIES LTD



FP CURTAIN FOR 30 AND 90 MINUTE PROTECTION

FIRE BARRIER FOR ROOF VOIDS, LOFT AREAS AND SUSPENDED CEILING VOIDS

INSTALLATION

1. Fold edge of curtain around a mild steel framing angle with the dimensions of 40mm x 50mm x 0.8mm <-> 1.0mm as shown.

2. Loose fix the top edges of the curtain at 250mm centres, to the underside of the soffit, using 65 x 6mm diameter "sleeve" anchor bolts and 38mm diameter washers.

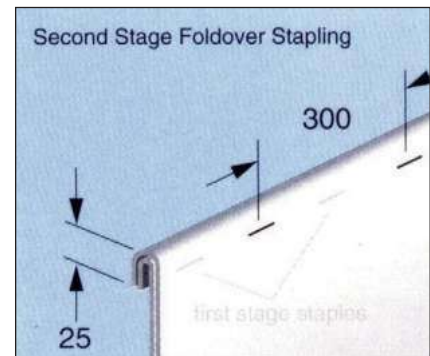
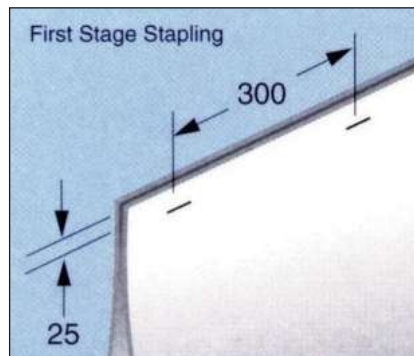
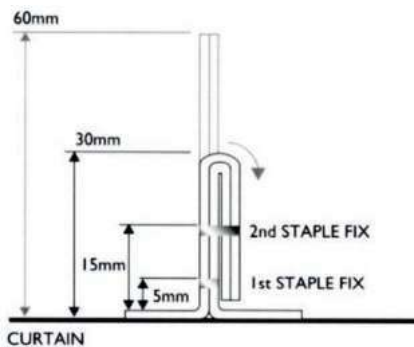
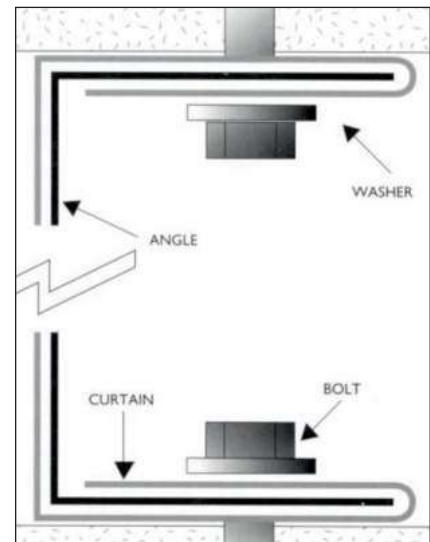
3. Fix vertical seams at 60mm centres, 5mm away from the face of the curtain and staple the vertical seams using zinc coated steel staples, 11.5mm x 6mm x 0.5mm, see 5.

4. Secure the top perimeter framing angle, followed by fixing and side perimeter angles, as specified above. The curtain must cover three sides of the angle.

5. All joints to overlap 60mm. Fold in half to form a double overlap and staple together as before, at 60mm centres, 15mm away from the face of the curtain and at a 30mm stagger to the first fix positions, as shown.

Alternative angles

32mm x 19mm x 0.9mm
50mm x 25mm x 0.9mm



HEALTH & SAFETY SPECIFICATIONS

Type of Product

Woven glass fibre textile for use as fire barrier.

Hazards Identification

Not defined as hazardous by the Chemicals (Hazards Information and Packaging) Regulations, 1993.

First Aid Measures

Inhalation: Remove to fresh air, drink water to clear throat and blow nose to evacuate fibres.

Skin Contact: Wash with plenty of soap and water.

Eye Contact: Flush with copious amount of water. In case of continued eye irritation seek medical advice.

Ingestion: Do not induce vomiting. Keep at rest and obtain immediate medical attention.

Fire Fighting Measures

Suitable Extinguishing Media: All standard fire fighting media.

Exposure Hazards: Avoid inhalation of smoke or fumes.

Accidental Release Measures

Personal Precautions: Not required.

Environmental Precautions: No special requirements.

Disposal Considerations

Dispose as solid waste in accordance with local regulations.

Handling and Storage

Handling: Minimise airborne dust. Wear an approved mask or respirator if dust concentration exceeds local control limits and avoid contact with exposed skin. Storage: No special requirements.

Exposure Controls/Personal Protection

Respiratory Protection: Wear mask if exposed to dusty conditions.

Hand Protection: Gloves should be worn when handling this material.

Eye Protection: Goggles should be worn when using this material.

Materials to avoid: Basic phosphates, alkalis, hydrofluoric acid.

The above information is based on Firewise understanding of current knowledge and legislation and is given in good faith. The user is responsible for establishing safe procedures for using the product.

Fire Protection



CAVITY WALL BARRIER & VENTILATED CAVITY WALL BARRIER

For use in cavities in block or brick walls or between brick walls and timber-framed buildings.

DESCRIPTION

A lightweight and easy-to-use cavity wall barrier available in non-ventilated and ventilated versions and in various widths, for use in cavities in block or brick walls or between brick walls and timber-framed buildings. It can be fixed across the cavity or it can be self-supporting.

USE

There are six types of cavity wall barrier:

1. Non-ventilated wall barrier (WB) is made from impregnated cloth and galvanised wire mesh and is ideal for fixing to cavity walls before fixing door/window frames (see illustrations 5 & 6 on next page). It can be pressed into a V-shape to be self-supporting in the cavity (see illustration 12 on next page). The WB barriers can be fitted with a sponge as a cold bridge.

2. Ventilated wall barrier (VWB) is made from intumescent material adhered to impregnated cloth with reinforced kraft paper and galvanised wire mesh inside. It can have the following vent patterns: pattern A has one row of small vents, pattern B has two rows of small vents, pattern C has three rows of small vents, pattern D has three rows of medium vents, and pattern E has three rows of large vents. See vent diagram.

3. In response to requests for a non-ventilated wall barrier like WB but with a facility to let moisture out and keep smoke out of the cavity, this can be achieved with the VWBG barrier consisting of the standard WB barrier but with rubber grommets and plastic tubes coming out of the seal, through the brick/block joints to the outside (see illustration 10 on next page).

All the above barriers can be made to any width and 950mm or 1900mm standard lengths.

4. Non-ventilated wall barrier sponge (WBS). Compress the fireproof sponge into cavity. Can be adhered with intumescent adhesive (IA).

5. Ventilated wall barrier sponge (VWBS). Compress the fireproof sponge into cavity. It can have the following vent patterns: pattern A has one row of small vents, pattern B has two rows of small vents, and pattern F has one row of large vents. See vent diagram below. Can be adhered with intumescent adhesive (IA).

6. Non-ventilated waterproof Thermal Cavity Barrier (TCB) offers both fire protection and effective thermal protection around window and door apertures.



PERFORMANCE

Tested to BS476 Part 22 (1987), achieving up to 104 minutes integrity and 100 minutes insulation.

Also tested to BS476 Part 22 (1987) achieving 132 minutes. Tested to BE EN1363-1.

VENTILATION HOLE PATTERNS

SPONGE

Standard Sponge Widths:
80mm, 135mm, 165mm,
210mm, 265mm



Options C, D and E
not available in
Sponge version



FOILED

Standard Foil Widths:
75mm, 120mm, 150mm,
200mm, 250mm



Option F not available in
the foiled version



ORDERING REFERENCES

ORDERING REFERENCES		
WB	Foiled Cavity Wall Barrier	(non-ventilated)
VWB	Foiled Cavity Wall Barrier	(ventilated with apertures)
WBS	Sponge Cavity Wall Barrier	(non-ventilated)
VWBS	Sponge Cavity Wall Barrier	(ventilated with apertures)
VWBG	Foiled Cavity Wall Barrier	(ventilated with grommets and tubes, stopping smoke in the cavity)
TCB	Sponge Thermal Cavity Barrier	(non-ventilated)

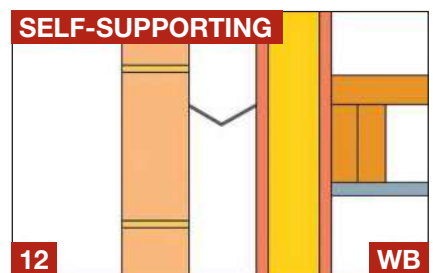
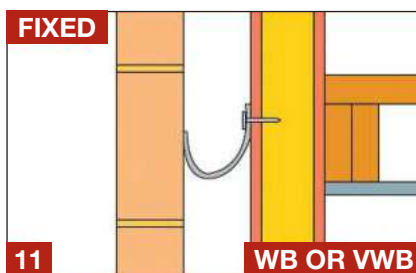
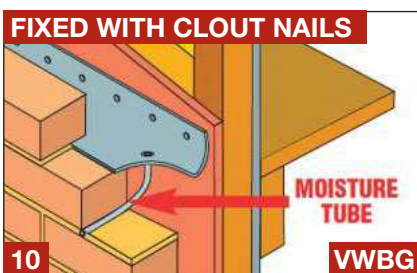
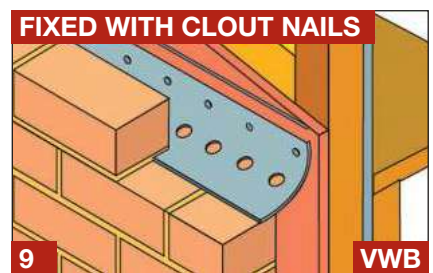
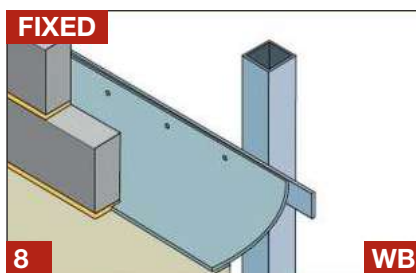
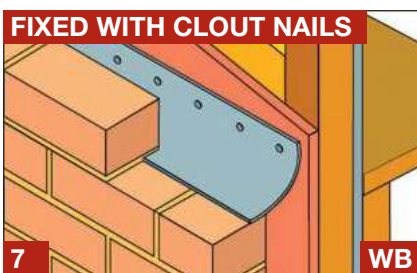
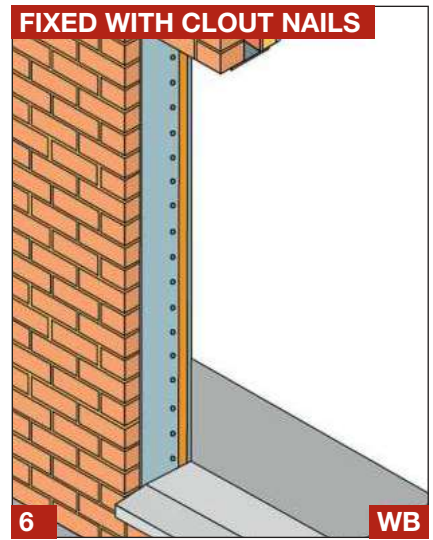
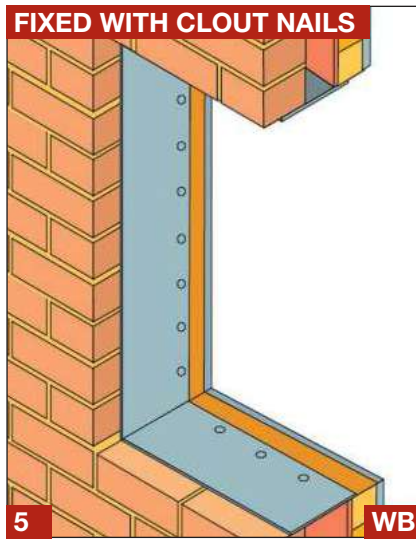
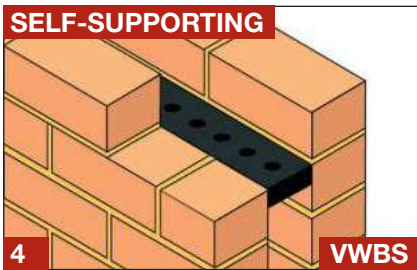
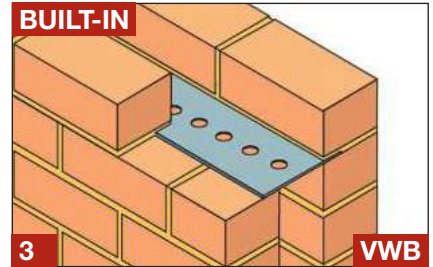
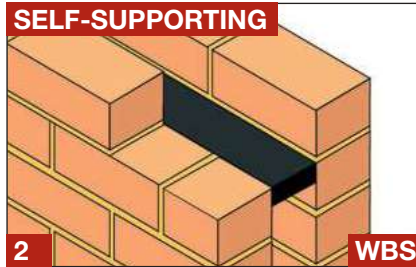
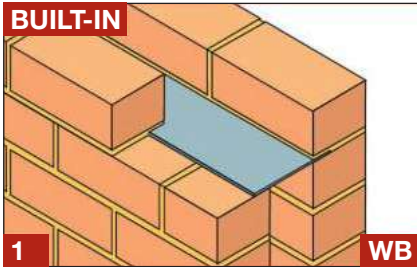
Standard foil barrier widths: 75mm, 120mm, 150mm, 200mm, and 250mm.
Standard sponge barrier widths: 80mm, 135mm, 165mm, 210mm, and 265mm.
See price list for full range. State gap width when ordering. Other sizes made to order.

Fire Protection



CAVITY WALL BARRIER & VENTILATED CAVITY WALL BARRIER

For use in cavities in block or brick walls or between brick walls and timber-framed buildings.



Fire Fighting Equipment



FIRE EXTINGUISHERS

Fire fighting

INTRODUCTION

Generally, large fires start as small fires, often of a size that can be tackled by suitably trained staff using portable fire extinguishers. Therefore, action by staff can prevent development of a fire that would pose a threat to life, property or operation of a business. In some premises, early action to control a fire in this way can also enable people to assist others, such as disabled people, residents in a care home or patients in a hospital, who are at greater risk in the event of fire.

LEGAL REQUIREMENTS

The Regulatory Reform (Fire Safety) Order 2005 which applies to virtually all premises other than dwellings, requires that, where necessary in order to safeguard everyone who is lawfully on, or in the immediate vicinity of, the premises, the premises must be equipped with appropriate fire-fighting equipment. This requirement is supplemented by a requirement to take measures for fire-fighting, adapted to the nature of the activities carried on, the size of the undertaking and of the premises concerned.

The necessity of fire-fighting equipment under the Order may arise from the features of the premises, the activity carried on in the premises, the fire hazards or any other relevant circumstances. Establishment of the need for fire-fighting equipment arises from a fire risk assessment and it is likely to be extremely rare for any fire risk assessment to determine that the provision of such equipment is not necessary.

OFFICIAL GUIDANCE






The Regulatory Reform (Fire Safety) Order is supported, in England and Wales, by eleven guides produced by the Department for Communities and Local Government (DelG). The guides advocate the provision of fire-fighting equipment in premises, and they provide recommendations for the selection and siting of appliances.

TYPES OF FIRE EXTINGUISHER

Portable fire extinguishers are the most universally applicable form of fire extinguishing appliance. Trolley mounted extinguishers are used only for special applications, where there may be a need for trained operators to tackle a large fire, such as one involving a significant quantity of flammable liquid.

Fires are classed according to the material that is burning. The fire extinguishers provided need to be appropriate for the class of fire. The classes are described in the table below



Class of Fire		Description
	Class A	Fires involving solid, usually carbon-based materials, which burn with glowing embers, such as wood, paper or textiles
	Class B	Fires involving flammable liquids, such as petrol, diesel, oils, etc.
	Class C	Fires involving gases
	Class D	Fires involving metals
	Class F	Fires involving cooking fats and oils, such as would be found in deep-fat fryers

Portable fire extinguishers are rated according to the maximum size of fire that a trained operator can control with the extinguisher. In most workplaces, such as offices, shops and factories, water, or water-based extinguishers are appropriate. Typically, a 13A-rated fire extinguisher should be provided for each 200 square metres of floor area and extinguishers should be sited at fire exits and on escape routes, such that no one needs to walk further than 30m to reach the nearest fire extinguisher.

These Class A extinguishers should be supplemented by extinguishers suitable for use on live electrical equipment (normally carbon dioxide extinguishers) wherever such equipment is situated within the area. Where there is a commercial kitchen with deep-fat fryers, one or more Class F extinguishers and/or fire blankets are likely to be appropriate.

Fire Fighting Equipment



CO₂ EXTINGUISHERS

Extinguisher FPC2 / FPC5

INTRODUCTION

Both of the Firechief CO₂ models have non-conductive, anti-static horns and are suitable for situations involving flammable liquids and electrical hazards. CO₂ is harmless to delicate equipment and materials. Ideal for modern office environments, all electrical risks and where oils, spirits, solvents and waxes are in use.

- Squeeze grip operation
- Corrosion resistant finish
- Harmless to machinery
- Kitemarked to BSEN3
- Complete with bracket



Details	FPC2	FPC5
Capacity	2Kg	5Kg
Fire Rating	34B	70B
Height	490mm	750mm
Cylinder diameter	117mm	152mm
Overall width	180mm	310mm
Filled weight	4.91kg	11.43kg
Range of throw	>4m	>4m
Duration of discharge	8 secs	14 secs
Working pressure at 20° c	56 bar	56 bar
Temperature range	-20 to 60° c	-20 to 60° c
BS EN3 approved	✓	✓
MED approved		✓



Fire Fighting Equipment



WATER EXTINGUISHERS

Extinguisher FPW9

INTRODUCTION

Water is still one of the most useful of all available fire extinguishants, and these Firechief water extinguishers offer excellent fire suppression for attacking freely burning materials such as paper and wood.

- Squeeze grip operation
- Corrosion resistant finish
- Internal polyethylene lining
- Protective plastic base
- Kitemarked to BSEN3
- Complete with bracket

Details	FPW9
Capacity	9Ltr
Fire Rating	21A
Height	600mm
Cylinder diameter	189mm
Overall width	300mm
Filled weight	14.18kg
Range of throw	>4m
Duration of discharge	50 secs
Working pressure at 20° c	15 bar
Temperature range	0 to 60° c
BS EN3 approved	✓



FPW9



WATER + ADDITIVE EXTINGUISHERS

Extinguisher FPWA3 / FPWA6

INTRODUCTION

Water + Additive extinguishers possess all the features of a water extinguisher with the advantage of being a compact and lightweight unit. Achieving a 13A rating with a 3 litre extinguisher, weighing only 5.6kg, makes fire fighting within Health and Safety lifting guidelines a possibility.

- Squeeze grip operation
- Corrosion resistant finish
- Internal polyethylene lining
- Protective plastic base
- Kitemarked to BSEN3
- Complete with bracket

Details	FPWA3	FPWA6
Capacity	3Ltr	6Ltr
Fire Rating	13A	21A
Height	435mm	565mm
Cylinder diameter	130mm	160mm
Overall width	290mm	290mm
Filled weight	5.55kg	10.09kg
Range of throw	>2m	>4m
Duration of discharge	18 secs	30 secs
Working pressure at 20° c	15 bar	15 bar
Temperature range	0 to + 60° c	0 to + 60° c
BS EN3 approved	✓	✓



FPWA6

FPWA3



Fire Fighting Equipment



FIREWISE
SUPPLIES LTD



DRY POWDER EXTINGUISHERS

Extinguisher FPP1 / FPP2 / FPP4 / FPP6 / FPP9

INTRODUCTION

Dry powder is a highly versatile Class 'A', 'B' and 'C' fire-fighting medium for most fire risks. In addition to dealing with electrical hazards, flammable liquids and gases, this extensive Firechief range of dry powder extinguishers is also effective on vehicle fires.

- Multi-purpose application
- Squeeze grip operation
- Corrosion resistant finish
- Protective plastic base with models FPP4, FPP6, FPP9
- Kitemarked to BSEN3
- Complete with bracket



Details	FPP1	FPP2	FPP4	FPP6	FPP9
Capacity	1Kg	2Kg	4Kg	6Kg	9Kg
Fire Rating	8A 55B	13A 70B	21A 113B	34A 233B	43A 233B
Height	340mm	370mm	430mm	565mm	600mm
Cylinder diameter	80mm	112mm	160mm	160mm	189mm
Overall width	135mm	150mm	310mm	290mm	300mm
Filled weight	1.67kg	3.62kg	6.98kg	9.62kg	14.37kg
Range of throw	>2m	>2m	>4m	>4m	>4m
Duration of discharge	9 secs	10 secs	12 secs	15 secs	15 secs
Working pressure at 20° c	15 bar	15 bar	15 bar	15 bar	15 bar
Temperature range	-30 to 60° c	-30 to 60° c	-30 to 60° c	-30 to 60° c	-30 to 60° c
BS EN3 approved	✓	✓	✓	✓	✓
MED approved				✓	✓



Fire Fighting Equipment



SPRAY FOAM EXTINGUISHERS

Extinguisher FPF2 / FPF3 / FPF6 / FPF9

INTRODUCTION

Firechief spray foam extinguishers provide a fast, powerful means of tackling class 'A' and 'B' fires. Highly effective against petrol and volatile liquids, forming a flame smothering seal over the surface and also preventing re-ignition, they are ideal for multi-risk usage.

- Spray nozzle
- Squeeze grip operation
- Corrosion resistant finish
- Internal polyethylene lining
- Protective plastic base
- Kitemarked to BSEN3
- Complete with bracket



Details	FPF2	FPF3	FPF6	FPF9
Capacity	2Ltr	3Ltr	6Ltr	9Ltr
Fire Rating	8A 55B	13A 89B	13A 144B	21A 183B
Height	395mm	435mm	565mm	600mm
Cylinder diameter	112mm	130mm	160mm	189mm
Overall width	150mm	290mm	290mm	300mm
Filled weight	3.8kg	5.55kg	10.09kg	14.21kg
Range of throw	>2m	>2m	>4m	>4m
Duration of discharge	12 secs	18 secs	30 secs	40 secs
Working pressure at 20° c	15 bar	15 bar	15 bar	15 bar
Temperature range	0 to 60° c	0 to 60° c	0 to 60° c	0 to 60° c
BS EN3 approved	✓	✓	✓	✓
MED approved				✓

Storage & Protection



MOBILE FIRE POINTS

Double fire extinguisher trolley*

PRODUCT CODES

FCT2

FCT2 c/w RHB

FCT2B

FCT2B c/w RHB



FCT2

Product Code	Capacity	Height	Width	Depth
FCT2	2 x 9kg / 9L Ext.	101cm	41cm	45cm
FCT2 c/w RHB	2 x 9kg / 9L Ext. & Bell	101cm	41cm	47cm
FCT2B	2 x 9kg / 9L Ext. & Bucket	116cm	41cm	45cm
FCT2B c/w	2 x 9kg / 9L Ext. & Bucket & Bell	116cm	41cm	47cm

ROTATIONALLY-MOULDED EXTINGUISHER STAND

Extinguisher stand* HS26

FEATURES

- Compact design specifically for 1 x 6l foam and 1 x 2kg CO₂ extinguishers
- Available in red, grey and cream
- Conveniently moulded ID sign position
- Ideal for shop and office locations

Product Code	Capacity	Height	Width	Depth
HS26	1 x 6l foam + 1 x 2kg CO ₂ ext.	620mm	480mm	270mm



HS26

*Fire extinguishers supplied separately

Storage & Protection



ROTATIONALLY-MOULDED CABINETS

Single extinguisher cabinet HS70 / HS70K / HS83 / HS83K

INTRODUCTION

Manufactured in high impact resistant plastic, this range of rotationally-moulded cabinets is designed and built to provide long lasting protection. The many unique features include:

- Corrosion-proof design
- Wall, floor, post and vehicle mounting
- Polypropylene vision panels in door
- Internal equipment retaining straps
- Eye-catching colour scheme for maximum impact
- Available with integral cabinet alarm



Product Code	Description	Capacity	Dimensions	Height	Width	Depth
Cabinet HS70	Standard Cabinet	1 x 6kg / 6L	Overall	705mm	320mm	253mm
		Extinguisher	Internal	620mm	260mm	200mm
Cabinet HS70K	Cabinet with triangular keylocks and keybox	1 x 6kg / 6L	Overall	705mm	320mm	253mm
		Extinguisher	Internal	620mm	260mm	200mm
Cabinet HS83	Standard Cabinet	1 x 9kg / 9L	Overall	830mm	330mm	263mm
		Extinguisher	Internal	750mm	270mm	205mm
Cabinet HS83K	Cabinet with triangular keylocks and keybox	1 x 9kg / 9L	Overall	830mm	330mm	263mm
		Extinguisher	Internal	750mm	270mm	205mm

ROTATIONALLY-MOULDED CABINETS

Double extinguisher cabinet HS72 / HS72K

FEATURES

- Corrosion-proof design
- Wall, floor, post and vehicle mounting
- Polypropylene vision panels in door
- Internal equipment retaining straps
- Eye-catching colour scheme for maximum impact
- Available with integral cabinet alarm



Product Code	Description	Capacity	Dimensions	Height	Width	Depth
Cabinet HS72	Standard Cabinet	2 x 9kg / 9L	Overall	720mm	580mm	270mm
		Extinguisher	Internal	640mm	525mm	205mm
Cabinet HS72K	Cabinet with triangular keylocks and keybox	2 x 9kg / 9L	Overall	720mm	580mm	270mm
		Extinguisher	Internal	640mm	525mm	205mm

Storage & Protection



ROTATIONALLY-MOULDED EXTINGUISHER STANDS

Extinguisher stands* HS10 / HS20 / HS30 / HSP3

FEATURES

- Robust rotationally-moulded design
- Manufactured in high impact and chemical resistant plastic
- Available in red, grey and cream
- Fully free-standing design with skirting board recess
- Suitable for use in food preparation and clean room areas
- Optional Firepoint HSP3 provides support for CO₂ extinguishers



Product Code	Capacity	Height	Width	Depth
HS10	1 x 9kg / 9L ext.	705mm	320mm	253mm
HS20	2 x 9kg / 9L ext.	620mm	260mm	200mm
HS30	3 x 9kg / 9L ext.	705mm	320mm	253mm
HSP3	1 x CO ₂ ext.	240mm	230mm	210mm

ROTATIONALLY-MOULDED EXTINGUISHER STAND

Extinguisher stand* HS26

FEATURES

- Compact design specifically for 1 x 6l foam and 1 x 2kg CO₂ extinguishers
- Available in red, grey and cream
- Conveniently moulded ID sign position
- Ideal for shop and office locations

Product Code	Capacity	Height	Width	Depth
HS26	1 x 6l foam + 1 x 2kg CO ₂ ext.	620mm	480mm	270mm



*Fire extinguishers supplied separately

Fire Fighting Equipment



FIRE BLANKETS

Versatility in fire fighting

INTRODUCTION

Historically associated with combating chip pan fires, the fire fighting versatility of the fire blanket is becoming increasingly recognized by fire safety professionals. From personnel to waste bin fires, offices to canteens, the applications for this simple-to-use and yet extremely effective fire fighting aid are numerous.

Easy to install and service, the modern fireblanket fulfills an essential role in most fire safety strategies. However, as with any life-saving device, the function of the product in the heat of the moment is the all-important consideration. When mounted in an accessible position near to the potential hazard and housed in an easily opened container, the blanket can be swiftly deployed and in action in a matter of seconds - crucial seconds in the development of an uncontrollable blaze.

Technically, a fire blanket extinguishes fire by forming an air tight seal, smothering the fire and cutting off the supply of oxygen. For this reason, when developing the high-performance textiles suited to this purpose there are many elements to be considered. Fabric flexibility, thermal coefficient, electrical conductivity and adequate vapour barriers to prevent the escape of flammable gases, all play their part as essential factors that differentiate one fire blanket from another. This is why we take the function and quality of our fire blankets so seriously - lives are at stake and there is no scope for compromise. Insisting that everyone of our fire blankets carries the British Standards Kitemark is fundamental in ensuring that this is the case.

Independent product testing to BSEN 1869: 1997, product traceability and rigid quality control procedures are just some of the safeguards implemented by the British Standards Kitemark Scheme. As a responsible manufacturer, we see the Kitemark as vital in assuring our customers of reliable product quality - every time.

By offering a choice of five container types, combined with an option of two approved fire blanket cloths, we are more than confident that there is a fire blanket within our range for every situation.

Our standard K7S cloth offers excellent value for money. This quality, heavyweight blanket is ideal for all applications and comes with a 5-year cloth guarantee.

Alternatively, our high performance K100 blanket combines a dense weave, unrivalled high-temperature coating and excellent draping characteristics to offer the ultimate fire blanket. Carrying a 10-year cloth guarantee, this blanket outperforms all others when subjected to test conditions exceeding the requirements of BSEN 1869, 1997.



'THE POD' FIRE BLANKET

- Single piece design for long lasting service
- No endcaps to lose
- Aesthetically pleasing design
- 2 sizes of container to accommodate full range of blanket sizes
- Hinged lid for easy extraction
- Moulded keyhole for added strength when hanging
- Large labelling area for maximum impact

Code	Size	Blanket Grade	Colour
Blanket PCR1/K75	1m x 1m	Standard	Red
Blanket PCR2/K75	1.2m x 1.2m	Standard	Red
Blanket PCR3/K75	1.8m x 1.2m	Standard	Red
BlanketPCR4/K75	1.8m x 1.75m	Standard	Red
Blanket PCW1/K75	1m x 1m	Standard	White
Blanket PCW2/K75	1.2m x 1.2m	Standard	White
Blanket PCW3/K75	1.8m x 1.2m	Standard	White
Blanket PCW4/K75	1.8m x 1.75m	Standard	White
Blanket PCR1/K100	1m x 1m	Premium	Red
Blanket PCR2/K100	1.2m x 1.2m	Premium	Red
Blanket PCR3/K100	1.8m x 1.2m	Premium	Red
Blanket PCR4/K100	1.8m 1.75m	Premium	Red
Blanket PCW1/K100	1m x 1m	Premium	White
Blanket PCW2/K100	1.2m x 1.2m	Premium	White
Blanket PCW3/K100	1.8m x 1.2m	Premium	White
Blanket PCW4/K100	1.8m x 1.75m	Premium	White

Fire Fighting Equipment



FIRE BUCKETS

Versatility in fire fighting



FLAMEZORB & FIRE SAND FZB1

- Excellent absorbent properties far superior to sand
- Bag contents to fill 10L fire bucket
- Effortless clear up and disposal unlike forecourt sand
- Fully conforms to BS476 Part 7 Class 2

Fire Sand

- Dry yellow sand sourced for fire fighting applications
- Supplied in 12.5kg bags for easy handling

Product code	Description
FZB1	Flamezorb
BFS1	Fire Sand



METAL FIRE BUCKET MFB1

Bucket lid sold separately

Product code	Description
MFB1	Metal Fire Bucket
FBB	Fire Bucket Bracket

ROTARY HAND BELL RHB



- Tried and tested robust design
- Bell sounds 60db alarm at up to 35 metres
- Red coated diecast aluminium dome
- Diecast aluminium base plate
- Pre-drilled flange for simple installation



PLASTIC FIRE BUCKET PFB1

- Suitable for many applications, including garage forecourt protection, clearing up spillages etc.
- Choice of bucket style to meet every requirement
- 10 litre bucket capacity
- Fire bucket bracket available

Bucket lid sold separately

Product code	Description
PFB1	Plastic Fire Bucket

Safety Signs

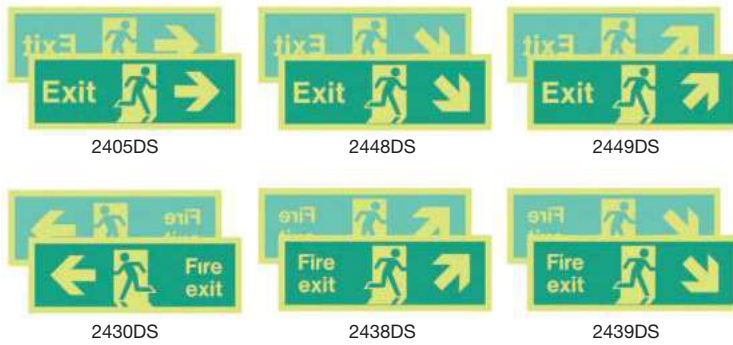


ESCAPE ROUTE SIGNS

Photoluminescent Signs



Double Sided Escape Route Signs



Add this letter to sign code to specify size when ordering	T	K	J
Sign			
Viewing distance	17m	22m	30m
Examples of use	Small offices, small shops and factories	Large offices, large factories, warehouses and shopping centres	Large warehouses, distribution centres and exhibition halls
Size	(120 x 340mm)	(150 x 400mm)	(200 x 450mm)



Hanging Kit

Product Code: **ZHOOKS/CLIPS**

This hanging kit consists of two spring double hook fixings, for flat or suspended ceilings.

The spring double hooks enable you to 'stretch' the escape route sign to a viewing height that can be easily seen by occupants travelling within the means of escape route

The signs shown on this page are available in photoluminescent rigid PVC (R) and photoluminescent self-adhesive vinyl (V)

Safety Signs





EXIT DOOR OPERATION & ESCAPE ROUTE INFORMATION

Photoluminescent Signs

 24304 PT (100 x 300mm) 24304 K (150 x 400mm)	 24775Y (150 x 100mm)	 24776Y (150 x 100mm)	 25129D (200 x 150mm)	 24128D (200 x 150mm)
 24303PT (100 x 300mm)				
 24228PT (100 x 300mm)	 24075M (80 x 200mm)	 24467M (80 x 200mm)	 24468M (80 x 200mm)	 24469M (80 x 200mm)
 24248PT (100 x 300mm)	 24273M (80 x 200mm)	 24226M (80 x 200mm)	 24227M (80 x 200mm)	
 24273A (100 x 100mm)	 24461A (100 x 100mm)	 24462A (100 x 100mm)	 26434C (150 x 150mm)	

Exit Door Signs and Instructions

 25110E (200 x 200mm)	 25257E (200 x 200mm)	 25421B (80 x 80mm)	 25257B (80 x 80mm)	 25140B (80 x 80mm)	 25141B (80 x 80mm)	 25424B (80 x 80mm)		
		 25123A (100 x 100mm)	 25067A (100 x 100mm)	 25137A (100 x 100mm)	 25421A (100 x 100mm)	 25257A (100 x 100mm)		
 25141A (100 x 100mm)	 25110A (100 x 100mm)	 25033A (100 x 100mm)	 25124A (100 x 100mm)	 25485A (100 x 100mm)	 25190A (100 x 100mm)	 25140A (100 x 100mm)	 25424A (100 x 100mm)	 25480A (100 x 100mm)

The signs shown on this page are available in photoluminescent rigid PVC (R) and photoluminescent self-adhesive vinyl (V)

Safety Signs



FIRE EXTINGUISHER IDENTIFICATION SIGNS

Photoluminescent Signs



26366M
(200 x 80mm)



26265M
(200 x 80mm)



26360M
(200 x 80mm)



26361M
(200 x 80mm)



26362M
(200 x 80mm)



26365M
(200 x 80mm)



26266M
(200 x 80mm)



26267M
(200 x 80mm)



26364M
(200 x 80mm)



26386M
(200 x 80mm)



26387M
(200 x 80mm)



26474M
(200 x 80mm)



26370 ID (105 x 150mm)
D (150 x 200mm)



26373 ID (105 x 150mm)
D (150 x 200mm)



26374 ID (105 x 150mm)
D (150 x 200mm)



26372 ID (105 x 150mm)
D (150 x 200mm)



26371 ID
(105 x 150mm)



26368 ID
(105 x 150mm)



26375 ID
(105 x 150mm)



26376 ID
(105 x 150mm)



26408 ID
(105 x 150mm)



26407 ID
(105 x 150mm)



26474 ID
(105 x 150mm)



26376 ID
(105 x 150mm)

The signs shown on this page are available in photoluminescent rigid PVC (R) and photoluminescent self-adhesive vinyl (V)

Safety Signs



EQUIPMENT LOCATION SIGNS

Photoluminescent Signs



26490D
(200 x 150mm)



26450D
(200 x 150mm)



26495D
(200 x 150mm)



26459D
(200 x 150mm)



26451D
(200 x 150mm)



26490C
(150 x 150mm)



26450C
(150 x 150mm)



26495C
(150 x 150mm)



26459C
(150 x 150mm)



26422B
(80 x 80mm)



26395D ID
(150 x 200mm)



26394D
(150 x 200mm)



26422A
(100 x 100mm)



26314A
(100 x 100mm)



26421A
(100 x 100mm)



26420A
(100 x 100mm)



26424A
(100 x 100mm)



26310M (80 x 200mm)



26454M (80 x 200mm)



26068M (80 x 200mm)



26483M (80 x 200mm)



26449M (80 x 200mm)



26448M (80 x 200mm)



26459M (80 x 200mm)



26401M (80 x 200mm)



26410M (80 x 200mm)



26053M (80 x 200mm)



26054M (80 x 200mm)



26055M (80 x 200mm)



26284M (80 x 200mm)



25546M (80 x 200mm)

The signs shown on this page are available in photoluminescent rigid PVC (R) and photoluminescent self-adhesive vinyl (V)

Safety Signs



HAZARD WARNING & PROHIBITION SIGNS

Photoluminescent Signs



27424D
(200 x 150mm)



27422D
(200 x 150mm)



27423D
(200 x 150mm)



27440D
(200 x 150mm)



28143PT (100 x 300mm)



28091PT (100 x 300mm)



28067PT (100 x 300mm)



28014PT (100 x 300mm)



28103PT (100 x 300mm)



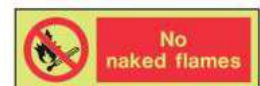
28138PT (100 x 300mm)



28116PT (100 x 300mm)



28064PT (100 x 300mm)



28109PT (100 x 300mm)



28172PT (100 x 300mm)



28115PT (100 x 300mm)



28180PT (100 x 300mm)



28001PT (100 x 300mm)

Call Point Signs



26241B
(80 x 80mm)



26257B
(80 x 80mm)

Fire Action Notices



25414D (200 x 150mm)



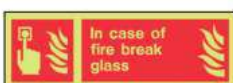
25425D (200 x 150mm)



25478D (200 x 150mm)



25479D (200 x 150mm)



26159N (50 x 150mm)



25487N (50 x 150mm)



24850N (50 x 150mm)



28252N (50 x 150mm)

The signs shown on this page are available in White Matt Rigid PVC only

Safety Signs



ESCAPE ROUTE SIGNS

Standard Safety Signs



W401T (120 x 340mm)
W401K (150 x 400mm)



W405T (120 x 340mm)
W405K (150 x 400mm)



W446T (120 x 340mm)
W446K (150 x 400mm)



W448T (120 x 340mm)
W448K (150 x 400mm)



W443T (120 x 340mm)
W443K (150 x 400mm)



W460T (120 x 340mm)
W460K (150 x 400mm)



W409T (120 x 340mm)
W409K (150 x 400mm)



W447T (120 x 340mm)
W447K (150 x 400mm)



W449T (120 x 340mm)
W449K (150 x 400mm)



W444T (120 x 340mm)
W444K (150 x 400mm)



W458T (120 x 340mm)
W458K (150 x 400mm)



W439T (120 x 340mm)
W439K (150 x 400mm)



W433T (120 x 340mm)
W433K (150 x 400mm)



W435T (120 x 340mm)
W435K (150 x 400mm)



W430T (120 x 340mm)
W430K (150 x 400mm)



W436T (120 x 340mm)
W436K (150 x 400mm)



W438T (120 x 340mm)
W438K (150 x 400mm)



W434T (120 x 340mm)
W434K (150 x 400mm)



W437T (120 x 340mm)
W437K (150 x 400mm)

Exit Door Operation and Escape Route Information



W4304PT (100 x 300mm)



W4303PT (100 x 300mm)



W4228PT (100 x 300mm)



W4775M
(200 x 80mm)



W4776M
(200 x 80mm)



W6434C
(150 x 150mm)



W5129D
(200 x 150mm)



W4128D
(200 x 150mm)

Exit Door Signs and Instructions



W5110E
(200 x 200mm)



W5257E
(200 x 200mm)



W5110A
(100 x 100mm)



W5257A
(100 x 100mm)



W5123A
(100 x 100mm)



W5067A
(100 x 100mm)



W5137A
(100 x 100mm)



W5421A
(100 x 100mm)



W5141A
(100 x 100mm)



W5033A
(100 x 100mm)



W5124A
(100 x 100mm)



W5485A
(100 x 100mm)



W5190A
(100 x 100mm)



W5140A
(100 x 100mm)



W5424A
(100 x 100mm)



W5480A
(100 x 100mm)

The signs shown on this page are available in White Matt Rigid PVC only

Safety Signs



FIRE EXTINGUISHER IDENTIFICATION SIGNS

Standard Safety Signs



W6366M
(200 x 80mm)



W6265M
(200 x 80mm)



W6360M
(200 x 80mm)



W6361M
(200 x 80mm)



W6362M
(200 x 80mm)



W6365M
(200 x 80mm)



W6370 ID (105 x 150mm)



W6373 ID (105 x 150mm)



W6374 ID (105 x 150mm)



W6372 ID (105 x 150mm)

Equipment Location Signs



W6490D
(200 x 150mm)



W6450D
(200 x 150mm)



W6495D
(200 x 150mm)



W6459D
(200 x 150mm)



W6451D
(200 x 150mm)



W6394D
(150 x 200mm)



W6395D
(150 x 200mm)



W6422A
(100 x 100mm)



W6421A
(100 x 100mm)



W6420A
(100 x 100mm)



W6314A
(100 x 100mm)



W6424A
(100 x 100mm)



W6055PT (100 x 300mm)



W6053PT (100 x 300mm)



W6054M (80 x 200mm)



W6441M (80 x 200mm)



W6410M (80 x 200mm)



W6441PT (100 x 300mm)



W6450PT (100 x 300mm)



W6459PT (100 x 300mm)



W6053M (80 x 200mm)



W6055M (80 x 200mm)



W6454M (80 x 200mm)



W6459M (80 x 200mm)



W6483M (80 x 200mm)



W6068M (80 x 200mm)



W6310M (80 x 200mm)



W6401M (80 x 200mm)



W6448M (80 x 200mm)



W6449M (80 x 200mm)



W6284M (80 x 200mm)



W5546M (80 x 200mm)

The signs shown on this page are available in White Matt Rigid PVC only

Safety Signs



EXTERNAL SIGNS

Standard Safety Signs



WX4128Q (300 x 300mm)



WX6450F
(225 x 200mm)



WX6451F
(225 x 200mm)



WX6459F
(225 x 200mm)



WX6490F
(225 x 200mm)



WX6495F
(225 x 200mm)



WX6448M (80 x 200mm)



WX6449M (80 x 200mm)



WX6454M (80 x 200mm)

Fire Action Notices



W5414D (200 x 150mm)



W5425D (200 x 150mm)



W5478D (200 x 150mm)



W5479D (200 x 150mm)



W5487N (50 x 150mm)



W4850N (50 x 150mm)

Hazard Warning & Prohibition Signs



W8143PT (100 x 300mm)



W8091PT (100 x 300mm)



W8067PT (100 x 300mm)



W8014PT (100 x 300mm)



W8103PT (100 x 300mm)



W7422D
(200 x 150mm)



W7423D
(200 x 150mm)



W8138PT (100 x 300mm)



W8116PT (100 x 300mm)



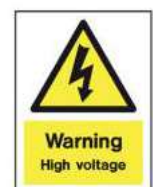
W8064PT (100 x 300mm)



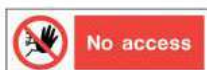
W8109PT (100 x 300mm)



W7440D
(200 x 150mm)



W7424D
(200 x 150mm)



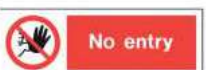
W8172PT (100 x 300mm)



W8115PT (100 x 300mm)



W8180PT (100 x 300mm)



W8001PT (100 x 300mm)

The signs shown on this page are available in White Matt Rigid PVC only

Seals for Windows & Doors



AQUAMAC™ 21

Weatherseal for doors

INTRODUCTION

Comprising of a resilient non-stretch, non-shrinking cellular core, Aquamac™ has a low friction non-grab outer sheath to prevent binding of windows and doors. Aquamac™ has an excellent memory, can withstand direct temperatures of +70°C to -30°C and will not be affected by paint or stains.

APPLICATION

Typical application fitted into the frame rebate (head and jambs) as 3 cut pieces. Can be used to create a compression or wiping seal (see Figs A & B). The Weatherseal is butt jointed at the corners. To seal the door bottom Schlegel Weatherbar is mounted into the threshold section.

It is important that the Aquamac 21 Weatherseal does not abut the Weatherbar but runs to the threshold section in front (weatherside) of the Weatherbar, this will maximise water permeability resistance.

To suit seal gap 3.5 - 5.7mm.
Packaging 2 x 250 mtr coils/cartons

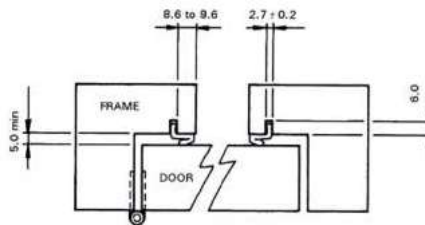
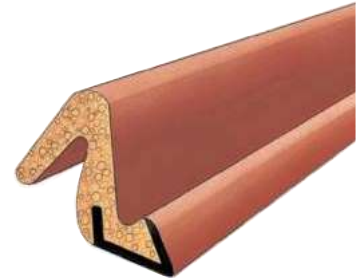
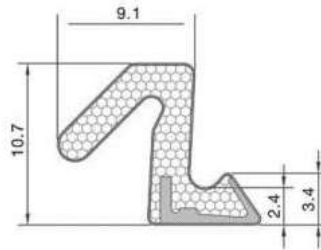


Fig. A Compression Weatherseal

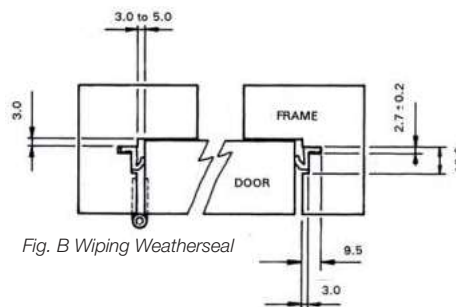


Fig. B Wiping Weatherseal

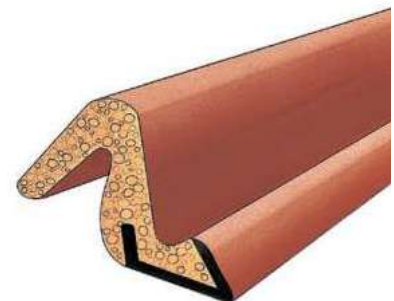
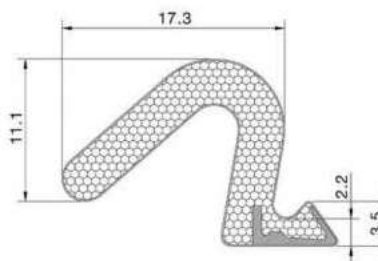


AQUAMAC™ 89

Weatherseal for doors

Seal Gap 5.0mm MIN to 13.0mm MAX
Kerf Slot Width. 2.7mm NOMINAL
Minimum Kerf Slot Depth 5.5mm

Packaging 2.1m lengths, 150 to a box.
Colours: bronze, white and beige



Seals for Windows & Doors

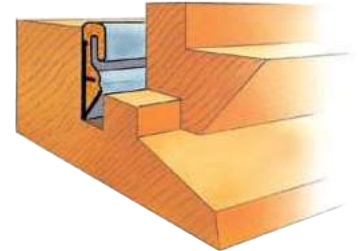
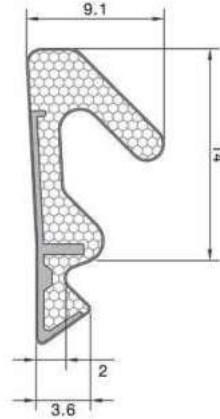


AQUAMAC™ 124

Weatherseal for wood doors

When fitted in four cut lengths it is important to create tight mitre joints to ensure high levels of windows performance. Joints can be enhanced by the application of a small amount of silicone mastic. To suit seal gap 5-8mm.

Packaging 125m coils, 2 to a box.
Also available per metre.
Colours: white, brown and black

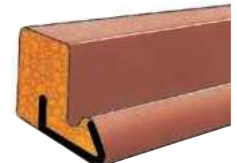
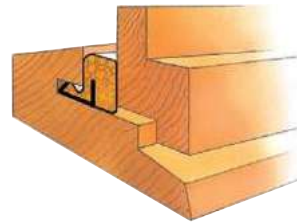
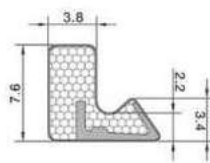


AQUAMAC™ 48

Weatherseal for wood windows

Seal Gap 2.0mm MIN to 3.0mm MAX
Kerf Slot Width. 2.7mm NOMINAL
Minimum Kerf Slot Depth 5.5mm

Packaging 350m/coil, 2 to a box.
Also available per metre.
Colours: white, brown and black

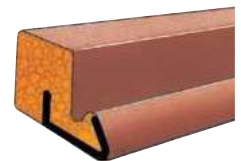
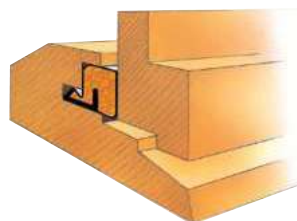
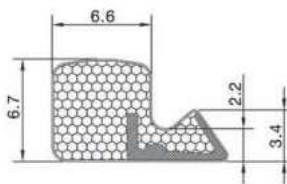


AQUAMAC™ 63

Weatherseal for wood windows

Seal Gap 3.4mm MIN to 5.4mm MAX
Kerf Slot Width. 2.7mm NOMINAL
Minimum Kerf Slot Depth 5.5mm

Packaging 300m coils, 2 to a box.
Also available per metre.
Colours: white, brown and black

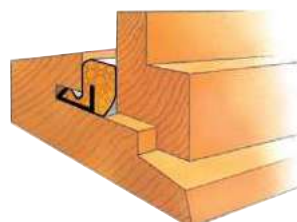
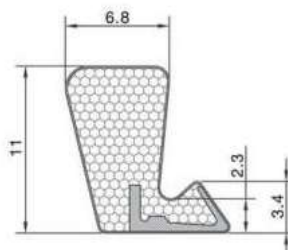


AQUAMAC™ 109

Weatherseal for wood windows, specifically sliding sash parting bead

Seal Gap 3.5mm MIN to 5.5mm MAX
Kerf Slot Width. 2.7mm NOMINAL
Minimum Kerf Slot Depth 5.5mm

Packaging 250m coils, 2 to a box.
Also available per metre.
Colours: white, brown and black



Seals for Windows & Doors

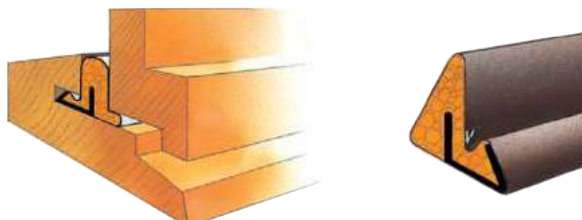
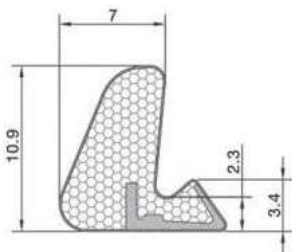


AQUAMAC™ 4846

Weatherseal for wood doors, specifically sliding sash parting beads

Seal Gap 3.5mm MIN to 5.6mm MAX
Kerf Slot Width. 2.7mm NOMINAL
Minimum Kerf Slot Depth 5.5mm

Packaging 200m coils, 2 to a box.
Also available per metre.
Colours: white, brown and black

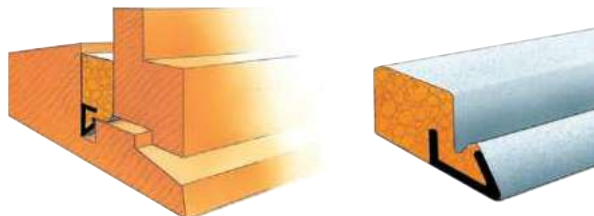
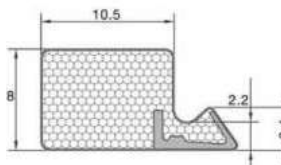


AQUAMAC™ 33

Weatherseal for wood windows

Seal Gap 4.0mm MIN to 6.4mm MAX
Kerf Slot Width. 2.7mm NOMINAL
Minimum Kerf Slot Depth 5.5mm

Packaging 200m coil, 2 to a box.
Also available per metre.
Colours: white, brown and black

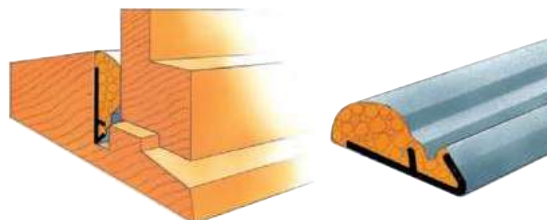
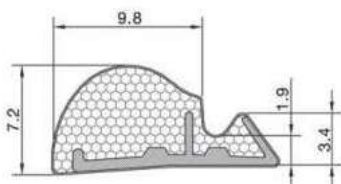


AQUAMAC™ 120

Weatherseal for wood windows

Seal Gap 3.5mm MIN to 5.8mm MAX
Kerf Slot Width. 2.8mm NOMINAL
Minimum Kerf Slot Depth 6.5mm

Packaging 250m coils, 2 to a box.
Also available per metre.
Colours: white, brown and black



WEATHERBAR

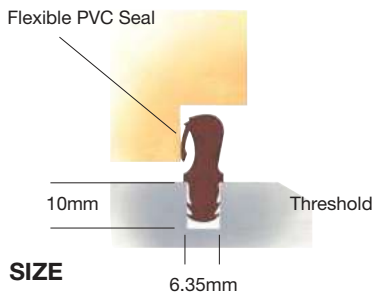
Watertight & airtight threshold seal

FUNCTION

The new Schlegel Weatherbar is designed to replace the traditional steel waterbar, introducing a watertight and airtight seal to the door threshold.

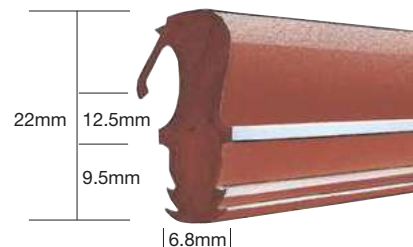
MATERIAL

High Impact Resistant PVC body and flexible PVC fin. Schlegel Weatherbar is manufactured by dual durometer extrusion process which ensures a permanent molecular bond between body and sealing fin.



SIZE

Section size as shown above. Threshold groove size required is 6.35mm (1/4"). Available in standard lengths of 1000mm and 2400mm.



TESTING

The new Schlegel Weatherbar has been extensively tested by Leeds University who conclude that "It is difficult to see where any further improvements could be made, either in design or in the grade of PVC used". (Full copy of Leeds test report available on request).

Seals for Windows & Doors



CARRIPILE 1, 2 and 3 SMOKE & DRAUGHT SEAL

For doors and window applications

INTRODUCTION

A range of seals specifically designed for sliding applications. Parting Bead is designed for the verticals of box sash windows, with Polyflex PF109 being ideal for the top, bottom and meeting rail. Carripile 1, 2 and 3 can be used as an alternative to Polyflex PF109 and is particularly useful for applications such as patio doors and sliding sash windows.

Parting Bead is manufactured using dual hardness PVC Nitrile, Polyflex from flexi-polymer and Carripiles have a PVCu carrier and polypropylene fin pile which provides an extra barrier against the weather. A particular feature of our Parting Bead is the reverse direction of the two sealing flippers. This ensures perfect sealing to both top and bottom sashes.

Carriers are supplied in 2.2M lengths, finpiles are available in white, grey and brown.

A full range of Pile Weatherseal with or without fin is available in coil form.



CARRIPILE 1



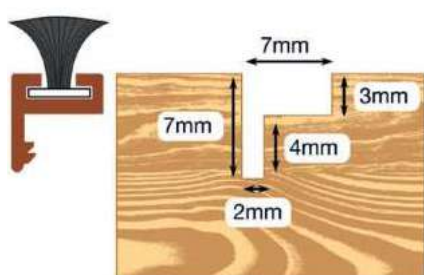
CARRIPILE 2

Carripile 2 can also be surface mounted with good quality contact adhesive or using brass pins

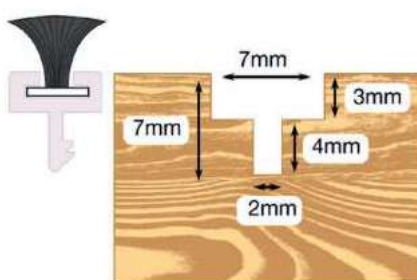


CARRIPILE 3

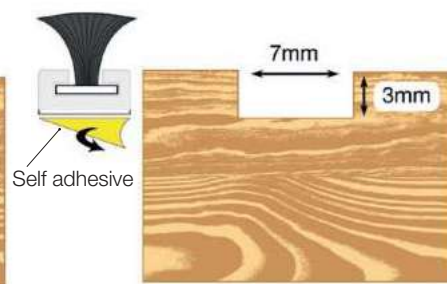
The below rebate sizes need to be routed into the door or frame for flush fit



Carripile 1 Offset leg type



Carripile 2 Centre leg type



Carripile 3 Self adhesive type

Carripile 1		
Finpile size	Ref	Carrier colour
5mm	RP105	black
5mm	RP125	white
6.5mm	RP108	black
6.5mm	RP128	white
8.5mm	RP103	black
8.5mm	RP127	white

Carripile 2		
Finpile size	Ref	Carrier colour
5mm	RP107	brown
5mm	RP114	white
6.5mm	RP102	brown
6.5mm	RP115	white
8.5mm	RP130	brown
8.5mm	RP116	white

Carripile 3		
Finpile size	Ref	Carrier colour
5mm	RP113	black
5mm	RP110	white
5mm	RP106	brown
6.5mm	RP101	black
6.5mm	RP109	white
6.5mm	RP117	brown
8.5mm	RP100	black
8.5mm	RP112	white
8.5mm	RP131	brown

Seals for Windows & Doors



FIREWISE
SUPPLIES LTD



POLYFLEX PF109

For double hung sash windows

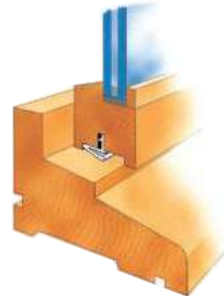
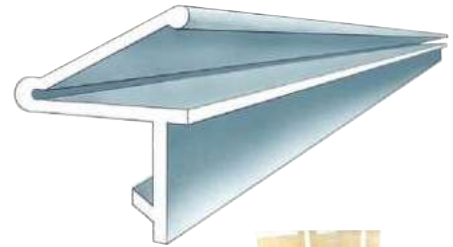
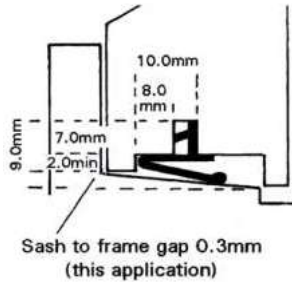
POLYFLEX™ PF109

For double hung sash windows

Polyflex PF 109 weatherstripping is a flexible, low friction perimeter seal for timber windows. It can outlast and outperform conventional metal and vinyl weatherseals in compression and wipe sealing applications. Maintains original shape after repeated window operations. Will not rot or mildew. Supplied in 2.1m lengths, colour: white.

PERFORMANCE BENEFITS

Operates in temperatures -30°F to + 130°F. Will not crack or shrink. Ensures smooth operation - has low friction forces. Conforms to surface irregularities. Easy to install - simply push into pre-prepared kerf. Available in white. Beige available on request.



PARTING BEADS (Ref's: PFP/12, PTX, & PPP/RP)

For timber sliding sash windows

PARFLIP

Parflip comprises two parallel rigid flippers which are friction free, ensuring smooth movement of the sash whilst maintaining a constant high level of protection against the elements. Not affected by paint or stains - paint will not bond to the rigid flippers, they are rooted in resilient material ensuring they retain the correct weather proofing positions. Patent design - The two parallel rigid flippers are friction free. Aesthetically pleasing appearance similar to a moulded timber bead.

Available in 3 Metre lengths. White and Brown.

PARTEX (PTX)

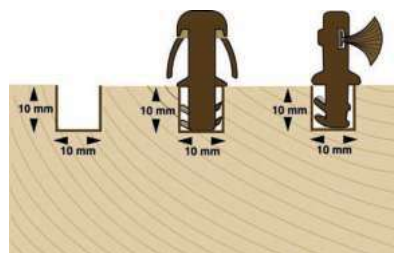
Solid construction U.V. stable material, no hollow core to harbour moisture and decay. Pile operates out of sight. Perfect alignment when reversed. Friction resistant surface for the sliding sash.

Available in 3m Lengths white or brown.

RETAINING PROFILE (PPP/RP)

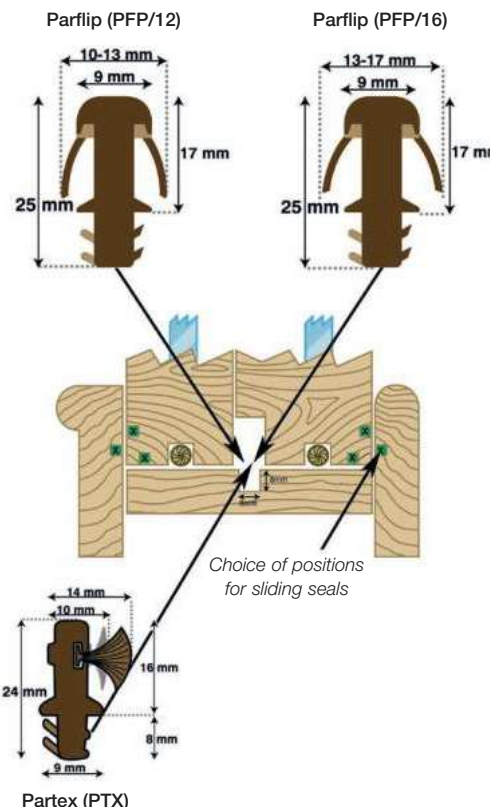
Parflip/Partex retaining profile (PPP/RP) fits into a 10mm x 10mm groove and enables the parting bead (either Partex or Parflip) to be removed for remedial work.

Available in 3m lengths white or brown.



Parflip/Partex Retaining Profile

PARFLIP OR PARTEX



Partex (PTX)

Seals for Windows & Doors



TIMBERTEC

Dual hardness compression seals, suitable for use on wooden windows and doors

INTRODUCTION

A range of dual hardness compression seals for easy non-stretch installation. Timbertec, being manufactured from superior polymers, affords improved compressibility and recovery.

Timbertec seals are quick fitting paint and stain resistant UV light stable and can be welded. The dual hardness co-extruded seals also prevent shrinkage once installed.

Timbertec	VB07	VF8	VF10	VF12
Brown	15770	15785	15805	15795
White	18770	18785	18805	18795
Coil	100m	50m	50m	50m

Timbertec	TF10	TF12	TF14	TF16	TF18
Brown	15844	15797	15806	15860	15886
White	18844	18797	18806	18860	18886
Coil	50m	50m	50m	50m	50m

MONOSTRIP

Compression seals

INTRODUCTION

Manufactured from superior polymers, allowing for a high quality performance seal.

Paint and stain resistant.

Monostrip			
Brown	15060	15070	15080
White	18060	18070	18080
Black	10060	10070	10080
Coil	100m	100m	100m

Seals for Windows & Doors



Q-LON™ PROFILES

Low friction elastomeric seals

PERFORMANCE BENEFITS

- More easily compressed for greater ease of door and window operation.
- Resists dirt and grime.
- Excellent memory - returns to original shape after compression.
- Reaches out - to cope with seasonal gap size changes.
- U.V. light stable.



Q-LON (FS)



Q-LON (SBS)

A range of seals specially designed for quick fitting and high performance. Ideal for the refurbishment and upgrade of existing windows and doors.

TECHNICAL DETAILS

A non-corrosive elastomeric seal incorporating a low friction 'nongrab' surface. The seal to remain flexible between -30°C to +70°C.

FITTING DETAILS

Fit as shown using stainless steel fixing pins. Apply while the door or window is closed.

The seal should be in firm contact with all parts of the window or door with approximately 3mm compression for external door and 1.5mm for windows & internal doors before pin is driven home.

Make sure there is a fixing not more than 25mm from the end of the product. If necessary pins can be driven through the carrier. Corners are mitred.

To achieve a complete seal, draughtproof the areas (such as behind the catch and stay) not covered by Q-LON™ Door Seals with 'V' Strip, or Zero Gap.

SAFETY NOTE PRECAUTION

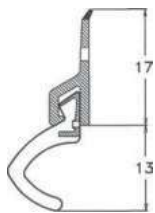
Before fitting draught proofing into rooms fitted with fuel burning appliances, any existing ventilators should be checked for proper operation (BS7386: 1990)

PRODUCT SPECIFICATION

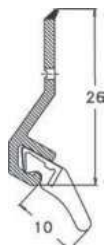
Supplied in 2.1M lengths. Carrier is rigid PVCU (white or dark brown) pre-punched or drilled.

Q-LON PROFILES

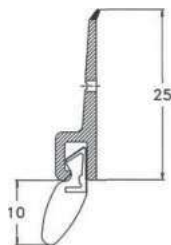
RETRO 21 (L)



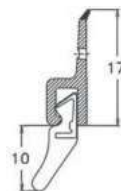
FS



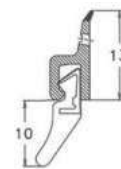
PSL



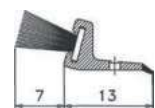
PS



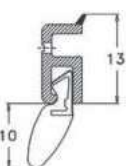
PSS



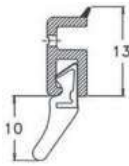
PSS (R21)



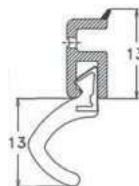
RETRO (B)



Q-LON (SBS)



RETRO (21B)

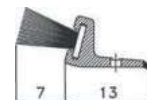


SHARKSEAL PROFILES

PSS



PSS (R21)



RETRO (B)



Seals for Windows & Doors



INSTAFIT & FLIPEX WIPER SEALS

Instafit - The original patented cranked blade wiper Seal & Flipex - Ideal for pivot applications

INSTAFIT

Minimal resistance to opening or closing, operates out of sight. Weather energised - the harder it blows the tighter it seals. Reactivated with each use - never takes a set.

The superb door frame seal, ideal for hinged, pivot, side or top hung windows. Outward opening:- groove into sash or door, inward opening:- groove into frame as illustrated.

Material

Material Soft 55 Shore Polymer.

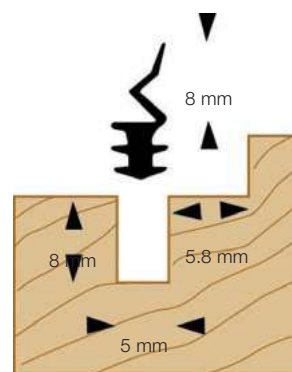
Colours

Colours Black (JSIF/BL)
Brown (JSIF/BN) and White (JSIF/W)

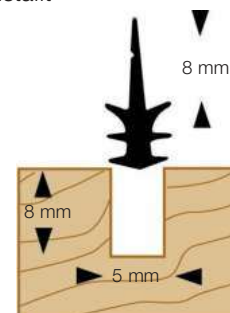
Packed

Packed 150 metres.

Also the perfect seal for top, bottom and centre rails of sliding sash windows, it is 'weather energised'.



Instafit



Flipex

FLIPEX

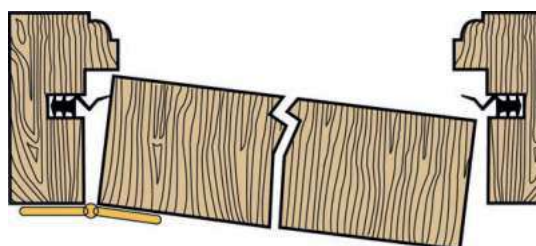
Flipex - ideal for pivot windows

Material

Soft EPDM 55 Shore.

Colours

Black (FPX/BL)
Packed 150 Metres.



DOUBLE SIDED PVC SECURITY GLAZING TAPE

Double sided self adhesive high tack closed cell PVC internal security glazing tape to BS7950

General Characteristics	Value	Standards	
Density	220/250kg/m ³		
Tensile Strength	0.35 Mps min	DIN 53571	
Elongation	150% min	DIN 53571	
Tear Strength	2kg/cm min	DIN 53515	
Compression Set	10% max 90% - 98% recovery	DIN 53572	
Water Absorption	8% by volume		
Cold Flexure	-30 C pass	6mm madril	
Temperature Resistance	-50 C to +60 C	BS 2571	
Shore Hardness	55 - 75	Shore 00	
Resistance to Chemicals		Ref/ Size	
Acid	Good	SDG 1mm x 9mm x 50 m	Black
Mineral Oil	Good	SDG 1.5mm x 9mm x 40 m	Black/White
Alcohol	Good	SDG 2mm x 9mm x 33 m	Black/White
Alkalis	Good	SDG 3mm x 9mm x 25 m	Black/Brown/White
Petrol	Good	SDG 4mm x 9mm x 20 m	Black
Soap and Detergents	Good	SDG 5mm x 9mm x 15 m	Black
Compression required to achieve a positive waterseal: 20%		SDG 6mm x 9mm x 15m	Black

NOTE: We can supply any width in 1.5mm, 2mm & 3mm thickness of double sided security dry glazing tape

Residential Door Seals



STARSEAL DB

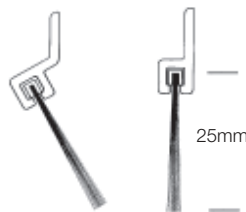
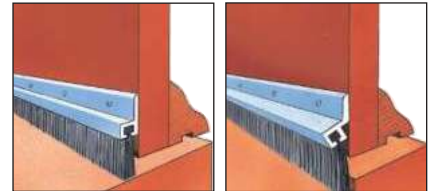
TYPICAL APPLICATIONS

To door bottoms.
To meeting stiles of double doors.
To all sides of wicker doors.

FITTING DETAILS

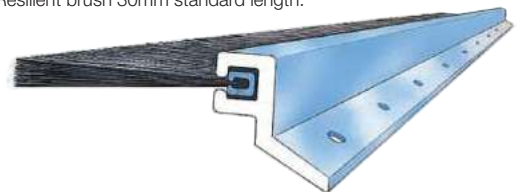
Cut the strip to the required length, to fit inside at the bottom of the door (cut at the end with extra slots) seal the ends of Starseal DB with pliers and hammer, i.e. cut the carrier 5mm shorter than the width of the door. Slide the seal out of the carrier and cut 1mm from each end with pliers.

This will seal the inner carrier, preventing the bristles falling out. Slide the seal back and close the jaws on the carrier with a hammer. File off rough edges. Supplied in lengths of 0.914M. Also available in gold, silver, white and brown.



Tough aluminium carrier, straight or angled.

Resilient brush 30mm standard length.

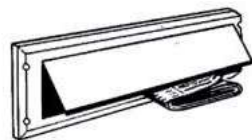


Pre-punched carrier for speedy installation.

LETTER BOX SEAL

PERFORMANCE BENEFITS

Two screw holes only - for speedy installation, (4 in double). Rigid back gives extra strength and barrier against draughts. The brush will always retain its original shape. Has countersunk screw holes-so that screws do not protrude outside carrier. Moulded carrier has fractional curve design to ensure snug fit on door after screws have been tightened home.



For horizontal and vertical letter box seals. Alternative Seal - includes: superior flapped letter box seal.



Supplied with and without flap in white or brown with black, single or double brush

ZERO GAP

Self adhesive window and door seal

- Completely enclosed
- Adhesive backed
- Quick installation



PERFORMANCE BENEFITS

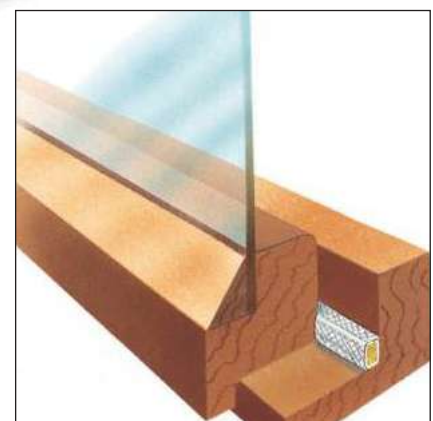
Enclosed completely against the elements. Integral cord prevents stretching. Adhesive back gives firm fixing to wood and metal. Sheathing resists wear and protects against U.V. light, ozone and water. Centre core compresses to 1mm but recovers original shape. Quick installation, no curing time as with silicone

PRODUCT APPLICATION

Metal windows*
Timber casement windows
Timber and metal doors
Timber centre pivot windows*

PRODUCT SPECIFICATION

Supplied in coils of 100M in white, black and bronze. Adhesive backing is protected by peel-off strip.



*Denotes to be used in conjunction with an adhesive primer recommended - 3M Scotch 83 Primer.

Dry Glazing + Security

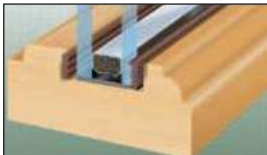
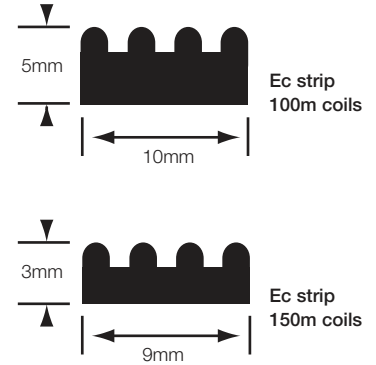
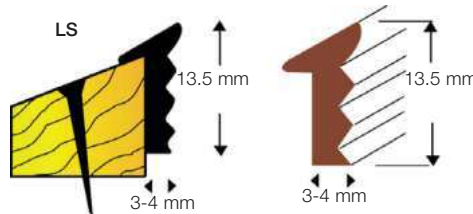


EPDM SELF ADHESIVE DRY GLAZING PROFILES

Single sided self adhesive closed cell EPDM rubber internal and external glazing tape

High quality closed cell EPDM rubber with enveloping sheath. Self adhesive (on one side) with non stretch reinforcing as used throughout Scandinavia.

Manufactured to Swedish and American standards nos: SS243705A1, SS818134 ASTM D, 1056RE42B2C3. Resists U.V. light, Ozone, Oxidisation and temperature changes. Ideal for external and internal glazing.



Single sided lipped glazing tape with rigid spine for ease of application

Profile	Reel	Colours
SLGT 0.8 X 12.8mm	33m	Black/White/Brown

Single Sided Profile	Reel	Colours
M 2 x 8mm	200m	Black/White
M3 x 8 & 3 x 9mm	150m	Black/White/Brown
M4 x 8 & 4 x 9mm	125m	Black/White/Brown
M4 x 10mm	125m	Black/White/Brown
M4 x 15mm	50m	Black
M4 x 20mm	50m	Black
M5 x 10mm	100m	Black/White/Brown
M8 x 15mm	50m	Black
MH 5 x 10mm	100m	Black
MH 6 x 10mm	50m	Black
LS 3.4 x 13.5mm	100m	Black/White/Brown
EC Strip 9 x 3mm	150m	Black/White/Brown
EC Strip 10 x 5mm	100m	Black/White/Brown

GEORGIAN BAR TAPE

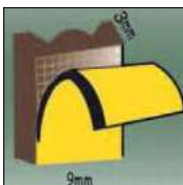
Profile	Colours	Roll
GBT 1mm cut to any width	Black / White	50m
GBT 1.6mm cut to any width	Black / White	46m



SELF ADHESIVE PROFILES

E Strip

Seals Gaps
2-3.5mm
Brown & White
Material: EPDM



150m/Coil

P Strip

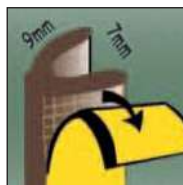
Seals Gaps 2-5mm
Black, Brown & White
Material: EPDM



150m/Coil

V Strip

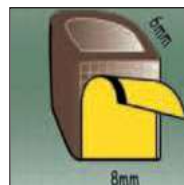
Seals Gaps
3-6.5mm
Black, Brown & White
Material: DM



100m/Coil

D Strip

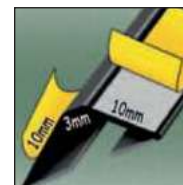
Seals Gaps
2-5.5mm
White
Material: EPDM



100m/Coil

Bat Wing

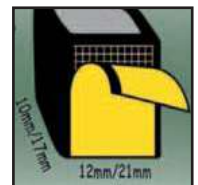
Available Colour:
Black
Material: Dual Hard
PVC



2.1m Length

Constructor D

Available Colour:
Black
Material: EPDM



D/10x12 X 75m
D/17x21 x 50m

Seals for Industrial Doors



UPRIGHT CARRIER (180°)

Available in four section sizes with over 40 trim lengths or manufactured to customer specification

STANDARD SIZES & MATERIALS

Standard lengths: 2.0 metre, 2.5 metre and 3.0 metres.

Cut lengths are available on request.

Filaments - Extruded from type 6 nylon

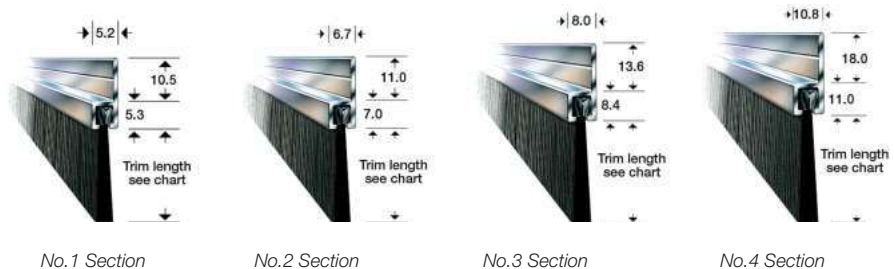
- Hard wearing • Good memory
- Working temperature range: -40°C to +100°C.

Metal Backing - Electro Galvanised Steel.

Core Wire - Electro Galvanised Steel.

Fixing Carrier - Mill Finish Extruded Aluminium in 180°, 90° and 45° flanges

- Anodised or painted finishes available on request.



Trim measurements and references for the standard upright carrier (180°)							
No. 1 Section		No.2 Section		No.3 Section		No. 4 Section	
Trim	Ref	Trim	Ref	Trim	Ref	Trim	Ref
8mm	FS 1/8-180°	15mm	FS 2/15-180°	17mm	FS 3/17-180°	26mm	FS 4/26-180°
10mm	FS 1/10-180°	20mm	FS 2/20-180°	20mm	FS 3/20-180°	43mm	FS 4/43-180°
12mm	FS 1/12-180°	26mm	FS 2/26-180°	26mm	FS 3/26-180°	50mm	FS 4/50-180°
15mm	FS 1/15-180°	34mm	FS 2/34-180°	34mm	FS 3/34-180°	80mm	FS 4/80-180°
-	-	50mm	FS 2/50-180°	40mm	FS 3/40-180°	102mm	FS 4/102-180°
-	-	-	-	44mm	FS 3/44-180°	-	-
-	-	-	-	50mm	FS 3/50-180°	-	-
-	-	-	-	75mm	FS 3/75-180°	-	-
-	-	-	-	100mm	FS 3/100-180°	-	-

The trim size quoted is mm of Brush Strip out of the aluminium fixing carriers. All specifications are subject to change at any time without prior notification

CARRIER (45°)

Available in four section sizes with over 40 trim lengths or manufactured to customer specification

STANDARD SIZES & MATERIALS

Standard lengths: 2.0 metre, 2.5 metre and 3.0 metres.

Cut lengths are available on request.

Filaments - Extruded from type 6 nylon

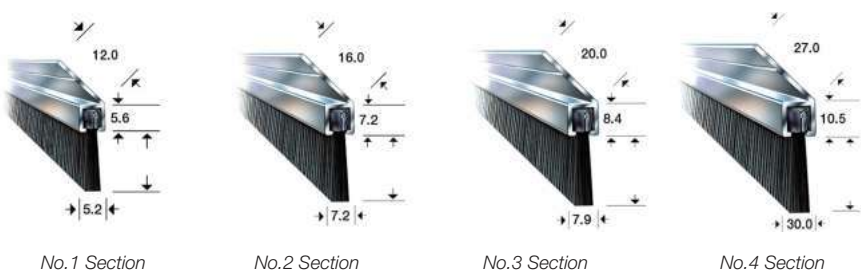
- Hard wearing • Good memory
- Working temperature range; -40°C to +100°C.

• **Metal Backing** - Electro Galvanised Steel.

• **Core Wire** - Electro Galvanised Steel.

Fixing Carrier - Mill Finished Extruded Aluminium in 180°, 90° and 45° flanges

- Anodised or painted finishes available on request.



Trim measurements and references for the standard carrier (45°)							
No. 1 Section		No.2 Section		No.3 Section		No. 4 Section	
Trim	Ref	Trim	Ref	Trim	Ref	Trim	Ref
8mm	FS 1/8-45°	15mm	FS 2/15-45°	17mm	FS 3/17-45°	26mm	FS 4/26-45°
10mm	FS 1/10-45°	20mm	FS 2/20-45°	20mm	FS 3/20-45°	43mm	FS 4/43-45°
12mm	FS 1/12-45°	26mm	FS 2/26-45°	26mm	FS 3/26-45°	50mm	FS 4/50-45°
15mm	FS 1/15-45°	34mm	FS 2/34-45°	34mm	FS 3/34-45°	80mm	FS 4/80-45°
-	-	50mm	FS 2/50-45°	40mm	FS 3/40-45°	102mm	FS 4/102-45°
-	-	-	-	44mm	FS 3/44-45°	-	-
-	-	-	-	50mm	FS 3/50-45°	-	-
-	-	-	-	75mm	FS 3/75-45°	-	-
-	-	-	-	100mm	FS 3/100-45°	-	-

The trim size quoted is mm of Brush Strip out of the aluminium fixing carriers. All specifications are subject to change at any time without prior notification

Seals for Industrial Doors



CARRIER (90°)

Available in four section sizes with over 40 trim lengths or manufactured to customer specification

STANDARD SIZES

Standard lengths: 2.0 metre, 2.5 metre and 3.0 metres.

Cut lengths are available on request.

Filaments - Extruded from type 6 nylon

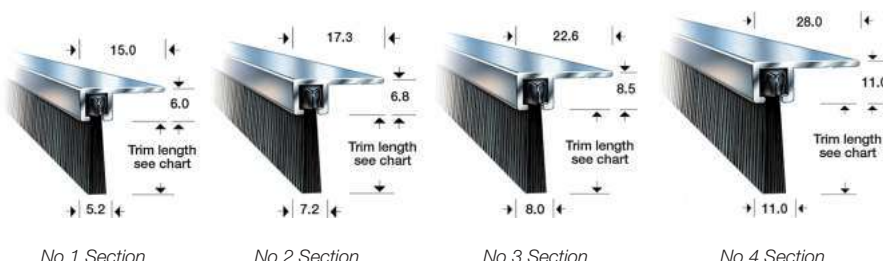
- Hard wearing • Good memory
- Working temperature range: - 40°C to +100°C.

Metal Backing - Electro Galvanised Steel.

Core Wire - Electro Galvanised Steel.

Fixing Carrier - Mill Finish Extruded Aluminium in 180°, 90° and 45° flanges

- Anodised or painted finishes available on request.



Trim measurements and references for the standard carrier (90°)							
No. 1 Section		No.2 Section		No.3 Section		No. 4 Section	
Trim	Ref	Trim	Ref	Trim	Ref	Trim	Ref
8mm	FS 1/8-90°	15mm	FS 2/15-90°	17mm	FS 3/17-90°	26mm	FS 4/26-90°
10mm	FS 1/10-90°	20mm	FS 2/20-90°	20mm	FS 3/20-90°	43mm	FS 4/43-90°
12mm	FS 1/12-90°	26mm	FS 2/26-90°	26mm	FS 3/26-90°	50mm	FS 4/50-90°
15mm	FS 1/15-90°	34mm	FS 2/34-90°	34mm	FS 3/34-90°	80mm	FS 4/80-90°
-	-	50mm	FS 2/50-90°	40mm	FS 3/40-90°	102mm	FS 4/102-90°
-	-	-	-	44mm	FS 3/44-90°	-	-
-	-	-	-	50mm	FS 3/50-90°	-	-
-	-	-	-	75mm	FS 3/75-90°	-	-
-	-	-	-	100mm	FS 3/100-90°	-	-

The trim size quoted is mm of Brush Strip out of the aluminium fixing carriers. All specifications are subject to change at any time without prior notification

CAMSTRIP

Available in four section sizes with over 40 trim lengths or manufactured to customer specification

STANDARD SIZES

For use where our aluminium fixing carrier is not required.

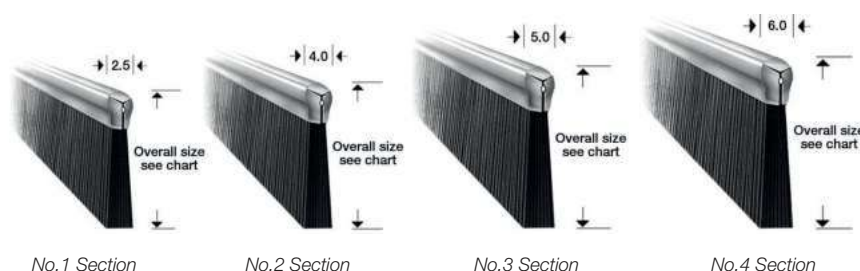
Standard lengths: 2.0 metre, 2.5 metre and 3.0 metre lengths, cut lengths are available on request.

Filaments - Extruded from type 6 nylon

- Hard wearing • Good memory
- Working temperature range: - 40°C to +100°C.

Metal Backing - Electro Galvanised Steel.

Core Wire - Electro Galvanised Steel..



Trim measurements and references for the Camstrip							
No. 1 Section		No.2 Section		No.3 Section		No. 4 Section	
Trim	Ref	Trim	Ref	Trim	Ref	Trim	Ref
12mm	CS 1/12	20mm	CS 2/20	24mm	CS 3/24	33mm	CS 4/33
14mm	CS 1/14	25mm	CS 2/25	27mm	CS 3/27	51mm	CS 4/51
16mm	CS 1/16	32mm	CS 2/32	33mm	CS 3/33	57mm	CS 4/57
19mm	CS 1/19	40mm	CS 2/40	40mm	CS 3/40	87mm	CS 4/87
-	-	56mm	CS 2/56	46mm	CS 3/46	109mm	CS 4/109
-	-	-	-	50mm	CS 3/50	-	-
-	-	-	-	56mm	CS 3/56	-	-
-	-	-	-	81mm	CS 3/81	-	-
-	-	-	-	106mm	CS 3/106	-	-

The trim size quoted is mm of overall size of Brush Strip. All specifications are subject to change at any time without prior notification

Air Management Systems



TTF SLIMLINE VENTILATOR (TRICKLE VENT)

TTF slimline through frame ventilator

SPECIFICATION

- Six sizes available to comply with Approved Document F 2006
- Slimline aluminium frame mounted ventilator
- Slimline and standard hoods
- Easy operation
- Controllable and draught free
- Easy installation
- Can be retro fitted
- Semi-permanent trickle option available
- Cord operation available
- Available in four standard colours
- Independently acoustically tested in accordance with BS EN 20140-10:1992, ISO 140-10:1991

INTRODUCTION

The TTF Slimline through frame ventilator is a robust, yet stylish aluminium ventilator. With its built in updraught and various operating modes the TTF Slimline is suitable for all types of windows. Available in six standard sizes and four standard colours, the unit also has the added option to be coloured and sized to meet most bespoke requirements.

DESIGN CRITERIA

The TTF Slimline Ventilator is suitable for PVCu, Aluminium and Timber Windows. The polyester paint finish is available in standard colours:

White (ref. Hipca), Black (ref. 9005), Brown (ref. 8019), Tan (ref. 8003) and Silver anodised.

MANUFACTURE

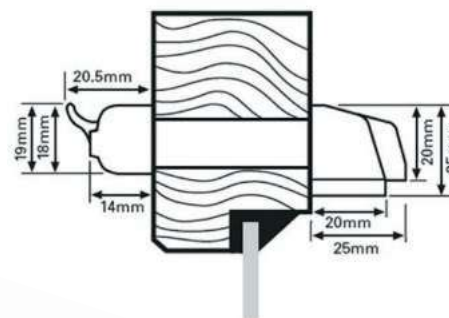
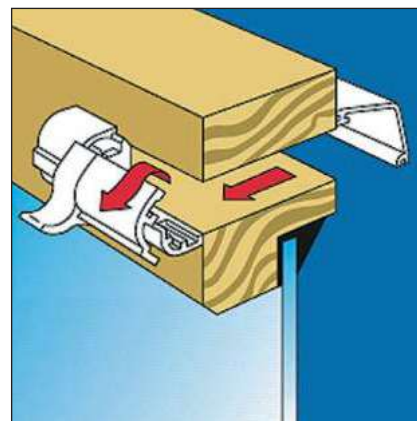
Manufactured in aluminium with nylon end caps/control components. Produced under ISO 9001 Quality Systems.

Components:

Aluminium hood plus one pair of end caps (20 or 25mm as ordered), Aluminium main body, Aluminium cover, Nylon end caps/control mechanism, 4 x screws, Flyscreen.

PERFORMANCE

Independently tested to BS EN 13141-1:2004
Water tightness of 400pa.
Independently acoustically tested in accordance with BS EN 20140-10:1992
ISO 140-10:1991.



ORDERING REFERENCES			
Unit	Length	EA as per BS 13141-1:2004	Slot Size
TTFSlimline 1250-10	208mm	1250mm ²	173 x 10mm
TTFSlimline 2500-10	375mm	2500mm ²	345 x 10mm
TTFSlimline 5000-10	745mm	5000mm ²	2x (345 x 10mm) - (10mm land)
TTFSlimline 1250-13	168mm	1250mm ²	133 x 13mm
TTFSlimline 2500-13	300mm	2500mm ²	265 x 13mm
TTFSlimline 5000-13	575mm	5000mm ²	2x (265 x 13mm) - (10mm land)
TTFSlimline 4000-12.5	375mm	2500mm ²	340 x 12.5mm

Airflow rates quoted are for when the units are fitted in accordance with manufacturers recommendations. Tested in accordance with BS EN 13141-1:2004

Threshold Seals

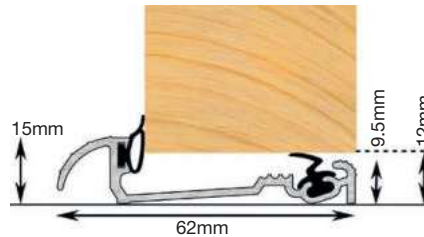


Macclex 15/2 (Ref:1.01.317.)

For inward opening doors

- Under door clearance 12mm
- Suitable for moderate exposure
- Ideal for double doors
- Accepts MWK striker block for flush bolts in double doors

Available In: Gold, Mill
In Sizes: 914mm to 4590mm

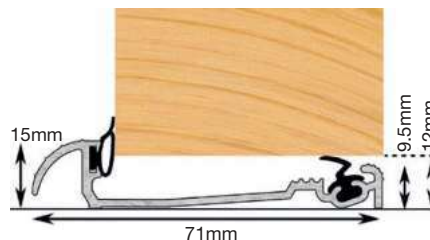


Macclex 15/56 (Ref:1.01.314.)

For inward opening doors

- Under door clearance 12mm
- Suitable for moderate exposure
- Ideal for double doors
- Accepts MWK striker block for flush bolts in double doors
- Designed for 56mm thick doors

Available In: Gold, Mill
In Sizes: 914mm to 4590mm

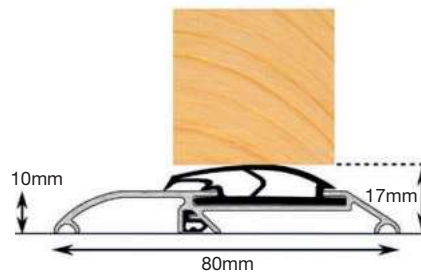


Threshex Sill (Ref:1.01.450.)

For inward or outward opening doors

- Suitable for moderate exposure
- Under door clearance 14-17mm
- The seal can be reversed to enable this product to be used with outward opening doors

Available In: Black, Bronze, Gold, Mill
In Sizes: 933mm to 4590mm

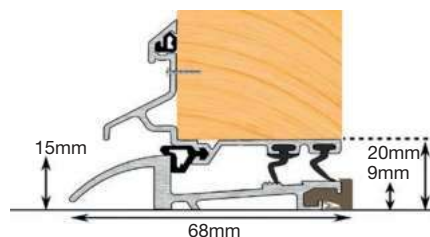


Mobility Weatherbar Kit 20 (Ref:1.01.280.)

For inward opening doors

- Under door clearance 20mm
- Ideal for very exposed locations
- The deflector section is supplied with our weather deflecting end caps - no sharp corners or raw edges
- Triple seal for extra protection
- No seals underfoot to be damaged by foot traffic
- Rear thermal barrier prevents condensation

Available In: Black, Bronze, Gold, SAA
In Sizes: 914mm to 4590mm



Other Exitex seals available on request.

Threshold Seals

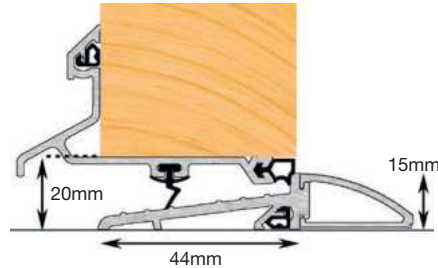


OUM (Ref:1.01.330.)

For outward opening doors

- Underdoor Clearance 19mm
- Suitable for exposed locations
- Protective weather deflecting Endcaps, avoids injury

Available In: Gold, Mill
In Sizes: 914mm to 4590mm

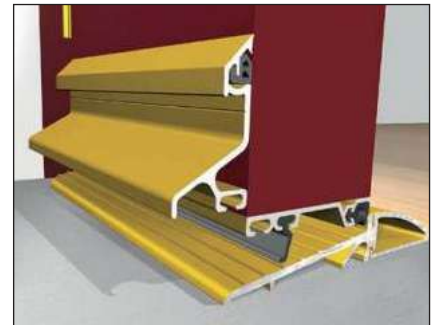
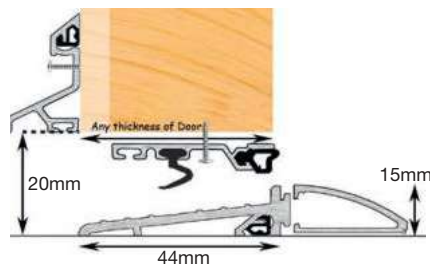


OUM Thicker Door Sill (Ref:1.01.331.)

For outward opening doors

- Under door clearance 19mm
- Suitable for exposed locations
- Separate Weather deflector supplied with protective weather deflecting Endcaps - no harmful raw edges
- Designed for doors over 44mm thick
- Threshold section as standard OUM
- Separate Seal Carrier with choice of Seal grooves subject to fitting tolerance

Available In: Gold & Mill
In Sizes: 914mm to 4590mm

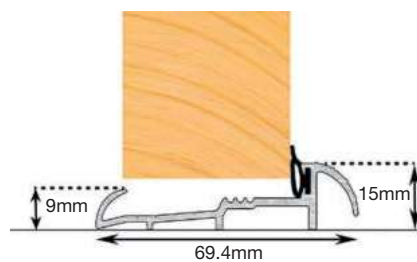


OUM/4 (Ref:1.01.339.)

For outward opening doors

- Under door clearance 15mm
- Suitable for exposed locations
- Ideal for double doors
- Accepts MWK striker block for flush bolts in double doors

Available In: Gold, Mill
In Sizes: 914mm to 4590mm



Other Exitex seals available on request.

Draught & Weather Seals



SEALMASTER PRODUCT SELECTOR

APPLICATION / PRODUCT	SmartSeal	Tornado	Cyclone	Watershed	Thunder	Blizzard	Deluge	Hurricane	Monsoon	Tempest	Typhoon
DOORS											
Inward opening:											
Exposed	✓		✓	✓	✓						
Sheltered		✓	✓								
Outward opening:											
Exposed	✓		✓	✓							
Sheltered		✓	✓								
Threshold-internal		✓	✓		✓						
Double swing:											
Internal			✓								
External			✓								
Existing with waterbar:											
Inward opening					✓						
Glass door		✓	✓								
Sliding door	✓			✓		✓					
Up and over garage door											
Roller shutter						✓			✓		
Meeting stiles:											
Plain						✓					✓
Rebated							✓	✓		✓	
Glass doors						✓					✓
Door stops:											
Grooved						✓					
Plain						✓					✓
Replacement								✓			
Curved						✓	✓				
WINDOWS											
Casement hinged						✓	✓	✓			
Sliding sash							✓	✓			
Pivoted										✓	✓
Tilt and turn							✓	✓			
UPVC: all types						✓				✓	
Aluminium: all types						✓				✓	
SPECIAL APPLICATIONS											
Fire extinguishing gas retention		✓	✓			✓	✓				
Acoustics		✓	✓		✓	✓	✓	✓		✓	
Smoke (BS 476:Part 31,1)		✓	✓			✓	✓				
Light		✓	✓			✓	✓				

This product selector shows the most widely encountered applications for draught and weather seals.

If your application is not listed please contact our Technical Services Department for advice on specific details.

Threshold Seals



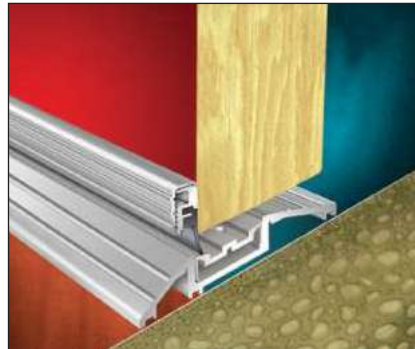
SEALMASTER SMARTSEAL

For inward and outward opening external doors

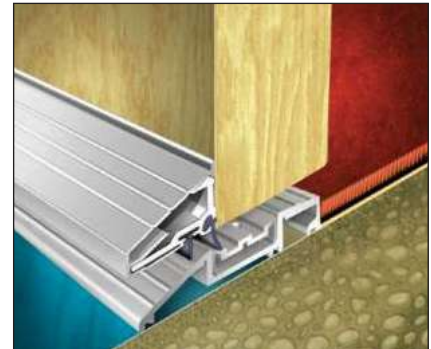
HOW TO SPECIFY

e.g. Sealmaster SmartSeal TAS/CAS (for threshold / contact strip) or TAS/WAS (for threshold / weatherboard) to suit door inmm wide opening.

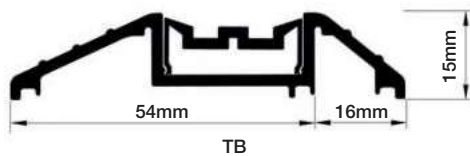
Threshold to be bedded in silicone and fixed to floor with screws/plugs. Contact strip (or weatherboard) to be fixed to door with screws.



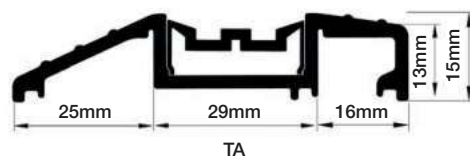
TBS/CAS



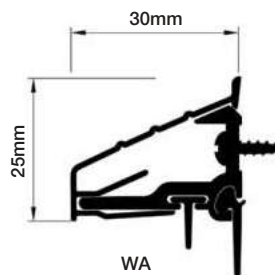
TAS/WAS



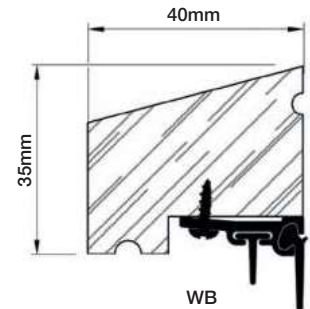
TB



TA

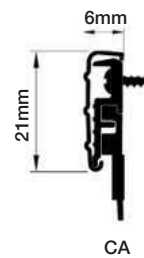


WA

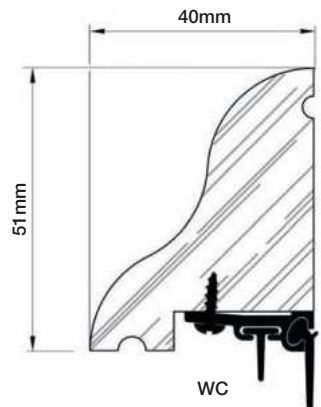


WB

Standard Options	Satin Silver CAS	Satin Gold CAG
Satin Silver - TAS	TAS/CAS	
Satin Gold - TAG		TAG/CAG
Satin Silver - TBS	TBS/CAS	
Satin Gold - TBG		TBG/CAG



CA



WC

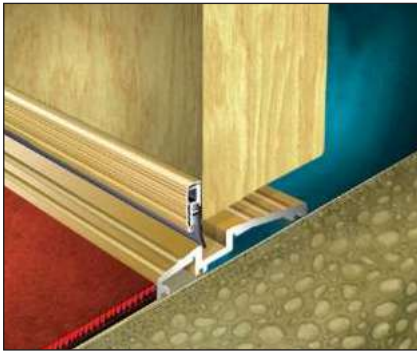
Standard Options	Satin Silver WAS	Satin Gold WAG	Softwood WBW	Redwood WBR	Oak WBH	Softwood WCW	Redwood WCR	Oak WCH
Satin Silver - TAS	TAS/WAS		TAS/WBW	TAS/WBR	TAS/WBH	TAS/WCW	TAS/WCR	TAS/WCH
Satin Gold - TAG		TAG/WAG	TAG/WBW	TAG/WBR	TAG/WBH	TAG/WCW	TAG/WCR	TAG/WCH
Satin Silver - TBS	TBS/WAS		TBS/WBW	TBS/WBR	TBS/WBH	TBS/WCW	TBS/WCR	TBS/WCH
Satin Gold - TBG		TBG/WAG	TBG/WBW	TBG/WBR	TBG/WBH	TBG/WCW	TBG/WCR	TBG/WCH

Threshold Seals

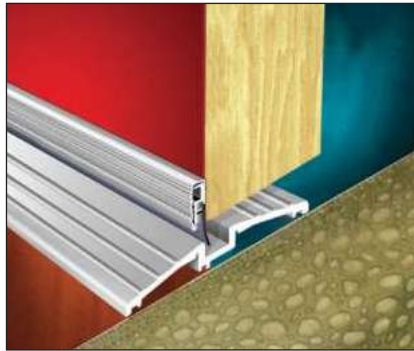


SEALMASTER WATERSHED

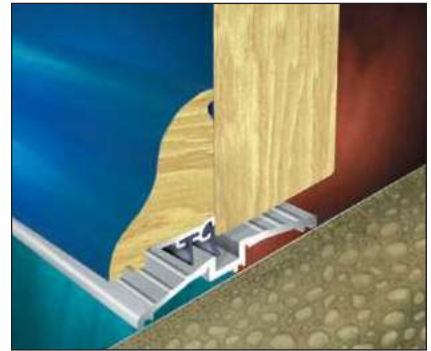
For inward opening external doors & outward opening external doors



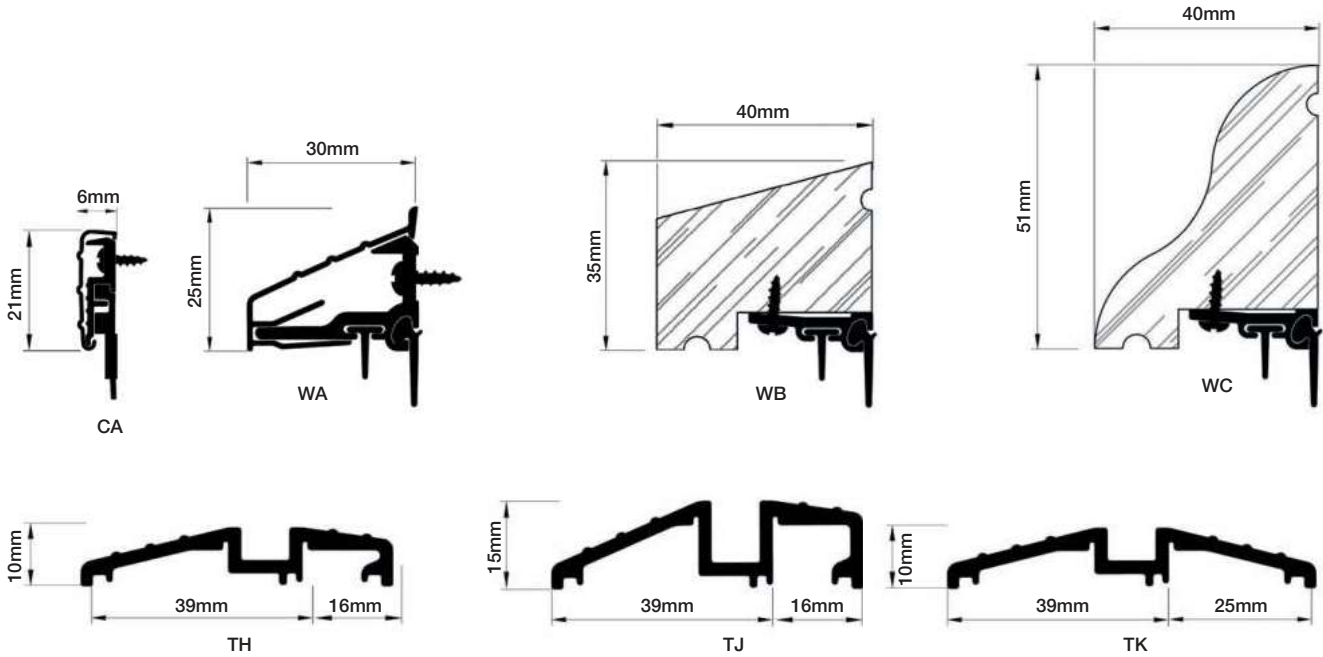
THG/CAG



TKS/CAS



TKS/WCW



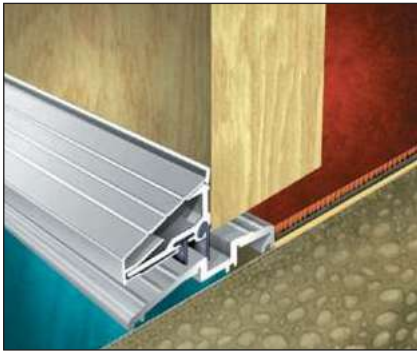
Standard Options	Satin Silver WAS	Satin Gold WAG	Softwood WBW	Redwood WBR	Oak WBH	Softwood WCW	Redwood WCR	Oak WCH
Satin Silver - THS								
Satin Gold - THG								
Satin Silver - TJS								
Satin Gold - TJG								
Satin Silver - TKS								
Satin Gold - TKG								

Threshold Seals

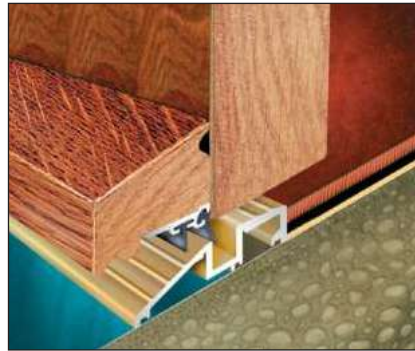


SEALMASTER WATERSHED

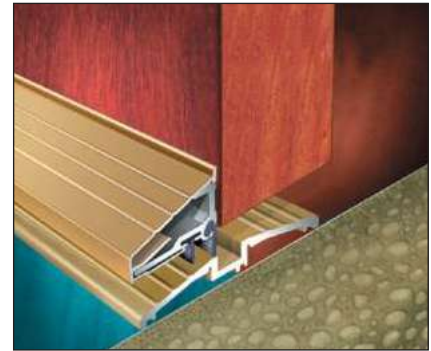
For inward opening external doors & outward opening external doors



THS/WAS



TJG/WBH



TKG/WAG

APPLICATIONS

An effective threshold seal combination with hidden fixings, designed with options to suit inward and outward opening, single and double leaf, external doors.

FEATURES & BENEFITS

The range of threshold sections means that it is possible to finish off a range of floor finishes neatly against this aluminium section.

The low profile of all the threshold sections ensures compliance with Document M of the Building Regulations and ease of access. The variety of weatherboard sections ensures that the seal can be used on period and contemporary door designs.

The channel collects water that has managed to by-pass the rubber blade seals and, through pre-drilled weep holes, this drains to the outside of the building, ensuring a high level of performance.


The contact strip combinations provide effective sealing options for outward opening doors. All weatherboard and contact strips have concealed fixings and snap on covers which are available in a range of finishes.

The Watershed combination seals can be used with virtually all of the Sealmaster stop and meeting stile seals to enable a doorset to achieve a high level of weatherability

HOW TO SPECIFY

e.g. Sealmaster Watershed seal THS/ CAS (for threshold / contact strip) or THS/WAS (for threshold / weather-board) to suit door inmm wide opening.

Threshold to be bedded in silicone and fixed to floor with screws/plugs. Weatherboard to be fixed to door with screws.

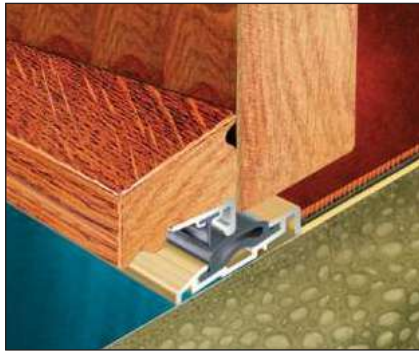
Standard Options	Satin Silver WAS	Satin Gold WAG	Softwood WBW	Redwood WBR	Oak WBH	Softwood WCW	Redwood WCR	Oak WCH
Satin Silver - THS 	 THS/WAS		 THS/WBW	 THS/WBR	 THS/WBH	 THS/WCW	 THS/WCR	 THS/WCH
Satin Gold - THG 		 THG/WAG	 THG/WBW	 THG/WBR	 THG/WBH	 THG/WCW	 THG/WCR	 THG/WCH
Satin Silver - TJS 	 TJS/WAS		 TJS/WBW	 TJS/WBR	 TJS/WBH	 TJS/WCW	 TJS/WCR	 TJS/WCH
Satin Gold - TJG 		 TJG/WAG	 TJG/WBW	 TJG/WBR	 TJG/WBH	 TJG/WCW	 TJG/WCR	 TJG/WCH
Satin Silver - TKS 	 TKS/WAS		 TKS/WBW	 TKS/WBR	 TKS/WBH	 TKS/WCW	 TKS/WCR	 TKS/WCH
Satin Gold - TKG 		 TKG/WAG	 TKG/WBW	 TKG/WBR	 TKG/WBH	 TKG/WCW	 TKG/WCR	 TKG/WCH

Threshold Seals

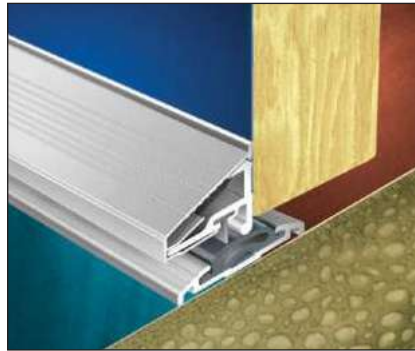


SEALMASTER CYCLONE

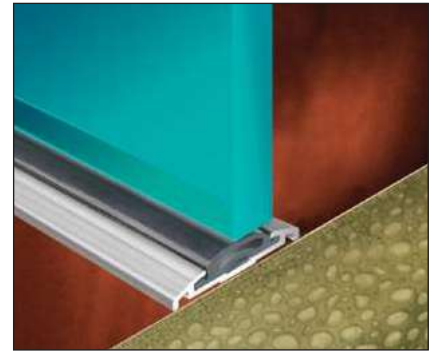
For inward & outward opening external doors, double swing external & single swing & double swing internal doors



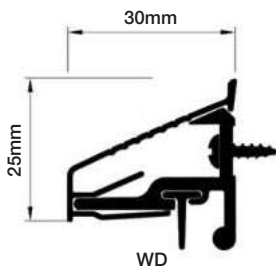
TDG/WEH



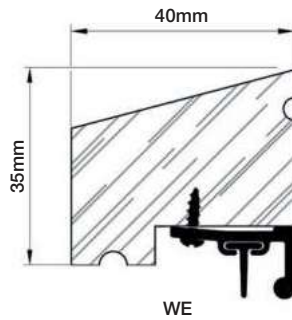
TES/WDS



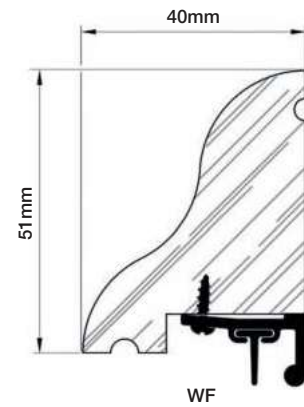
TES



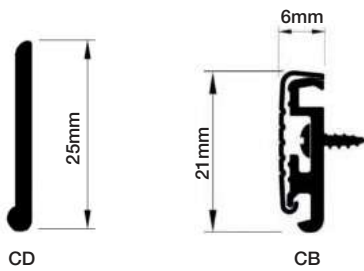
WD



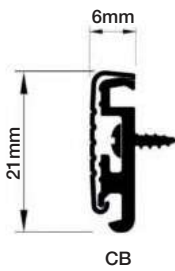
WE



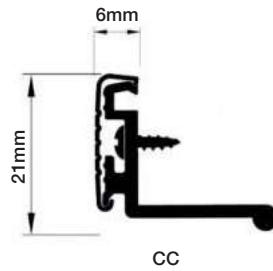
WF



CD



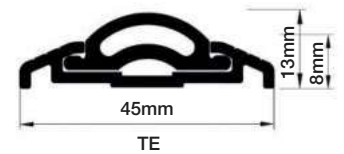
CB



CC



TD



TE

Standard Options	Satin Silver CBS	Satin Gold CBG	Satin Silver CCS	Satin Gold CCG	Satin Silver CDS	Satin Gold CDG	None
Satin Silver - TDS	TDS/CBS		TDS/CCS		TDS/CDS		TDS
Satin Gold - TDG		TDG/CBG		TDG/CCG		TDG/CDG	TDG
Satin Silver - TES	TES/CBS		TES/CCS		TES/CDS		TES
Satin Gold - TEG		TEG/CBG		TEG/CCG		TEG/CDG	TEG

Threshold Seals

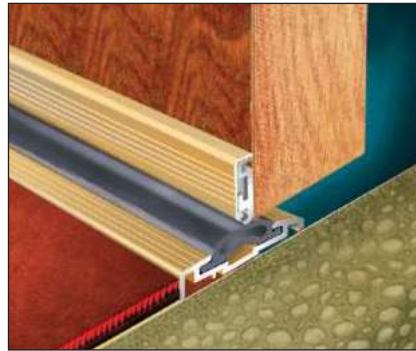


SEALMASTER CYCLONE

For inward & outward opening external doors, double swing external & single swing & double swing internal doors



TDS/CDS



TDG/CBG



TES/CBS

APPLICATIONS

A versatile threshold seal combination with hidden fixings and options to suit virtually all hinged and pivoted doors.

FEATURES & BENEFITS

The Cyclone threshold and contact strip combinations can be used in most internal and external situations, including those with a high degree of exposure requiring weather tight seals.

The Cyclone threshold and weatherboard combinations can only be used on inward opening external doors that are sheltered from wind driven rain.

With the contact strip combinations, the Cyclone can be used on external doors to comply with Part M of the Building Regulations to allow ease of access. It can also be used with the Blizzard seal and other Sealmaster stop seals to

achieve an exceptional acoustic performance.

All fixings, in all the sections, are hidden to give clean, crisp lines in an attractive range of finishes.

The Cyclone threshold section is available in two low profile versions, one being symmetrical for application on top of carpet or vinyl floor finishes (section TE), the other has a flat face against which carpet or vinyl can be finished neatly (section TD).

Specialist applications include rooms with a gas flood fire suppression system installed. Studio and music room doors, as well as interview rooms, where a high level of acoustic performance is required and photographic dark rooms where a light, tight seal is needed.

HOW TO SPECIFY

e.g. Sealmaster Cyclone seal TDS/CBS (for threshold / contact strip) or TDS/WDS (for threshold / weatherboard) to suit door inmm wide opening.

Threshold to be bedded in silicone and fixed to floor with screws/plugs. Contact strip (or weatherboard) to be fixed to door with screws.

Standard Options	Satin Silver WDS	Satin Gold WDG	Softwood WEW	Redwood WER	Oak WEH	Softwood WFW	Redwood WFR	Oak WFH
Satin Silver TDS								
Satin Gold TDG								
Satin Silver TES								
Satin Gold TEG								
	TDS/WDS		TDS/WEW	TDS/WER	TDS/WEH	TDS/WFW	TDS/WFR	TDS/WFH
		TDG/WDG	TDG/WEW	TDG/WER	TDG/WEH	TDG/WFW	TDG/WFR	TDG/WFH
	TES/WDS		TES/WEW	TES/WER	TES/WEH	TES/WFW	TES/WFR	TES/WFH
		TEG/WDG	TEG/WEW	TEG/WER	TEG/WEH	TEG/WFW	TEG/WFR	TEG/WFH

Threshold Seals



SEALMASTER THUNDER

For acoustic seals on internal doors and refurbishing inward opening external doors



TNS/WHS



TMS/WHS



TLS/WGS

APPLICATIONS

A combination seal to improve the performance of inward opening doors with a water bar in the sill but can also be used as a very effective acoustic door seal. It forms the basis of acoustic seals installed by the BBC in its recording studio and auditoria doors.

For acoustic sealing applications the Thunder weather bar sections may be reversed so that only a flat aluminium kick plate is visible and doors can be more easily wedged open. For such applications the low rise 3mm threshold plate (section TM) is suitable.

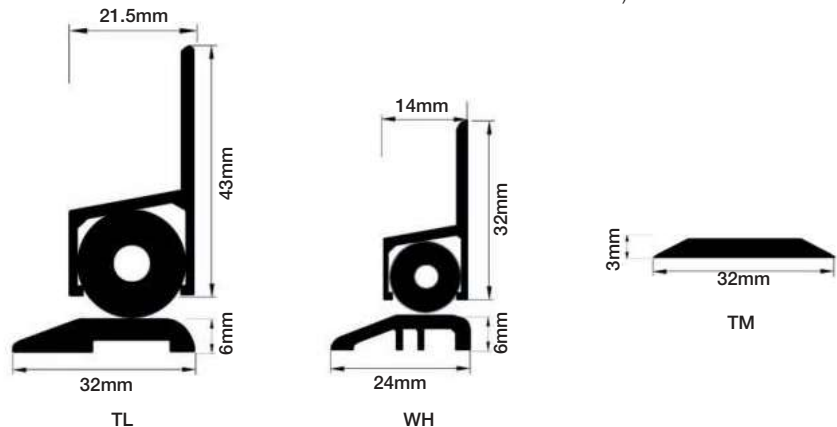
HOW TO SPECIFY

e.g. Sealmaster Thunder TLS/WGS to suit door inmm wide opening.

Threshold to be bedded in silicone and fixed to floor with screws/plugs. Weatherboard (reversed if required) to be fixed to door with screws (rebate door if reversed).

FEATURES & BENEFITS

Thunder seals are available in two sizes with the same overall shape. Where an external door is to be sealed a larger section combination is recommended e.g. TLS/WGS. The smaller section combinations e.g. TNG/WHG are more suited to internal applications.



Standard Options	Satin Silver WGS	Satin Gold WGG	Satin Silver WHS	Satin Gold WHG
Satin Silver - TLS				
Satin Silver - TLS	TLS/WGS			
Satin Gold - TLG				
Satin Gold - TLG		TLG/WGG		
Satin Silver - TMS				
Satin Silver - TMS		TMS/WGS	TMS/WHS	
Satin Gold - TMG				
Satin Gold - TMG		TMG/WGG		TMG/WHG
Satin Silver - TNS				
Satin Silver - TNS			TNS/WHS	
Satin Gold - TNG				
Satin Gold - TNG				TNG/WHG

Threshold Seals

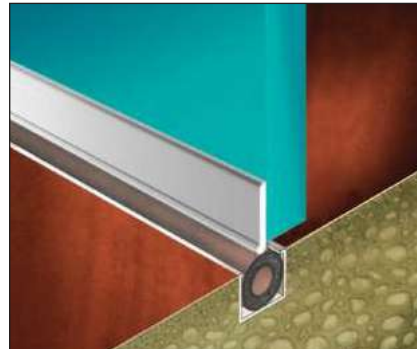


SEALMASTER TORNADO

For single swing internal doors and plate glass doors



TCM/CBS



TCM/CDS



TCM/CCG

APPLICATIONS

An effective draught, acoustic and light seal with minimal visual impact for internal, single swing doors.

FEATURES & BENEFITS

The Tornado threshold is designed to be grooved into the floor and can be used as a floor trim to allow a change of floor finish from one side of the door to the other.

The smooth, black, closed cell, neoprene insert forms a discrete threshold, either under the centre line of the door or towards one face or the

other, depending on the overall design requirements.

When used with one of the range of Tornado contact strips, this seal combination will provide an effective adjustable seal.

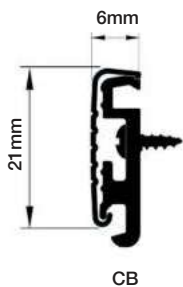
The minimal upstand of the Tornado threshold insert will not impede foot or wheeled traffic.

Tornado combination seals can be used with virtually all Sealmaster stop seals.

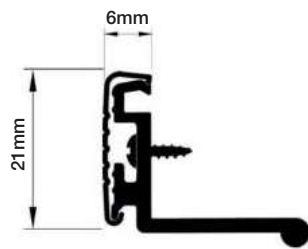
HOW TO SPECIFY

e.g. Sealmaster Tornado seal TCM/CBS (for threshold / contact strip) or TCM (for threshold only) to suit door in mm wide opening.

Threshold to be bedded in silicone and fixed to floor with screws/plugs. Contact strip to be fixed to door with screws (or adhesive in the case of plate glass doors).



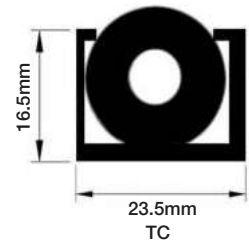
CB



CB



CD



TC

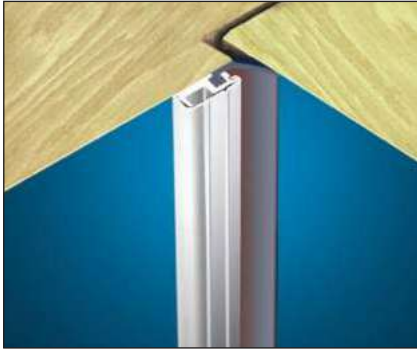
Standard Options	Satin Silver CBS	Satin Gold CBG	Satin Silver CCS	Satin Gold CCG	Satin Silver CDS	Satin Gold CDG	None
Silver Mill Finish - TCM	TCM/CBS	TCM/CBG	TCM/CCS	TCM/CCG	TCM/CDS	TCM/CDG	TCM

Door Stop & Window Seals



SEALMASTER BLIZZARD

For heads & jambs of internal doors, external doors & hinged casement windows



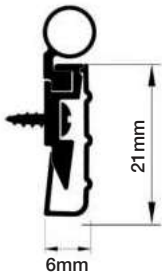
SCS/094



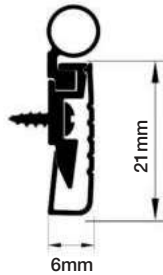
SAG/097



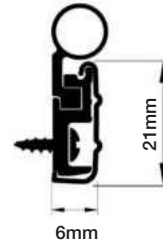
SBG/097



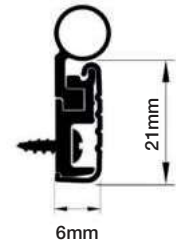
SA with 089



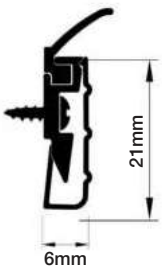
SB with 089



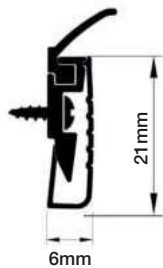
SC with 093



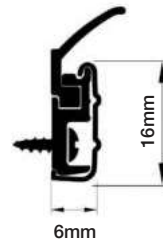
SB with 089



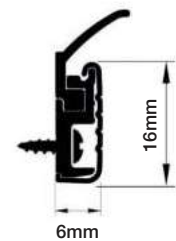
SA with 097



SB with 097



SC with 094



SD with 094

Standard Options	089	097	093	094
Satin Silver (16mm) - SCS			SCS/093	SCS/094
Satin Gold (16mm) - SCG			SCG/093	SCG/094
Satin Silver (16mm) - SDS			SDS/093	SDS/094
Satin Gold (16mm) - SDG			SDG/093	SDG/094

Door Stop & Window Seals



SEALMASTER BLIZZARD

For heads & jambs of internal doors, external doors & hinged casement windows



SAG/097



SBS/097



SAS/089

APPLICATIONS

A surface mounted stop seal with hidden fixings, suitable for both internal and external single action doors. Blizzard seals are also suitable for single action casement windows.

FEATURES & BENEFITS

Blizzard seals are suitable for the jambs and heads of door frames and can be used in conjunction with any Sealmaster threshold seal to provide a high performance weather, draught proofing, acoustic and light sealing solution.

The Blizzard seal carrier is available in 2 sizes of 16 or 21mm wide. The 16mm holders (sections SC & SD) are ideal for situations where the seal sections are to be butt jointed whereas the 21mm holders (sections SA & SB) are designed to accommodate mitred jointing.

The base holder, which accommodates one of the range of flexible neoprene seal inserts, is screw fixed to the required surface. These screw fixings are then hidden by the cover section, which is available in a choice of finishes to match the Sealmaster threshold sections e.g. Blizzard SAS/089 matches Smartseal TAS/WAS.

Blizzard seals are effective in improving the acoustic performance of an existing door.

The small and neat Blizzard sections may also be used to provide effective sealing solutions for Windows.

HOW TO SPECIFY

e.g. Sealmaster Blizzard SAS/089 to suit door inmm high bymm wide opening.

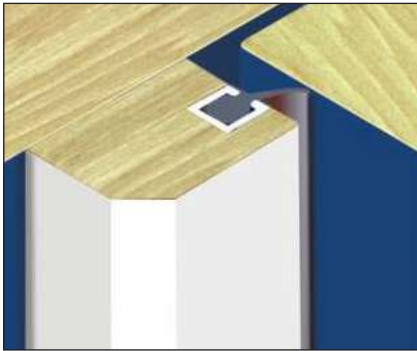
Standard Options	089	097	093	094
Satin Silver (21mm) - SAS	SAS/089	SAS/097		
Satin Gold (21mm) -SAG	SAG/097	SAG/097		
Satin Silver (21mm) - SBS	SBS/089	SBS/097		
Satin Gold (21mm) - SBG	SBG/089	SBG/097		

Door Stop & Window Seals



SEALMASTER DELUGE

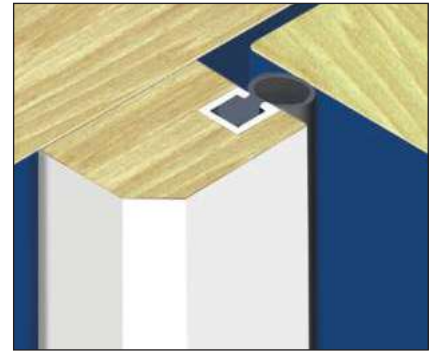
For heads & jambs of internal doors, external doors & hinged casement windows



SEM/001



SEM/045



SEM/000

APPLICATIONS

A rebated, seal suitable for around windows and the head and jambs of doors.

FEATURES & BENEFITS

Deluge seals are designed to be rebated into the joinery making them unobtrusive. They are particularly suitable for situations where doors and window frames are to be replaced.

These stop seals, in conjunction with an appropriate door threshold seal and meeting stile seals on double door suitable for:

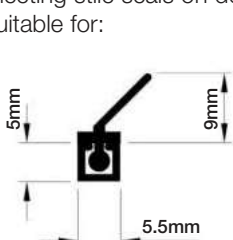
- Situations where smoke / gas / air leakage is important. leakage rates as low as 0.47m³ / hour / metre at 25pa pressure have been achieved when tested.
- Dark rooms used for general photographic work on single swing doors.
- Situations where noise penetration is important, where up to Rw=10db reduction in sound transmission can be achieved.

Deluge stop seals consist of an aluminium carrier and a wide range of straight blade, angle blade and compression bulb inserts to suit the applications illustrated above and many others.

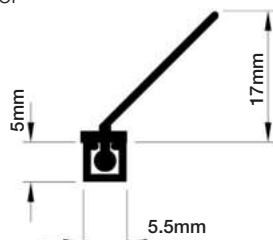
For heavy compression doorsets, the tubular bulb insert is most suitable. For standard applications, straight or angled blades with a crossbar next to the carrier are usually most suited. For ease of access and low friction operation, the straight and angled blades without crossbars are usually recommended.

HOW TO SPECIFY

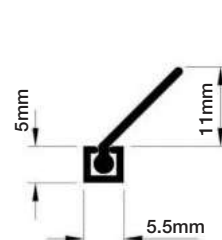
e.g. Sealmaster Deluge SEM/002 to suit door / window inmm high bymm wide opening.



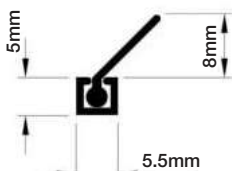
SE with 004



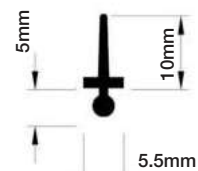
SE with 045



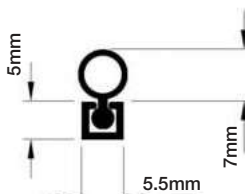
SE with 039



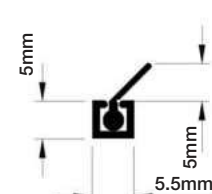
SE with 003



SE with 001



SE with 004



SE with 002

Standard Options	Insert 000	Insert 001	Insert 002	Insert 003	Insert 004	Insert 045	Insert 039
Silver Mill Finish - SEM		SEM/001	SEM/002	SEM/003	SEM/004	SEM/045	SEM/039

Door Stop & Window Seals



SEALMASTER HURRICANE

For heads & jambs of internal doors, external doors & hinged casement windows



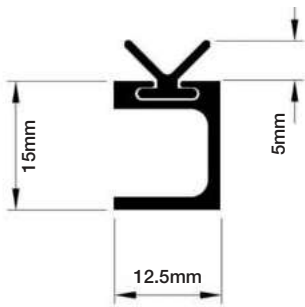
SFG/017



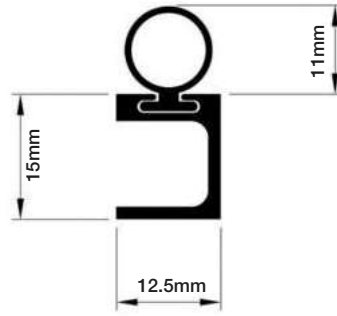
SFS/015



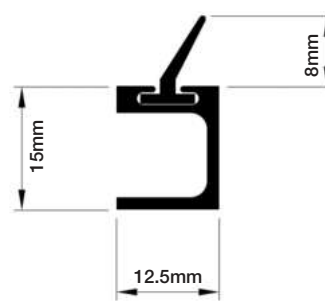
SGG/015



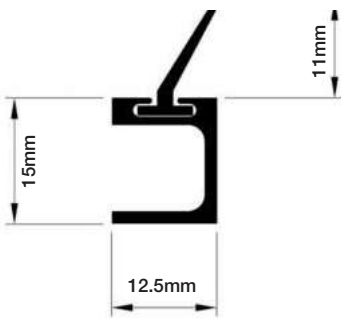
SG with 017



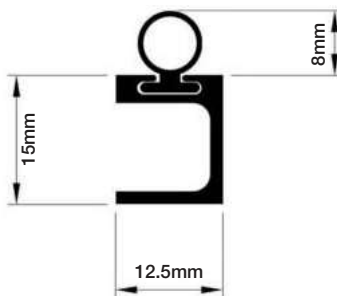
SG with 018



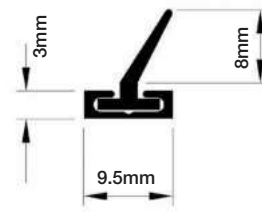
SG with 014



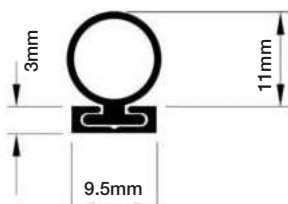
SG with 015



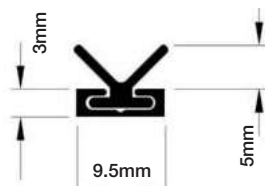
SG with 016



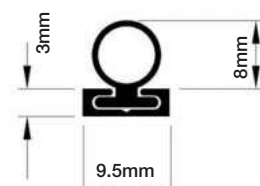
SF with 014



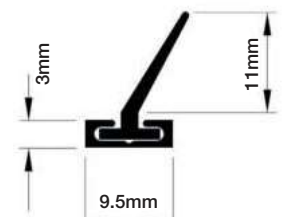
SF with 018



SF with 017



SF with 016



SF with 015

Door Stop & Window Seals



SEALMASTER HURRICANE

For heads & jambs of internal doors, external doors & hinged casement windows



SGG/016



SFS/017



SFG/018

APPLICATIONS

A stop seal available in surface fixed or rebated designs and suitable for a wide range of window and door sealing applications.

FEATURES & BENEFITS

Hurricane rebated seals are primarily designed for use with new purpose made windows and doors whilst the surface fixed versions are suitable for upgrading existing windows and doors.

Hurricane rebated seals are particularly suited for fitting all around casement windows with cranked hinges.















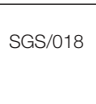





Hurricane seals are suitable for:

- Situations where smoke / gas / air leakage is important. Leakage rates as low as 4m³ / hour / metre have been achieved at 600pa pressure, using a Hurricane rebated seal all around a timber casement window.
- Situations where water tightness is important. The Hurricane rebated seal with the 017 insert maintained watertightness at 750pa pressure.
- Darkrooms for photographic work.
- Situations where noise penetration is important. An improvement in the order of Rw=10dB in sound transmission has been achieved with the Hurricane rebated seal with the 014 insert.

Hurricane stop seal aluminium carriers are available with a wide range of angle blade and compression bulb inserts to suit the applications illustrated above and many others.

HOW TO SPECIFY

e.g. Sealmaster Hurricane SFS/014 to suit door / window inmm high bymm wide opening.

Standard Options	Insert 014	Insert 015	Insert 016	Insert 017	Insert 018
Satin Silver - SFS	 SFS/014	 SFS/015	 SFS/016	 SFS/017	 SFS/018
Satin Gold - SFG	 SFG/014	 SFG/015	 SFG/016	 SFG/017	 SFG/018
Satin Silver - SGS	 SGS/014	 SGS/015	 SGS/016	 SGS/017	 SGS/018
Satin Gold - SGG	 SGG/014	 SGG/015	 SGG/016	 SGG/017	 SGG/018

Door Stop Seals



SEALMASTER TYPHOON

For double swing double leaf doors, large single swing doors & plate glass doors

SNG/025



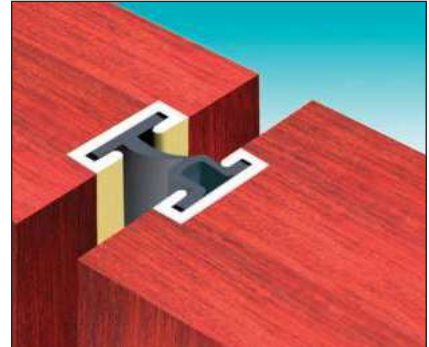
SPG

SNS/022



SPS

SMG/024



SMG/007

APPLICATIONS

A specialist range of stop seals for both timber and glass doors.

The SM holder may be used with any of the Typhoon range of seal inserts.

Typhoon SP section holders are designed to be fitted opposite the Typhoon SM section holder seal options on pairs of plate glass doors.

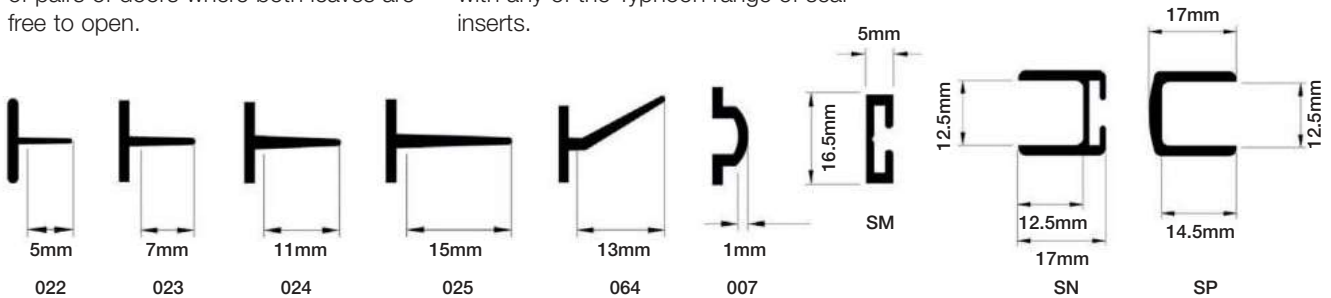
FEATURES & BENEFITS

Typhoon SM section holders are designed to be rebated flush into the head, meeting and hanging stiles of hinged or pivot doors that swing through 180° and in the meeting stiles of pairs of doors where both leaves are free to open.

Typhoon SN section holders are designed to fit over the edge of 12.5mm or 10mm plate glass doors. For 10mm glass doors neoprene packing should be used on either side of the glass (available from Sealmaster ex stock). The SN holder may be used with any of the Typhoon range of seal inserts.

HOW TO SPECIFY

e.g. Sealmaster Typhoon SMS/022 to suit pair of double swing doors in mm high by mm wide opening.



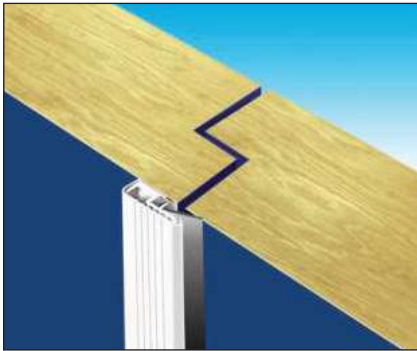
Standard Options	Insert 022	Insert 023	Insert 024	Insert 025	Insert 064	Insert 007	None
Satin Silver - SMS	SMS/022	SMS/023	SMS/024	SMS/025	SMS/064	SMS/007	
Satin Gold - SMG	SMG/022	SMG/023	SMG/024	SMG/025	SMG/064	SMG/007	
Satin Silver - SNS	SNS/022	SNS/023	SNS/024	SNS/025	SNS/064	SNS/007	
Satin Gold - SNG	SNG/022	SNG/023	SNG/024	SNG/025	SNG/064	SNG/007	
Satin Silver - SPS							SPS
Satin Gold - SPG							SPG

Door Stop Seals



SEALMASTER TEMPEST

For rebated meeting stile doors



SKS/090



SLS/088



SLG/088

APPLICATIONS

A surface mounted stop seal for the rebated meeting stiles of pairs of doors.

FEATURES & BENEFITS

Tempest seals are specifically designed for use on rebated meeting stiles of pairs of doors, primarily French doors or other situations where the opening element and the frame are flush.

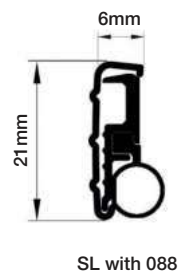
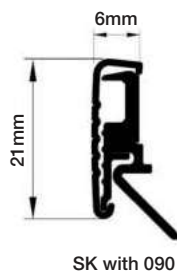
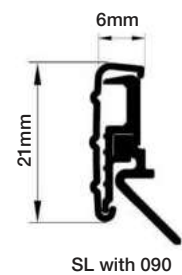
These seals, used in conjunction with other appropriate stop and threshold seals are suitable for situations where control of smoke / gas / air leakage is important. The base holder, which accommodates one of the range of flexible neoprene seal inserts, is screw fixed to the required surface. These screw fixings are then hidden by the cover section, which is available in

a choice of ribbed or piped finishes to match the Sealmaster threshold sections e.g. Tempest SKS/088 matches Cyclone TDS/WDS

HOW TO SPECIFY

e.g. Sealmaster Tempest SKS/088 to suit rebated door inmm high opening.

Standard Options	Insert 090	Insert 088
Satin Silver - SKS 	SKS/090	SKS/088
Satin Gold - SKG 	SKG/090	SKG/088
Satin Silver - SLS 	SLS/090	SLS/088
Satin Gold - SLG 	SLG/090	SLG/088

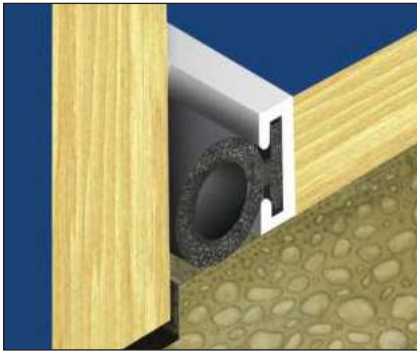


Door Stop Seals



SEALMASTER MONSOON

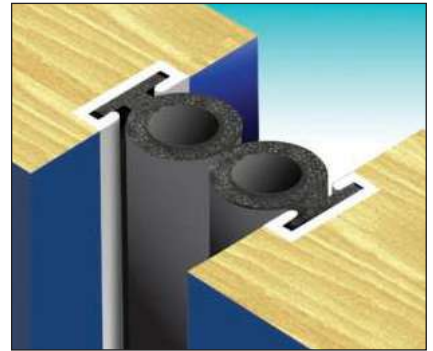
For heavy duty door applications, roller shutter doors & sliding doors



SHS/027



SHG/026



SHS/026

APPLICATIONS

A heavy duty draught and noise seal for industrial or other large applications.

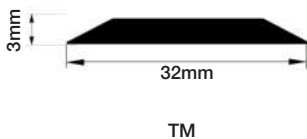
FEATURES & BENEFITS

Monsoon seals are circular heavy duty draught and noise seals, particularly suitable for use in industrial applications on large doors where the gaps are consistent and for the bottom of roller shutter doors.

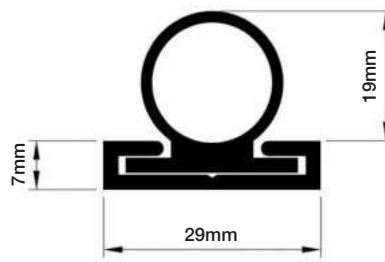
On roller shutter doors, these seals should make contact with a suitable threshold, such as the Thunder TMS or TMG.

HOW TO SPECIFY

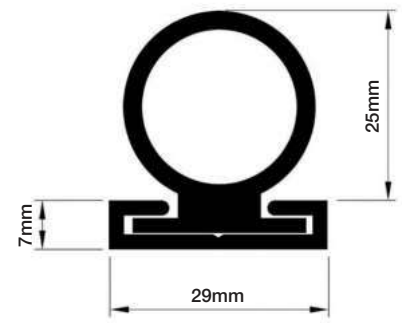
e.g. Sealmaster Monsoon SHS/026 with Sealmaster Thunder TMS contact strip to suit door inmm wide opening.









TM



SH with 027



SH with 026

Standard Options	Insert 026	Insert 027	NONE
Satin Silver - SHS 	 SHS/026	 SHS/027	
Satin Gold - SHG 	SHG/026	SHG/027	
Satin Silver - TMS 			TMS
Satin Gold - TMG 			TMG