



# Envirograf®

Passive Fire Protection

## Passive fire prevention products plus acoustic, draught and weather seals



Fire stopping products



Intumescent paint for timber, steel & plaster



Consumer Unit Protection



Cavity Barriers Range



The Catalonia Institute of Construction Technology

We are currently in the process of obtaining ETA certification for our products



## Fire Protection - Looking to save Lives and Property

**Working with Fire Officers, Architects, Specifiers and Contractors**

**Today, no company provides a more comprehensive range of reliable fire prevention products than the excellent Envirograf® range**

The Envirograf® brand was established in 1983 and it quickly evolved to become a leading force in fire containment technology. Its reputation as innovator and developer of fire prevention products is widely recognised, and its commitment to product research and development is second to none.

Envirograf® products carry the hallmark of excellence, reflecting the high standards that prevail in its laboratory, test rig, and manufacturing plant. Envirograf® products have rigorous quality control which, at all stages, ensures products remain at the leading edge of fire containment technology. This quality has earned the company and its products a high reputation.

### **PRODUCT SELECTION**

When it comes to fire protection, every risk must be considered to ensure that loss of life and loss of property are kept to a minimum.

While many people are aware of the importance of fire barriers in preventing or delaying the spread of fire, they do not always consider the effects of breaching the fire barrier, perhaps to allow electrical wires or other services to pass through. That is why a range of Envirograf® intumescent products has been designed, to safeguard the integrity of fire barriers, whether they are ceilings, floors, roofs, or walls.

Other products in the Envirograf® range are designed to protect a structure or item so that it can maintain its structural performance in a fire (e.g. load-bearing steelwork or fire doors). Choosing the correct product is essential. Seals must offer the same level of fire protection as the fire barrier they are to seal. For example, a ceiling with a fire protection rating of 60 minutes needs a seal with a rating of 60 minutes to maintain its integrity. When it comes to protecting a structural item in a building, it is vital to find out its protection rating and ensure that it maintains the load-bearing capacity in a fire.



**We provide:**

- **Consultation**
- **Site Meetings**
- **Solutions**
- **Lasting Protection**
- **Certified CPD's**

## **FIRE RESISTANCE COATINGS STANDARDS**

There are seven relevant British Standards categories:

**CLASS 1** – BS476 Part 7 (1987)

**CLASS 0** – BS476 Parts 6 (1989) (2002)

**BS-EN B.S1 d0**

**BS476 Part 20/21/22/23 (1987)**

However, the British Standards tests will be superseded by the new European Standard EN13501 Parts EN13823 (2002) single burn test (SBI) and EN11925-2 (2002) ignitability.

Relevant Envirograf® products have been tested to the new standard with the resulting excellent classification A1-B/S1/d0 (the S1 indicates minimal smoke emission, on a scale of S1 to S9, where S9 is the highest smoke emission).

Coatings only need to be tested on particle board – 12mm thick for walls and 18mm thick for ceilings and floors. The particle board is accepted in place of all types of wood board, but Envirograf® products have been tested on MDF board to the same European Standard, again with the resulting excellent classification A1-B/S1/d0.

This test information will be indicated on Data Sheets. These should be consulted during the specification process, or you can contact our technical department.

All other products are tested to European Standard as shown on each Product.

If you have any questions during the specification process, including requirements for test data, contact the technical department.

**NB:** for applications where there may be some need for clarification on the suitability of the product, an independent assessment derived from test certificate(s) may be necessary, provided that it is from an independent fire consultant. Contact the technical department.

## **LEGISLATION**

All products comply to Document B & E where applicable. In all cases, building regulations and approved documents (as well as building officers, local fire authorities, and health and safety executives) should be appropriately consulted.

## **TERMS OF BUSINESS**

Envirograf® products are only sold through approved distributors. For terms of business, please contact Intumescent Systems Ltd or your nearest distributor (details on back cover).

## **HOW TO ORDER**

Once you have specified the product or products that you require, place your order with your nearest distributor, who will ensure that the product specified is correct for the application. They will then organise the delivery of the goods to the desired location.



### DESCRIPTION

A true intumescent pillow made from a hardwearing coated cloth filled with pieces of fireproof sponge and Envirograf® intumescent material - it is soft and pliable, enabling them to be wrapped around services and to fill awkward areas. The pillows not only give fire stopping and smoke sealing, but will expand to 3 times their size in a fire, but are not high pressured, so they will not push each other out, they will just lock together.

They can be fitted to any size of opening, and give permanent or temporary fire fire protection and smoke sealing. Suitable for computer/clean/sterile areas. Can be used for overnight protection where work is in progress. To ensure pillows are not lost, they can be fitted with a tag and loop and wired together for security – they can be taken out and retained for further use. Will not rot or degrade.

### PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 124 minutes integrity and 113 minutes insulation. Also tested to EN 13501-2:2007 + A1:2009 achieving 120 min. integrity and insulation.

### USE

Pillows are used for packing into gaps around pipes, cables, and over cable trays.

### ORDERING REFERENCES:

**PATENTED**

Ref	Size	Ref	Size
P1	40 x 150 x 150mm	P5	80 x 127 x 250mm
P2	40 x 225 x 225mm	P6	80 x 300 x 300mm
P3	40 x 300 x 300mm	P7	80 x 225 x 225mm
P4	40 x 127 x 250mm	20 sizes in price list plus special orders	

In areas requiring removal and re-fitting of pillows, security tags can be fitted

**Other sizes in stock or made to order**



### DESCRIPTION

A non-inflammable, compressible, foil-clad mineral fibre block with intumescent on both sides, so seal & lock together in a fire, 1200mm long. Designed to form a fire and smoke barrier and easily cut to size with a sharp knife. The blocks have self-adhesive tape for joining together. Available in the standard sizes shown below. Other sizes can be made to order.

Ideal as a fire break under suspended computer floors, or between screen walling and concrete floors. They can be used with Envirograf® wraps and pipe collars for PVC/copper/steel pipes.

### USE

For use in walls or floors, and can be easily removed for the maintenance of services.

### PERFORMANCE

Tested to BS476 Part 22 (1987), achieving an integrity of 138 minutes.

### ORDERING REFERENCES:

**PATENTED**

Ref	Depth x Width	Ref	Depth x Width
IB1	50mm x 150mm	IB2	100mm x 150mm
IB1/A	50mm x 100mm	IB2/A	100mm x 100mm
IB1/B	50mm x 050mm	IB2/B	100mm x 050mm

NB: IB1=1hr IB2=2hr rating. Other sizes can be made to order





**DESCRIPTION**

A non-inflammable, non-fibrous, compressible, foil-clad-intumescent and sponge block, 1m long, with self-adhesive strips fitted down both sides for joining the blocks together, designed to form a fire and smoke barrier. Services can be passed through the block(s) using Envirograf® Wraps or Product 110 Fireblok® - sleeving for all shapes and sized pipes, trunking, etc.

**USE**

Suitable for use in ceilings, floors, or walls in computer rooms, sterile areas, and other 'clean' areas. Light and self supporting. No fibres, completely safe for Hospitals.

**PERFORMANCE**

Tested to BS476 Part 22 (1987), achieving integrity of 138 minutes.



**ORDERING REFERENCES:**

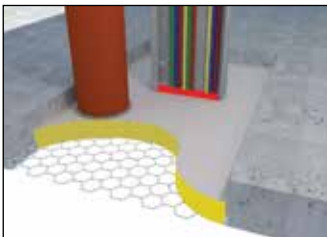
**PATENTED**

Ref	Depth x Width	Ref	Depth x Width
SIB1	50mm x 150mm	SIB2	100mm x 150mm
SIB1/A	50mm x 100mm	SIB2/A	100mm x 100mm
SIB1/B	50mm x 050mm	SIB2/B	100mm x 050mm

NB: SIB1 = 1 hour rating and SIB2 = 2 hours rating.



This product installed correctly is as strong as a wall



**DESCRIPTION**

A high density rock fibre slab with intumescent coating on both sides, which can be easily cut with a sharp knife and over painted or decorated. **Appropriate jointing compound is supplied.**

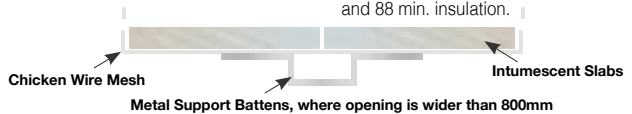
**USE**

Suitable for use as a permanent fire barrier in walls. Intumescent Jointing Compound is supplied with each slab for fixing sections together. It is ideal for use over door frames, between the frame head and ceiling.

Where there are PVC pipes and cables use Envirograf® pipe wraps (Product 7) or Fireblok sleeves (Product 110). Also suitable for floors, but for large floor openings they should be supported with wire mesh. Envirograf® Slabs are 60mm thick and very supportive, so can be used to fill large wall openings.

**PERFORMANCE**

Tested to BS476 Part 22 (1987), achieving integrity of 183 minutes. Also tested to EN3501-2:2007 achieving 120 min. integrity and 88 min. insulation.



**ORDERING REFERENCES:**

**PATENTED**

Ref	Dimensions
IS 60	60mm x 600mm x 1200mm (1 hour - 4 hours fire rating)
SUP	Metal Support Batten for large floor openings ( per metre)





### DESCRIPTION

A high density fire-stop sponge with either white or black intumescent coating on both sides. Sponge is easily cut with a sharp knife and can be painted over/decorated. An appropriate quantity of **Envirograf® Jointing Compound is supplied.**

### USE

Suitable for use as a permanent fire barrier, where no fibres are permitted (eg: including computer rooms, operating theatres,

sterile areas, electronics areas, and food preparation areas. Where services pass through the slab, use Envirograf® Products 1, 7, 13, and 110.

### PERFORMANCE

Tested to BS476 Part 22 (1987), achieving integrity of 138 minutes.



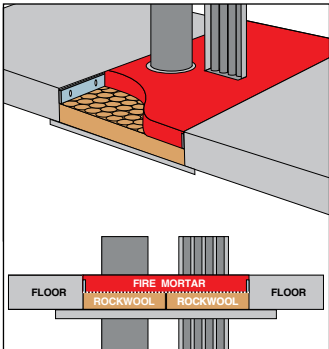
When slabs are used in floor openings, they must be supported by chicken wire mesh.

### ORDERING REFERENCES:

**PATENTED**

Ref	Dimensions (mm)		
<b>WHITE COATING</b>		<b>BLACK COATING</b>	
NF50/ 5	50 x 500 x 1000	BNF50/ 5	50 x 500 x 1000
NF50/ 7	50 x 750 x 1000	BNF50/ 7	50 x 750 x 1000
NF50/10	50 x 1000 x 1000	BNF50/10	50 x 1000 x 1000

**FM is normally in Grey finish but can be supplied in dark pink for identification. Labels are supplied.**



### DESCRIPTION

A dry mix to which water is added and then mixed like plaster or sand/cement. **No shuttering boards are required.** When set, the mortar is load bearing. It can be drilled with wood bits and is easily cut to allow the installation of services. Standard single-bag FM mix available in 25kg bags (FM25).

Mix together, just add water and apply. The mortar comes in 2 Colours: Dark Grey or to show that the mortar is a fire rated product it can be supplied Pink in Colour.

Should you wish we can supply a light aggregate to add to the Fire Mortar in 6.25Kg bags. See illustration for instructions.

### USE

Good for fire stopping around building services that pass through floors. Lay rockwool slabs into the opening, leaving the required depth for the mortar, according

to the loading required. It is essential to fit Envirograf® Product 7 (intumescent wraps) around PVC pipes, cables, and steel pipes. For areas over 600x900mm, it is essential to reinforce with 30mm chicken wire mesh, fixed with FB/C straps and support battens. See data sheet for full details.

### PERFORMANCE

Tested in accordance with BS476 Part 22 (1987). The test report shows that there was no loss of integrity of the slab itself during the 245 minutes period and 245 minutes insulation. For non-load-bearing areas, 25mm thickness will give 245 minutes integrity. For load-bearing areas, 50mm thickness for light loading, 60mm thickness for medium loading and 70mm thickness or more for heavy loading.



### ORDERING REFERENCES:

**PATENTED**

FM25	Grey Fire Mortar 25kg
FM25/P	Pink Fire Mortar 25kg
/A	Aggregate 6.25kg (add A after reference when ordering)
FB/C1	1000mm metal straps with fixing holes at 300mm centres
SUP	Support Bars (folded zinc metal strips 18SWG) <b>state length</b>
MESH	30mm wire mesh x 1050mm width, sold per linear metre run





Envirograf® Wraps are foiled to enhance the expansion in a fire and to keep the thickness down for ease of application.

### DESCRIPTION

Three types of very economical foil-clad Intumescent wraps for pipes and cables. A limited range of acoustic protection versions is also available.

### USE

For use around pipes or cables in brick or block walls, and in concrete floors. Also for use with Products 4, 5, and 6, the wrap is pushed into the hole, leaving a 10mm gap back from the wall face for pointing with sand and cement or slab coating or plaster. The wraps will crush PVC pipes, trunking, and cables, and will cool steel pipes when attacked by fire – an economical way to protect services. A label is supplied to

adhere to protected pipes or cables, for identification to the relevant authorities. See also Envirograf® Products 25 and 110 for cable and pipe protection.

### PERFORMANCE

This product underwent a series of fire resistance tests employing the general procedures and criteria of BS476 Parts 20/21/22 (1987). It has been tested on sealing penetrations of various pipes passing through different types of floors and walls. Integrity and insulation results of up to 245 minutes were achieved. Also tested to EN 1366-3 for 70 minutes integrity.

### ORDERING EXAMPLE:

For 83mm external diameter PVC pipe and cables  
**EW83/3** for 1 hour to 3 hours, or **EW83/4** for up to 4 hours

A label is provided to adhere to service showing is protected by Envirograf® Wrap.

### ORDERING REFERENCES:

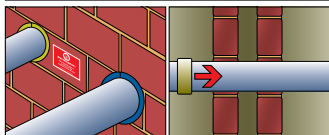
**PATENTED**

Reference	External Pipe Diameter	Depth of Wrap	Rating
<b>EW#</b>	18mm to 215mm	30mm	1-3 hours
(# = external pipe/cable size)		50mm	1-4 hours

Size 250mm up to 650mm width 100 to 200mm. (See price list for full range)

**To suit pipes up to 650mm**

## NEW INTUMESCENT WRAP IN 10m ROLL FORM



A Wrap on a roll 30mm & 50mm wide for 1 to 4 hours fire protection. All measurements are give for lengths to be cut according to size of pipe or cable. The wrap can also fit round multiple services, for brick, block & concrete walls or ceilings. Just cut to length adhesive tape supplied & labels to donate service is fire protected.

### DESCRIPTION

This continuous wrap on a roll is ideal for fire protection of multiple pipes and cable services. Just cut to length and wrap around the service. Supplied in two widths, with cutting sizes for each pipe size, plus tags and labels to adhere to the pipe or wall. Protection for up to four hours.

**Ideal for Plumbers or Electricians to keep ready for use.**

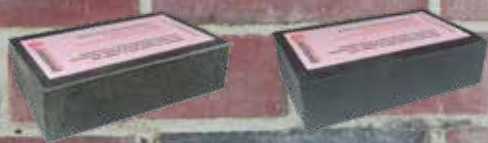
### PERFORMANCE

This product has been tested to BS476 Part 20 (1987) and EN1366-3 (2000).

### ORDERING REFERENCES:

**PATENTED**

<b>EWE1</b>	30mm wide wrap	1-3 hours protection up to 200mm diameter
<b>EWE2</b>	50mm wide wrap	1-4 hours protection up to 400mm diameter



Circular seals for either filling in circular holes or pipes, but can be cut for pipe area, cables, trunking etc. to pass through.

**EM215/1**  
Intumescent block  
1 hours fire rating

**EM215/2**  
Intumescent block  
2 hours fire rating

**CB Intumescent block**  
2 hours fire rating

Easy installation, just lay them as bricks. Suitable for walls, floors and ceilings  
 Envirograf® black AM Intumescent mastic can be filled on any open joints.

- Temporary or permanent fire protection solution for sealing around pipes, cable trays and cables in wall, floor or ceiling openings.
- Made from fire resistant foam and intumescent
- Dust and fibre free
- Easy installation ( can be cut and shaped with a large knife, without using special tools )
- Acoustic properties to BS EN ISO 140 Part 4 ( 57 dB )
- Fire rating to BS476 Part 20 & EN1366-3 up to 2 hours



Easily shaped to the required size

In a fire, the 1 hour block sponge centre will stop the fire & smoke penetration & the intumescent which is rubberised expands holding together & sealing off the opening. The 2 hour Envirobrick is coated with Envirograf® Intumescent coating which seals off the sponge and as the intumescent material expands the whole opening becomes a solid area keeping back the flames and smoke, gas and chemical vapours.

Both will seal round cables, cable trays, PVC pipes and also metal pipes, ventilation & electrical trunking. Should large pipes or services be fitted then our EB (Product 16) or WPCS units ( Product 13) can be fitted into the Envirobrick. For hollow plasterboard walls. According to the depth of the wall the brick can be fitted either way 130mm or 200mm through the wall, however if the gap

between the walls is larger we can make the bricks wider. If however fitting into a hollow partition wall greater than 200mm, we can make a wall lining to fit into the width of the opening first. Then apply bricks which are made to suit any size opening. This means the bricks can be fitted on one face only or each side leaving a gap between.

**ORDERING REFERENCES:**

Square		Circular Rings for Inside Pipe			
Ref.		Ref.	Diam.	Ref.	Diam.
EM215		CB65	65mm	CB75	75mm
200mm long		CB100	100mm	CB125	125mm
x 130mm wide		CB150	150mm	CB200	150mm
x 50mm high		CB250	250mm	CB300	300mm
		<b>1 hours - 40mm thick</b>		<b>2 hours - 50mm thick</b>	
		<b>All sizes up to 125mm supplied in boxes of 10, 150mm upwards supplied in boxes of 4.</b>			

When ordering please state fire rating required,  
 NB: EM---/1 = 1 hours EM---/2 = 2 hours





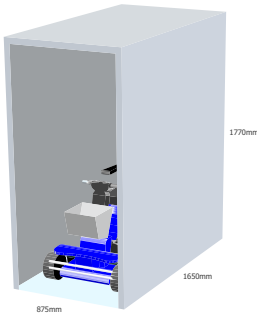
Front flap being opened to allow oxygen to enter the cover - note that fire did not reignit



Contained fire for 45 minutes



Due to many fires & fatalities with the batteries overheating & burning, it has been essential to develop a cover where scooters are parked at night in home & corridors of flats etc. The cover has been designed for quick and easy permanent fixing. Once fixed it is easy to open to get the scooter out & to put back and close at night.



There is a cable entry both sides of the cover to put the mains feed through to plug into charger point ( normally found on the handle bar )

**Dimensions: 875mm wide x 1650mm long x 1770mm high**

**Please make sure that you have sufficient space to fix the cover.**

Picture above shows how fiercely a mobile scooter will burn once enough air is allowed to feed the fire.

**DESCRIPTION**

For sealing around services passing through dry lining, lath and plaster and solid walls. Giving 120 minutes of fire protection for plastic pipes and cables and steel and copper pipes. The CAG disc has cuts that open up to go round the service for quick application. Double sided braided tape for full adhesion. CAG gaskets are boxed in 36 to a box.

**ORDERING REFERENCES:**

Ref	Size
CAG1	65mm for services upto 28mm
CAG2	75mm for services upto 39mm
CAG3	90mm for services upto 55mm



**PERFORMANCE**

Tested to EN 1366-3:2009 achieving 120 minutes. Acoustic testing to BS EN ISO 140-3:1995 63dB (-2,-8)

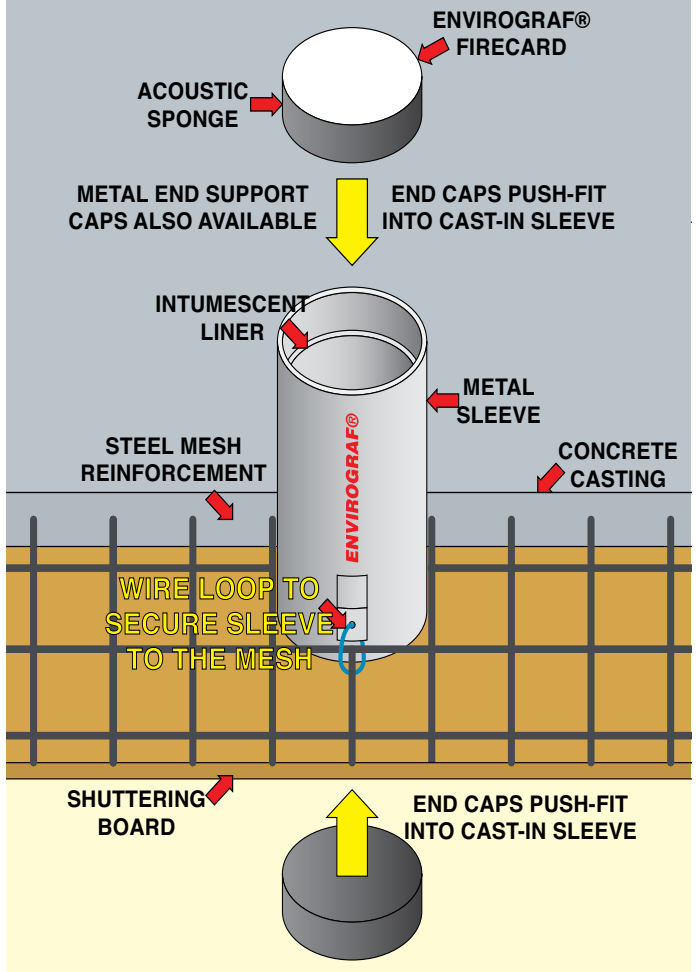


**DESCRIPTION**

A circular oblong or square metal collar with an intumescent lining, designed for setting into concrete and to allow any type of service (cable, pipe, etc) to be inserted or removed at any time. Removable end-caps are made from acoustic sponge and fireproof card, and can be cut with a sharp knife to accommodate services up to 300mm internal diameter. They can be fitted into bored holes if new services are required after the concrete has been set. Suitable for use in either domestic or industrial applications (such as computer rooms, hospitals, laboratories, etc).

**USE**

For use around services in fire-rated concrete floors, the sleeve is fastened to the reinforcing mesh with wire ties and cast into the concrete. The enclosed ends prevent concrete from filling the inner part of the sleeve. After casting and before the concrete is set, the ends are simply wiped clean with a damp cloth. When the concrete is set, the end caps are released by scoring around the rim tape with a sharp knife. End-caps are then cut to fit the service and are placed back into the end of the sleeve. At any time, these end caps can be removed for maintenance, offering excellent versatility. In a fire, the intumescent liner expands to fill the gap around the services and blocks passage of smoke and fire. End-caps stop smoke passing through the floor. Acoustic end caps provide excellent attenuation to airborne sound. Metal end-caps can be supplied for use after setting, allowing people to walk over or pallet trucks to pass over.



**PERFORMANCE**

Tested to BS476 Parts 20 & 22 (1987), giving up to 4 hours protection and sound insulation to Doc E of UK Building Regulations. Also tested to European Standard EN1366-3:2005 & EN 1363-1:2000 achieving 130 minutes integrity and insulation. Acoustic testing to BS EN ISO 717-1 (1999).

**ANY SIZE, SHAPE OR LENGTH MADE**

**24H DELIVERY AVAILABLE**

**ORDERING REFERENCES:**

**OTHER SIZES IN STOCK** **PATENTED**

**CCS**

20 Standard sizes available. Other lengths and sizes made to order  
 Circular, square, or rectangular shapes are also available to order up to any size.  
 Phone for data sheet.



**COLLARS UP TO UP TO 800mm DIAMETER**



**THEY WILL GIVE UP TO 4 HOURS FIRE PROTECTION**



**CAN BE USED ON FLOORS, WALLS AND CEILINGS**



**WPCS COLLAR CAN BE USED FOR CABLES**



**DESCRIPTION**

Circular intumescent collars with versatile fixings enabling the units to be fitted onto ceilings, floors, or walls; or they can be rebated into ceilings or walls (hollow/plasterboard). Up to 4 hours protection for pipes 45 - 650mm internal diameter. An acoustic version is available, add A to the ordering reference.

**USE**

WPCS are used in Nuclear Power Stations and Hospitals, up to 800mm diameter.

800mm diameter can be used round cable, WPCS will crush all plastic type pipes in a fire. Will cool down metal, steel copper pipes stopping heat from reaching the next compartment.

The depth of WPCS are:

- 1 hour 30mm deep
- 2 hours 40mm deep
- 4 hours 50mm deep
- 100mm deep for 400mm pipes
- 150mm up to 900mm pipes

The fixing lugs as shown in the photos can be moved round the sleeve to other positions.

**PERFORMANCE**

The WPCS unit has been tested to BS476 Parts 20, 21 & 22 (1987), giving up to 4 hours of fire protection. Warrington - BS EN 1366-3:2009 - 245mins integrity & insulation. Efectis - EN13501-2:2007 - 120mins

**IMPORTANT:**

Please note that external pipe diameters may vary between different manufacturers and systems, and ambient temperature also affects dimensions. Please select the collar size most appropriate for your application, allowing a small clearance for ease of fitting. A close fitting between the collar and the pipe surface should be the aim, but the collar should not be unduly strained in order to close it around the pipe. A fireproof sponge filler strip can be provided upon request for special applications. Please enquire with details of your application for technical advice.

A small gap up to 3mm all round the pipe is acceptable as the WPCS would start to seal 45 seconds from the start of a fire.

**ORDERING REFERENCES:**

Please see the current price list for full details of available products and their ordering references

**PATENTED**

**Available for: 1 hour protection /1**

**2 hours protection /2**

**4 hours protection /4**



**DESCRIPTION**

New Envirograf® ISPC pipe collars offer up to 90 minutes fire protection and it can be quickly fixed to the risk side of a room, using the supplied special fixing clips. ISPC can be used in both new and retrofit applications to protect UPVC, PVC and steel pipes

ranging from 45mm to 350mm in size. Installers can easily fit the Envirograf® ISPC product, even in those difficult-to-reach areas, with no need for special tools or equipment. The fixing clips can be fitted in different places.

**PERFORMANCE**

Tests carried out at Efectis 18th June 2012 for 2 hours fire protection and insulation.

**ORDERING REFERENCES:**

**ISPC** State external size for pipe or cable

**PATENTED**

Please see the current price list for full details of available products and their ordering references.

Specially made so fixings can be in any direction. ISPC can be pushed into wall or ceiling

**DESCRIPTION**

Sealing off Roperhurst Limited pipes from 650mm to 900mm diameter, with 4.5 mm wall thickness.

Pipe collar clamps have been designed and tested for very thin 4.5mm pipes made by Roperhurst Limited. You will see from the photos taken at Efectis of how the pipe collar clamp was mounted.

**USE**

To seal off large pipes from 650mm to 900mm in diameter

**PERFORMANCE**

Tested at Efectis Holland EN1366-3 (2009) for 66 minutes



INTERNAL VIEW BEFORE TEST



EXTERNAL VIEW BEFORE TEST



64 MINUTES INTO THE FIRE TEST



### DESCRIPTION

An intumescent grille unit available in two types: wall mounted and glass mounted.

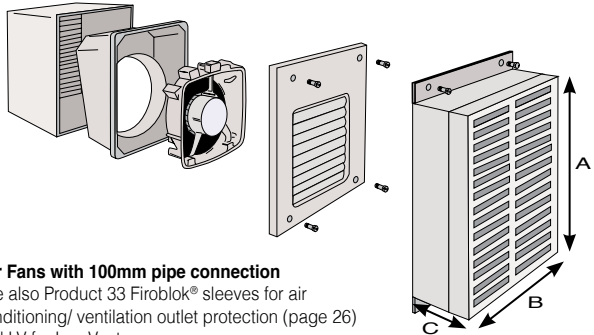
### USE

Fan cover units can be installed over VentAxia, Xpelair, or other makes of wall or window fans, giving fire and smoke protection to escape corridors and staircase fire escapes.

### PERFORMANCE

Can also be supplied with smoke shutters with 24V electro-magnet with automatic re-set solenoid, or fitted with a memory spring which closes at 60/70°C. Fan cover required under Building Regulations and 17th Edition of IEE Regulations.

Contains a front MG grille, giving up to 73 minutes integrity to BS476 Parts 20 & 22 (1987). BS EN 1366-3:2005 & BS EN 1363-1:2000 achieving 130 minutes integrity & insulation.



### For Fans with 100mm pipe connection

See also Product 33 Firoblok® sleeves for air conditioning/ ventilation outlet protection (page 26) and LV for Loo Vents



### ORDERING REFERENCES:

**PATENTED**

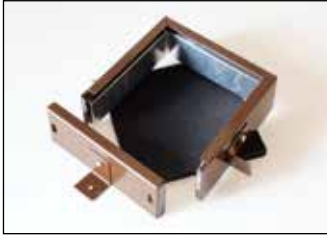
<b>FCW</b>	Wall-mounted
<b>FCG</b>	Glass-mounted

Add suffix /X for Xpelair plus the model, catalogue number, and fan size  
Add suffix /V for VentAxia plus the model, catalogue number, and fan size  
State other makes. **State height, width, depth as A B C**

When ordering fan covers, please allow a minimum 25mm clear gap around the fan mouldings for ease of fixing and wiring.

For 24 Volt or memory spring phone Technical Department



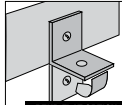


**DESCRIPTION**

Envirograf® multi-purpose boxes comprise of a box section containing intumescent material and a fireproof sponge smoke seal. One side of the metal cover can slide off, to allow fitting over existing services and in tight corners. Fixing brackets can be turned so that the unit can be fitted to a wall or ceiling or be recessed into a hollow plasterboard wall. The box unit is supplied with a fireproof sponge which can be easily cut with a sharp knife or scissors to fit around the service(s) as a smoke seal. The fireproof sponge can be removed and replaced for ease of maintenance at any time.

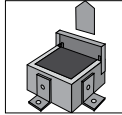
**ADVANTAGES**

Can be fitted over services where the wall

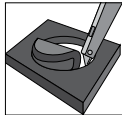


**SPECIAL FEATURES:**

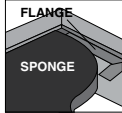
A detachable section allows the unit to be used in tight corners. Adjustable brackets allowing multiple fixing options.



Special made of top cover lid so unit can fit round existing services and cover fitted back.



Special fire-resistant sponge smoke seal, easily cut to allow services through. The sponge smoke seal simply slides into flange section from the front.



Sponge fitted back into flange.



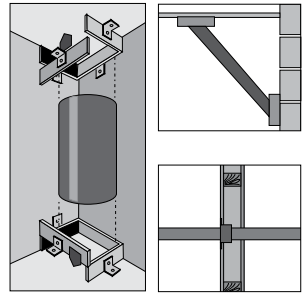
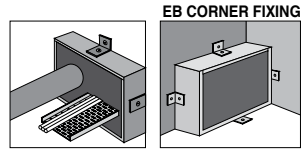
or floor opening need to be left open, i.e. round hot water pipes, cable trays, around cables.

**USE**

The Envirograf® multi-purpose box is the most versatile of its kind available and has been specifically designed for most installation requirements where services pass through fire barrier ceilings, floors, and walls. It can be surface-mounted or recessed.

**PERFORMANCE**

The multi-purpose box was tested to BS476 Parts 20 and 22 (1987), achieving up to 4 hours of fire protection. EN 1366-3:2009 & EN 1363-1:2004 achieving 75 min. integrity and insulation.



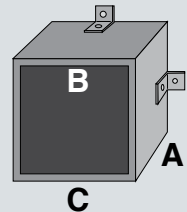
**CAN BE FITTED TO FLOORS OR CEILINGS**

**EB REBATED IN WALL**

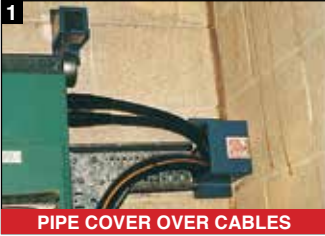
**ORDERING REFERENCES:**

BOX SIZES **CAN BE MADE TO ANY SHAPE OR SIZE** **PATENTED**

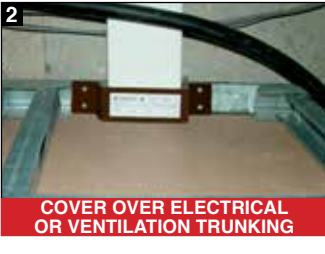
Ref	Depth(A)	Inside(B)	Outside(C)	Rating
EB 45/ 50	50mm	45mm	67mm	4h
EB 55/ 50	50mm	55mm	76mm	4h
EB 72/ 50	50mm	72mm	93mm	4h
EB 83/ 50	50mm	83mm	105mm	4h
EB115/ 50	50mm	115mm	138mm	4h
EB135/ 50	50mm	135mm	155mm	4h
EB166/ 50	50mm	166mm	196mm	4h
EB215/ 50	50mm	215mm	255mm	4h
EB166/100	100mm	166mm	196mm	4h
EB215/100	100mm	215mm	255mm	4h
EB265/100	100mm	265mm	315mm	4h
EB315/100	100mm	315mm	365mm	4h
EB615/100	100mm	615mm	665mm	4h







PIPE COVER OVER CABLES



COVER OVER ELECTRICAL OR VENTILATION TRUNKING



COVER OVER PVC PIPE

**DESCRIPTION**

Metal saddle units made from powder-coated 18SWG zincet and filled with internal intumescent material. Supplied 50mm deep for 2 hours protection, 100mm deep for 4 hours protection, and in a variety of standard sizes. Other sizes can be made to order.

**USE**

For use with single or multiple pipes, where pipes are tight to the wall (1), over pipes and trunking penetrating suspended ceilings (2), in corners (3), or over cable trays.

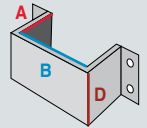
**PERFORMANCE**

Tested to BS476 Parts 20 & 22 (1987), achieving 2 hours protection and 4 hours protection. Tested to EN 1366-3:2009 achieving 132 minutes integrity & insulation.

**ORDERING REFERENCES:**

**MADE TO ANY SIZE** **PATENTED**

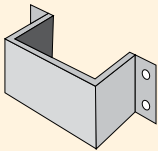
Ref (2 hrs)	Ref (4 hrs)	Internal A	Internal B
PC 50/2	PC 50/4	80mm	60mm
PC 75/2	PC 75/4	120mm	85mm
PC100/2	PC100/4	150mm	120mm
PC127/2	PC127/4	170mm	140mm
PC150/2	PC150/4	200mm	170mm
PC175/2	PC175/4	220mm	190mm
PC200/2	PC200/4	245mm	215mm
PC250/2	PC250/4	295mm	265mm
PC300/2	PC300/4	350mm	320mm



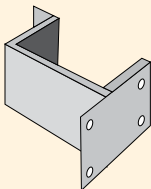
**FOR OTHER SIZES  
QUOTE BOTH REF  
A and B**

See price list for full range. Add /C to the end of the references above if you require corner units. Other sizes made to order: state internal dimensions (A and B) and the depth (D) as depicted in the illustration above.

**APPLICATION**

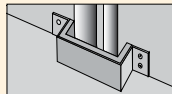


'U' BRACKET

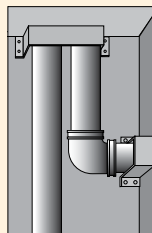
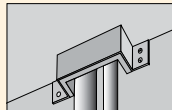


CORNER BRACKET

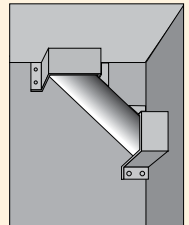
Add /C to ordering references



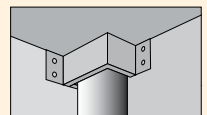
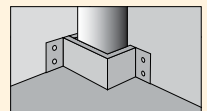
'U' BRACKETS



'U' BRACKETS WITH MULTIPLE SERVICE PENETRATIONS



'U' BRACKETS WITH ANGLED SERVICE



CORNER BRACKETS

MEETING NEW REGULATIONS ( AMENDMENT 3 TO BS7671:2008 )



Unprotected consumer units  
can stop evacuation

Meeting New Requirements

### Electrical Fire Protection Units for plastic consumer units & distribution boards.

Plastic units have always been a fire hazard as normally they are placed on an escape routes on flats, houses, intakes and under stair cupboard . Overloading of cables & fuses can have ignition which soon becomes a large fire.

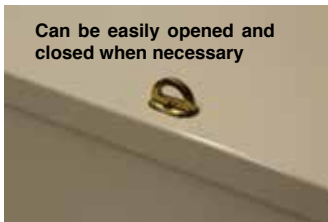
Envirograf® ECU units are made in different sizes to suit your consumer unit & distribution board. Around the unit is a red band of cloth housing intumescent that can be cut with a sharp knife to accommodate cables, conduits & trunking which is already fitted to your units so forming a complete fire seal barrier.

The units are lined with Envirograf® fireproof paper covered with a PVC material. This product is most important to save fire damage and most important to allow evacuation from the flat or building, saving lives.

Can be mounted with door opening up or down.



Protective material which can  
accommodate cables etc.



Can be easily opened and  
closed when necessary

### WHY ARE THEY IMPORTANT?

As of the 5th of January 2015, the Amendment 3 to BS7671:2008 Requirements for Electrical Installation (IET Wiring Regulation) was published, which outlines a new set of regulations that will affect all of the consumer units put in the new builds in UK.

#### What makes it important?

The amendment says:

“Within domestic (household) premises, consumer units and similar switchgear assemblies shall comply with BS EN 61439-3 and shall:

- I. Have their enclosures manufactured from non-combustive material, or
- II. Be enclosed in a cabinet or enclosure constructed of non-combustible material and complying with regulation 132.12.”

This amendment is a massive step towards PVC consumer units improving safety in the home, flat and all premises. To address that ahead of time, Envirograf's R&D have been working hard to provide you with a solution that will allow for a quick and easy access to the consumer unit, whilst providing the necessary fire protection to satisfy the new regulations.

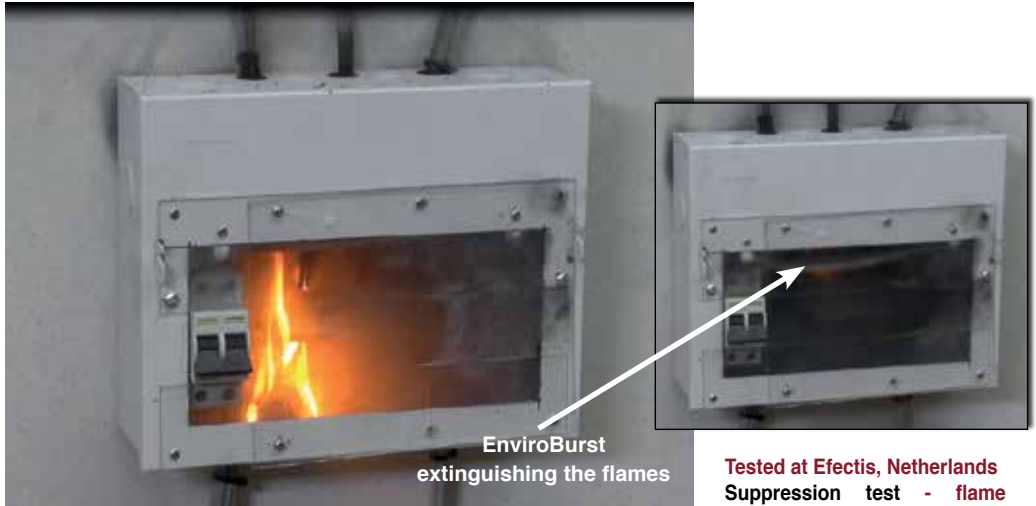
**CALL FOR SIZES AND PRICES**

Please look for :

“ **Passive Fire Products to Protect Electrical Installations** “

for a complete range of products helping you comply with current regulations





## EnviroBurst Automatic Fire Suppression System

EnviroBurst Automatic Fire Suppression System consists of a sealed thermoplastic tube which will begin to soften when exposed to high temperatures. Once the fire reaches 70°C the tube will burst, releasing a liquid extinguishant into the heart of the fire.

The system is ideal for protecting enclosed areas which pose a high risk of igniting, such as distribution boards or consumer units which can be prone to overheating. It is designed to be compact and lightweight, meaning it is easily adaptable to a wide range of purposes.

EnviroBurst tubes are available in four sizes:

EBU0	150mm
EBU1	195mm
EBU2	300mm
EBU3	505mm
other sizes made to order	

Most standard consumer units will only require EBU1 up to 250mm wide. For larger distribution boards EBU2 300mm wide or EBU3.

The quickest and safest way of stopping a fire in the Consumer unit.

### Fixing instructions

The tube units are supplied with fixing clips, nuts and bolts. Fixings should be placed about 30-40mm from both ends.

Take off the lid, drill 2 holes near the top. Fit the clips around the tube & bolt to the inside of the lid. Refit the lid back.

YOU NOW HAVE A FIRE PROTECTED BOARD.





TO MEET NEW REGULATIONS



SCU/B Intumescent back gasket which will protect the cable entry from the back and seal off in the event of a fire.



SLM

This lining will prevent the metal consumer unit from becoming live due to loose connections & live supply touching the case.



SCU

We can also supply an intumescent strip which will protect the cable entry, and seal off in the event of a fire inside the consumer unit.



**DESCRIPTION**

A fast-curing adhesive, suitable for strong bonding of most materials.

require cleaning with a special activation agent prior to application of the adhesive.

This is the strongest contact adhesive.

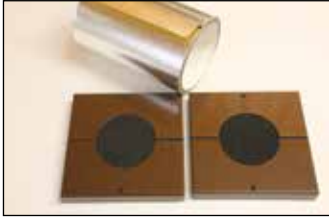
**USE**

This glue can be used to bond metals, plastics, wood, rubber, etc. Some surfaces

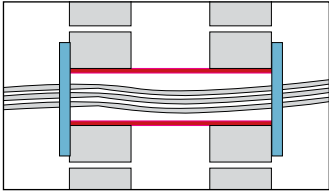
**ORDERING REFERENCES:**

Activator/Cleaner	200ml
Cyanoacrylate Adhesive	50g

**PATENTED**



All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations



## DESCRIPTION

A complete unit giving fire and smoke protection to electrical and plumbing services passing through fire barrier walls made from block, brick, concrete, and hollow plasterboard. The system comprises three parts:

(A) A semi-flexible tube 200mm or 600mm long that can be cut to the right length or made to length to suit the floor or wall. In case of fire, this will intumesce and fill the hole, preventing the spread of fire.

### Only expands Inwards.

(B) Two smoke protection units (one placed each side of the penetration) that allow the maintenance of services but, in a fire, prevent the spread of smoke from one side to the other. (See also Product 110).

## USE

Fire barrier for use in walls and floors, where cables can be easily installed or removed. Round cable trays & baskets, plastic trunking passing through plasterboard walls. Round hot pipes that need to expand & contract. Armoured cables.

## PERFORMANCE

Tested to BS476 Parts 20 & 23 (1987), achieving 130 minutes integrity in solid walls, and 67 minutes in hollow plasterboard walls. EN 13501-2:2007 & EN 1366-3:2009 achieving 120 minutes integrity and 90 minutes insulation.

## ORDERING REFERENCES:

Ref	Internal	External
ICP1	50mm	65mm
ICP2	90mm	115mm
ICP3	115mm	150mm
ICP4	165mm	210mm

**PATENTED**

**STANDARD LENGTH OF INTUMESCENT TUBE 200mm BUT CAN BE MADE TO ANY LENGTH STATE LENGTH REQUIRED ANY OTHER SIZES MADE TO ORDER**

Add suffix /2 for 200mm long and /6 for 600mm long. Other sizes available.



All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations



## DESCRIPTION

Intumescent pads with self-adhesive tape on the back, for single and multi-opening PVC trunking passing through solid walls or ceilings and for steel trunking passing through solid hollow walls.

## USE

The pads are adhered inside the trunking with the double-sided tape on back of pads where both PVC, UPVC and steel trunking pass through solid wall or floors. Enabling access at all times to the cables.

For UPVC or PVC trunking passing through hollow partitions or floors use Product 28 or 110.

Steel trunking only require the pads in the trunking. For multi sectional trunking we can supply pads to suit these.

## PERFORMANCE

Tested to BS476 Part 20 (1987), achieving an integrity of 245 minutes and 142 minutes insulation.

EN 1363-1:2012 130 min. integrity & 67 minutes insulation.

EN 13501-2:2007 120 min. integrity & 90 minutes insulation

Intumescent Pads are made for all size trunking, just state size

## ORDERING REFERENCES:

Ref	mm
IP21	25 x 50
IP22	50 x 50
IP33	75 x 75

See price list for full range, up to 375mm trunking and multi-trunking

**PATENTED**

## FOR FIRE AND SMOKE SEALING



All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

**DESCRIPTION**

A compressible intumescent pillow with cord and retention tag to fix to the trunking.

**USE**

Use this product when cold smoke as well as fire protection is required in steel or PVC trunking passing through walls and floors. The retaining cord and lug fit inside the trunking, so if the pillow is removed the lid cannot be re-fitted without first replacing the pillow. The pillows will initially allow for

30% or less filling of cables and will then compress to allow for 50% cable fill without overheating the cables. If trunking is more than 50% full, then intumescent pads (Envirograf® Product 26) should be used.

**PERFORMANCE**

Tested to BS476 Part 20 (1987), achieving up to 4 hours integrity.  
EN 13501-2:2007+A1:2004 120 minutes.

**ORDERING REFERENCES:****PATENTED**

<b>TP33</b>	To fit 75mm x 75mm trunking
<b>TP43</b>	To fit 100mm x 75mm trunking

See price list for trunking pillows up to 300x150mm (others made to order) for all sizes of trunking **Ordering TP then size of trunking.**



All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

**DESCRIPTION**

Intumescent wrap for round PVC electrical trunking where passing through hollow plasterboard walls or ceilings. The wrap can be installed after the trunking has been installed, as long as there is a minimum of 10mm gap round the trunking.

**USE**

Use wherever PVC electrical trunking passes through a plasterboard wall or floor. The wrap is fitted around the trunking, and pushed into the wall or ceiling, so that in a fire the wrap expands and crushes the trunking. Can be used where PVC electrical

trunking passes through plasterboard partitions or walls. See also Envirograf® Product 110.

**PERFORMANCE**

The wrap has been tested to BS476 Parts 20,22 (1987), achieving an integrity of 130 minutes in solid walls, and 67 minutes in hollow walls. Also tested to EN1363-1 2000 for 130 minutes, BS EN 1363-1 2012, EN501-2 2007, EN 1366-3 2009.

**ORDERING REFERENCES:**

**TW** State the size of trunking and the length required

**DESCRIPTION**

This is a true intumescent compressible pillow, filled with fireproof sponge and intumescent material. The pillow covering is coated glass-cloth which alone gives up to 4 hours of fire protection. In a fire, the pillow's stitching breaks and the intumescent pillow contents expand around and between the cables to fill up the opening. In both walls and ceilings.

All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

**USE**

For use where cable trays pass through fire-rated ceilings, floors, and walls. Supplied with a fitted cord and retention tag which can be rivetted or screwed onto the cable tray.

**PERFORMANCE**

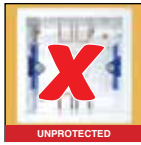
Tested to BS476 Part 20 (1987), achieving an integrity of 181 minutes. Also tested at Cidemco to European Standard EN 366-3:2005 and EN13501-2:2007 for 120 minutes.

**ORDERING REFERENCES:****PATENTED**

**TE** See price list. Can be made to fit any size trunking and opening.

MEETING NEW EN 1364-1:2015 TEST FOR 90 MINUTES

All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations



**DESCRIPTION**

An intumescent gasket that fits into BESA boxes, universal conduit boxes, and socket or switch boxes designed to comply with British Standards and IEE Regulations.

**USE**

Where conduits pass through fire-rated ceilings and walls, it is a requirement to terminate each side with a BESA or universal box fitted with intumescent gaskets to stop fire penetrating. It is also a requirement to fit intumescent gaskets in the back of metal switch/socket boxes where they are back-to-back and cables pass through the wall. All dry lining boxes and metal boxes fitted in dry-lining walls must have intumescent gaskets fitted to comply with the 17th Edition IEE Regulations. To comply with Document E of UK Building Regulations (sound-proofing in plasterboard ceilings and walls), acoustic protection must be fitted for both impact and airborne sound. Envirograf® acoustic protection is approved by Robust Details and tested to Document E.

**PERFORMANCE**

Envirograf® gaskets in metal boxes gave up to 4 hours fire protection and 70 minutes integrity and insulation in dry-lining boxes when tested to BS476 Parts 20/22 (1987). Plastic boxes in ceilings/walls have also been tested to European Standards BS EN 1363-1:1999, EN13501-2:2007, EN1364-1:2015 for 136 minutes.

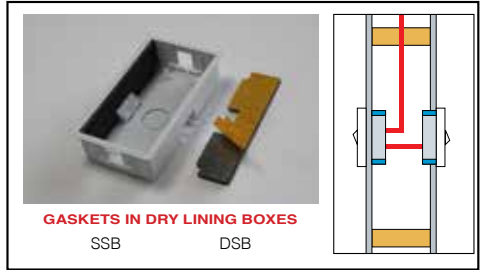
**ORDERING REFERENCES:**

**MADE TO ANY SIZE**

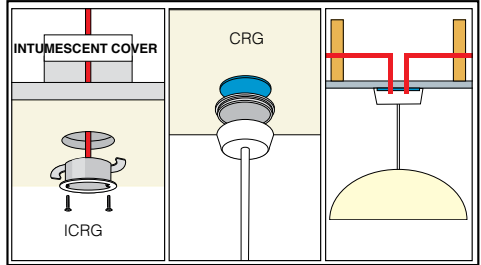
<b>ABG</b>	Adjustable Box Gasket (50mm / 100mm deep)	
<b>MTC</b>	Marshall Tufflex Ceiling Rose Cover	
<b>BEG</b>	BESA Box Gasket	
<b>DPG</b>	Double Plug Box Gasket	
<b>SPG</b>	Single Plug Box Gasket	
<b>CRG</b>	Ceiling Rose Gasket	
<b>SSB</b>	Single Shallow Box	
<b>DSB</b>	Double Shallow Box	
<b>GBOX/T</b>	Twin shallow box + gasket	
<b>GBOX/S</b>	Single shallow box + gasket	
<b>GBOX/D</b>	Double shallow box + gasket	
<b>GBOX/SD</b>	Single deep box + gasket	
<b>GBOX/DD</b>	Double deep box + gasket	

\*INTUMESCENT GASKETS IN ABS BOXES

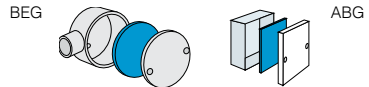
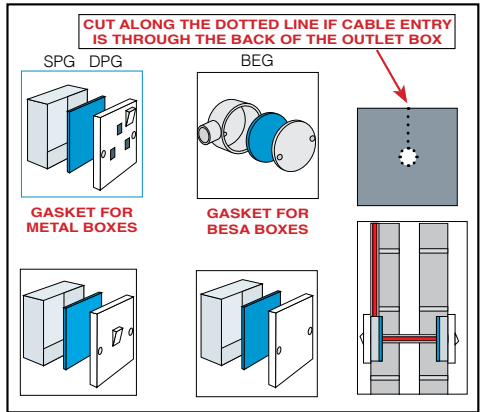
**SOLUTION FOR PLASTERBOARD (DRY LINING) WALLS**



**SOLUTION FOR PLASTERBOARD CEILINGS**

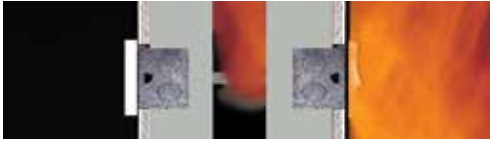


**SOLUTION FOR BLOCK AND BRICK WALL**



Gaskets are simply placed into BESA and knockout boxes and fixed with the self-adhesive backing tape. Shown here fitted into PVC or steel conduits.

MEETING NEW EN 1364-1:2015 TEST FOR 90 MINUTES



Without Gaskets



With Gaskets

## ELECTRICAL SOCKET FIRE AND SOUND TRAP



EXTERNAL FIT



INTERNAL FIT

### THE MAIN FEATURES OF THIS VERSATILE PRODUCT ARE:

- It only takes seconds to fit
- Offers both acoustic and fire protection
- Complies with Document B & E of current UK Building Regulations
- Tested to principles of BS EN1366-3, achieving 2 hours fire rating
- Tested to BS EN ISO 140 Part 4 with a mean result 12dB better than the requirements of Document E of UK Building Regulations

Airborne - 44 db

Impact - 74 db

Minimum rating - 65 db

### ORDERING REFERENCES:

#### EXTERNAL-FIT (SUPPLIED WITH FIXING PINS)

- FST/EXT/S/S&D** SINGLE SHALLOW & DEEP BOXES
- FST/EXT/D/S&D** DOUBLE SHALLOW & DEEP BOXES

#### INTERNAL FIT (NO PINS NECESSARY)

- FST/INT/S/S** SINGLE SHALLOW BOX
- FST/INT/D/S** DOUBLE SHALLOW BOX
- FST/INT/S/D** SINGLE DEEP BOX
- FST/INT/D/D** DOUBLE DEEP BOX

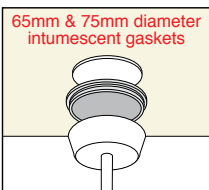
**PATENTED**

Unprotected openings for electrical sockets and switches will reduce the acoustic performance of walls and compromise the resistance to fire. To comply with Documents B and E of the current UK Building Regulations, the integrity of the wall must be maintained, and this can be easily achieved with the Envirograf® Fire and Sound Trap (FST). This versatile product will encase airborne and impact sound and, in the event of a fire, the product will entrap the flames within the socket box for up to two hours, ensuring that there is no penetration of flames and smoke through the socket and into the wall cavity.

This streamlined product, with its double action design, will help to save lives and combat both airborne and impact sound. It is extremely flexible and it can be easily fitted in seconds to all types of electrical socket boxes, thus saving valuable installation time. The Envirograf® Fire and Sound Trap (FST) can be fitted internally or externally to both UPVC and metal socket boxes and it has been tested in accordance with the principles of BS EN1363-1:1999, achieving 131 minutes. Also tested to EN1364-1:2015 achieving 110min. integrity and insulation.

All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

## CEILING ROSE FITTINGS

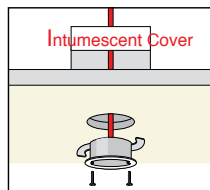


65mm & 75mm diameter intumescent gaskets

This is a requirement if 3 or more cables come through the ceiling

Gaskets are placed between ceiling rose fittings and ceiling

Ref: CRG



Intumescent Cover

Intumescent cover for Marshall-Tufflex ceiling rose fitting for plasterboard ceilings

Ref: MTC

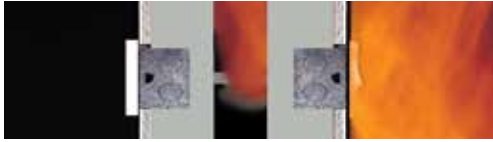
Giving both acoustic and fire protection. For fire only fit Ref: ICRG



Ceiling Rose Gaskets Ref: CRG



MEETING NEW EN 1364-1:2015 TEST FOR 90 MINUTES



Without Gaskets



With Gaskets

NEW ACOUSTIC & FIRE PROTECTION FOR METAL SOCKET & SWITCH BOXES



SINGLE METAL BOX SET



DOUBLE METAL BOX SET

All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

ORDERING REFERENCES:

PATENTED

SPG/APS/26	Single metal box set 26mm deep
SPG/APS/37	Single metal box set 37mm deep
SPG/APS/47	Single metal box set 47mm deep
DPG/APD/26	Double metal box set 26mm deep
DPG/APD/37	Double metal box set 37mm deep
DPG/APD/47	Double metal box set 47mm deep
CBG/APC	Cooker box set ( 47mm deep x 3 in x 5 in )

An intumescent gasket to adhere inside the metal box. Can have holes cut into the gaskets to accommodate tubes and cables. For both single and double boxes, with larger gasket for cooker boxes etc. The gasket has DS tape on the back to adhere to the inside of the metal box. The acoustic sponge gasket has corners cut to allow quick & easy application onto the box.

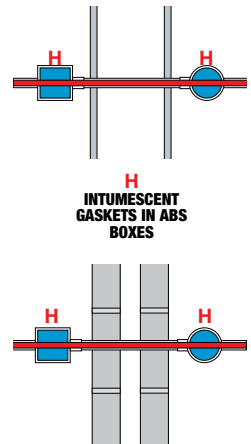
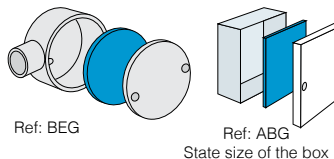
PERFORMANCE

Tested to BS476 Part 22 (1987) and achieved 4 hours in solid walls and 71 minutes in cavity walls. Acoustic protection to Robust Details & 17th Edition IEE Regulations tested in accordance with BS EN 1403 (1995) & rated in accordance with BS EN 150 717/1 (1997). Acoustic criteria tested to BS476, Parts 20/22, EN 1364-1 (1999) & EN 1365-2 (1999). Acoustic performance BS EN ISO 140-3 : 1995 63dB (-2,-8) EN13501-2:2007 achieving 108 min. integrity & insulation. EN1344-1:2015 achieving 136 min. integrity & insulation.

BESA BOXES FITTINGS



It is essential to fit gaskets in Besa Boxes & Universal Knockout boxes where cable pass through walls or ceilings. Without gaskets the conduit in a room or area of fire is glowing hot in 5 minutes alighting the cables in the tube & boxes passing the fire into the next floor or compartment.



Gaskets are simply placed into BESA and knockout boxes and fixed with the self-adhesive backing tape. Shown here fitted into PVC or steel conduits.

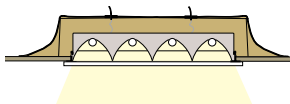
## AIR CONDITIONING UNIT COVER EASILY FITTED OVER INSTALLED UNITS



### DESCRIPTION

A very lightweight, self-supporting and completely ventilated tent (FT) designed to avoid overheating of the light fitting. Cable entries are fitted at the top of the tent, and it is easily installed by one person in minutes. (With no extra supports, simple clip fixing, no mechanical screw fixing required). An acoustic tent is also available to attenuate airborne and impact sound (FT/AC). The acoustic type enables soundproofing without overheating of the light fitting. A version is available for air conditioning units (AIR).

All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations



### USE

For use where recessed fluorescent light fittings or air conditioning units are installed above suspended or plasterboard fire rated ceilings, to maintain fire integrity. No extra supports are necessary because of its light weight. Can be used over air conditioning units. Acoustic covers have been fully tested at The Building Test Centre. Reports are available on request. Cables can be taken up under edge of tent.

### PERFORMANCE

This product underwent a number of fire resistance tests employing the general procedures and criteria of BS476 Part 20 and Part 23 Clause 5 (1987), achieving 88 minutes integrity. Acoustic version tested to comply with Document 'E'. Also tested at TNO to NEN6069:1997. BS476 Part 22 1987 240 min. integrity and 46 min. insulation. BS EN 1363-1:2012 90 minutes. Acoustic performance BS EN ISO 140-3 : 1995 63dB (-2,-8)

### ORDERING REFERENCES:

#### LIGHTING COVERS

Ref	Dimensions
FT1	350mm x 300mm x 150mm
FT2	650mm x 600mm x 150mm
FT21	650mm x 300mm x 150mm *
FT4	1250mm x 600mm x 150mm
FT41	1250mm x 300mm x 150mm
FT5	1550mm x 600mm x 150mm
FT51	1550mm x 300mm x 150mm *
FT6	1850mm x 600mm x 150mm
FT61	1850mm x 300mm x 150mm

#### ACOUSTIC LIGHTING COVERS

Ref	Dimensions
FT1/AC	350mm x 300mm x 150mm
FT2 /AC	650mm x 600mm x 150mm
FT4 /AC	1250mm x 600mm x 150mm
FT41/AC	1250mm x 300mm x 150mm
FT5 /AC	1550mm x 600mm x 150mm
FT6 /AC	1850mm x 600mm x 150mm
FT61/AC	1850mm x 300mm x 150mm

#### AIR CONDITIONING COVERS

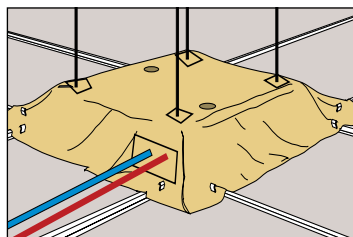
Ref	Dimensions
AIR1	400mm x 400mm x 240mm
AIR2	400mm x 400mm x 280mm
AIR3	600mm x 600mm x 250mm
AIR4	900mm x 850mm x 240mm
AIR5	900mm x 850mm x 280mm

Popular sizes from stock. Sizes marked \* are special sizes made to order.

**PATENTED**

Please state if the product will be fitted above plasterboard ceilings

## AIR CONDITIONING UNITS



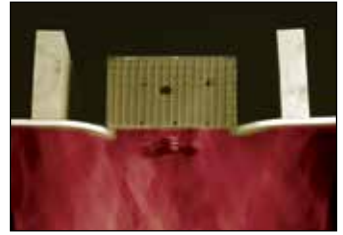
Intumescent card is fixed to the top of the tent to provide entry points for support rods or cables or pipes to pass through.

**Note:** where the unit is already fitted, seams can be made to allow the cover to be placed over the unit and the joints can be sealed with the supplied adhesive.

**VERY EASY TO FIT**



WITHOUT THESE COVERS YOU MAY NOT BE INSURED



**DESCRIPTION**

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

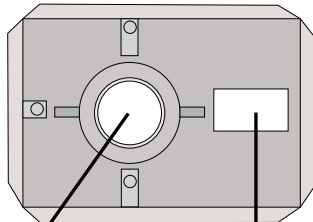
**PERFORMANCE**

This product has been tested employing the general procedures and criteria of BS476 Part 20 and Part 23 Clause 5 (1987), achieving 88 minutes integrity. Also tested at TNO to NEN6069:1997. BS476 Part 22 1987 240 min. integrity and 46 min. insulation. BS EN 1363-1:2012 90 minutes. Fully loaded ceiling 88 minutes integrity.

Where the cover can be fitted over a suspended ceiling in roof areas or where floorboards are already lifted, use the Envirograf® Fire Cage. There are two types: one for light fittings (FC) and the other for light fittings with transformers (FC/R). An acoustic type is available – see next page for details. See price list for full details of all types of downlighter covers.

All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

Envirograf® DSLV Covers are made to measure for use where transformers or chokes are connected to the light fitting.



**LIGHT FITTING**

**TRANSFORMER OR CHOKE**

**ORDERING REFERENCES:**

**PATENTED**

Standard				Light Fitting & Transformer Combined			
Ref.	Length	Width	Height	Ref.	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	DSLVE	450mm	290mm	150mm
DLC5	180mm	180mm	170mm	DSLVG	475mm	320mm	215mm
DLC6	260mm	260mm	120mm	DSLVO	400mm	250mm	200mm
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. For advice on specifications, see contact details on back cover.

Other sizes made to order



**DESCRIPTION**

Sound absorption and fire protection of downlighters can now be achieved with the Envirograf® 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 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. (See Product 31 for tents for fluorescent and other light fittings).

All Electrical Products to comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations

**USE**

Envirograf® acoustic downlighters 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.

**PERFORMANCE**

Only Envirograf® covers have passed all relevant British Standards tests on all types of ceilings, complying with Document B and E (acoustic requirements) of UK Building Regulations and the revised 17th Edition IEE Regulations. Also tested to EN 6069 (1997). BS EN 1363-1 : 2012  
Acoustic performance  
BS EN ISO 140-3 : 1995 63dB (-2,-8)

**ORDERING REFERENCES:**

**PATENTED**

Cage Type				Light Fitting & Transformer Combined				Cloth Type		Downlighter Cover Size	
Ref	Length	Width	Height	Ref	Length	Width	Height	Ref	Diameter x Height		
FC 1/AC	190mm	190mm	140mm	FC 1R/AC	365mm	190mm	140mm	DLC0/AC	150mm x 120mm		
FC 2/AC	190mm	190mm	190mm	FC 2R/AC	365mm	190mm	190mm	DLC1/AC	130mm x 70mm		
FC 3/AC	240mm	240mm	140mm	FC 3R/AC	415mm	240mm	140mm	DLC2/AC	130mm x 100mm		
FC 4/AC	240mm	240mm	190mm	FC 4R/AC	415mm	240mm	190mm	DLC3/AC	130mm x 140mm		
FC 5/AC	300mm	300mm	140mm	FC 5R/AC	475mm	300mm	140mm	DLC4/AC	180mm x 130mm		
FC 6/AC	300mm	300mm	190mm	FC 6R/AC	475mm	300mm	190mm	DLC5/AC	180mm x 170mm		
FC 7/AC	300mm	300mm	250mm	FC 7R/AC	475mm	300mm	250mm	DLC6/AC	260mm x 120mm		
FC 8/AC	340mm	340mm	140mm	FC 8R/AC	515mm	340mm	140mm	DLC7/AC	260mm x 230mm		
FC 9/AC	340mm	340mm	250mm	FC 9R/AC	515mm	340mm	250mm	DLC8/AC	300mm x 170mm		
FC10/AC	390mm	390mm	195mm	FC10R/AC	565mm	390mm	195mm	DLC9/AC	350mm x 230mm		

Special sizes made to order. For advice on specifications, see contact details on back cover.

**ACOUSTIC COVERS TO COMPLY WITH THE REQUIREMENTS OF 'ROBUST DETAILS'**

**Certified CPD's**

**Product 152**



We're always happy to share our knowledge of passive fire protection.

Contact us if you would like to learn more about it.

**NEW Ceiling Barrier for over suspended ceiling tiles giving 60 minutes fire protection, acoustic protection impact & airborne, thermal insulation**



Envirograf® acoustic covers have been on sale for many years, meeting the requirements of Document E of UK Building Regulations for impact and airborne sound. New loft requirements mean that there should be more insulation in both domestic and commercial buildings, so the Envirograf® covers have been made stronger to take insulation material over the top, or the insulation material can be cut and fit around the cover. This new Envirograf® cover meets the thermal requirements of Document L of UK Building Regulations. Although there are now fire-rated downlighters on the market, these are a fire hazard if the fire is below the roof. They will hold in the ceiling but, even without a fire, the metal canisters, in lots of cases, are reaching 200°C and they will ignite paper, cloth, and many insulation materials. In a fire, the temperature reached inside the canister is in excess of 500°C.

The new Envirograf® covers ventilate, thus dispersing heat, and seal up in a fire, stopping the heat and flames from getting into the roof space. Some people say that downlighter covers are not required, especially for domestic situations. In tests carried out by laboratories on this type of fire, from ignition in a lounge or bedroom, the fire can reach 350°C in just 3 minutes, and in 2 minutes 50 seconds ceiling paper can be alight and the flames can be penetrating into the light fittings. People have no idea how quickly fire can travel or how quickly the temperature can rise.

Envirograf® acoustic loft covers are made in many sizes to suit all recessed light fittings.

**All Electrical Products must comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations**

GOVERNMENT TEST ON A LOUNGE

Ceiling on fire







(E) Firoblok® externally-fitted intumescent protection for PVC ventilation outlets

## DESCRIPTION

Intumescent protection for both ceiling and wall ventilation outlets. Can be easily installed in about four minutes. Used with outlets which connect to toilet/bathroom ventilation fans. Available in sizes from 50mm to 600mm diameter, for domestic and industrial applications. **The range now includes superb Firoblok® external protection sleeves for PVC ventilation outlets which is non-clogging and offers 100% ventilation area.**

## PERFORMANCE

Products were rigorously tested BS476 Parts 20 and 22 (1987), achieving an integrity of 120 minutes. The new Firoblok® products were tested to BS476 Part 21 (1987), achieving an integrity of 90 minutes. EN1363-1 (1999) in plasterboard wall 68 minutes integrity. BS476 Part 8:1972 120 minutes. EN1366-3:2009 98 minutes integrity & insulation.

## ORDERING REFERENCES:

**PATENTED**

### Internal intumescent liner (See Ref: A):

Which is in 2 halves & adheres inside the pipe, leaving 92% free air volume

Ref	(Pipe ID* mm)	Rating	
LV 50/1	50	1 hour	
LV 75/1	75	1 hour	
LV 98/1	98	1 hour	Internal pipe wrap for inside plastic & metal pipe from extractor & loo vent sealing off the pipe, stopping it from getting into the cavity and hollow walls.
LV100/1	100	1 hour	
LV100/2	100	2 hour	
LV150/1	150	1 hour	
LV200/1	200	1 hour	
LV225/1	225	1 hour	
LV300/1	300	1 hour	

**Metal sleeve with fixing brackets and internal intumescent liner, for round PVC and flexible pipe in ceilings & walls. Can be surface mounted or rebated (See D):**

Ref	Ring size:	ID* mm	OD* mm	Depth	Rating
LVML 98/1		108	127	30mm	1 hour
LVML100/1		115	128	30mm	1 hour
LVML150/1		156	172	30mm	1 hour

Other sizes made to order

### New Firoblok® external protection sleeve for PVC ventilation outlets (See E):

Ref	(Service OD* mm)	Internal	Hole (mm)	Rating	
EC 80	80	90	95	1½ hours	
EC100	100	110	118	1½ hours	For airvents
EC125	125	130	140	1½ hours	& loo fans
EC150	150	156	170	1½ hours	

\*ID=internal diameter & OD=outside diameter

(Other sizes made to order, including square/oblong sections)



(A) Internal intumescent liner for PVC or steel ventilation pipes in a wall

(D) Intumescent-lined metal collar for use in suspended or plasterboard ceilings and ductings, supplied with fixing brackets, screws, and washers

Can be fixed to ceiling or pushed up into

**ALSO AVAILABLE FOR PVC VENTILATION DUCTING  
SEE PRODUCT 110**



**FITTING INSTRUCTIONS**



Take unit and push into prepared hole in ceiling/wall.



Fasten in position with supplied pins, 2 to side and 2 in the bottom holes.



Slide the PVC or flexible PVC pipe down the unit.



Flexible pipe can be pulled through the hole, rested onto the CLVM & pushed up into the ceiling

Where toilet ventilation fan units fit onto ceilings or walls, fire protection is needed where either PVC or flexible PVC pipes are used. Envirograf® CLVM allows the pipe to be slid down the unit. Having intumescent inside the top of the unit which seals off in a fire & intumescent round the base of the unit to seal onto the plasterboard or lath & plaster holding the unit into position.

**PERFORMANCE**

Tested to BS476 Parts 20/21/22 (1987).  
BS-EN 1366-3:2009 90 minutes fire protection

**ORDERING REFERENCES:**

**PATENTED**

- CLVM/110** For 110mm pipes
- CLVM/150** For 150mm pipes

All clippers are 140mm high



**DESCRIPTION**

Regulations often require fire and smoke protection grilles for openings in walls, ceilings, fire doors or at the entry point of ventilation ducting. The Envirograf® TJ Grille fulfils this requirement, offering full fire and smoke protection.

**USE**

The TJ grille can be either installed into an existing 24V fire/smoke alarm system or (alternatively, if there is no alarm system available or the grille is required to be independent), into an Envirograf® AC mains to 24V control unit with smoke detector circuit and N/O or N/C contacts. (This control unit can operate up to 3 grilles).

**PERFORMANCE**

This product underwent a fire resistance test employing the general procedures and criteria of: BS476 Part 20 (1987), achieving an integrity of 66 minutes; and BS476 Part 22 (1987), achieving an integrity of 73 minutes. EN1366-3:2005 achieving 122min. integrity & insulation. EN13501-2:2004 120 minutes integrity & insulation.

**ORDERING REFERENCES:**

**PATENTED**

Ref	Internal Hole Size Height x Width	External Size Height x Width	Without a suffix - Manual Reset Type
			Add suffix /A for auto reset grille Add suffix /MS for memory spring grille Add suffix /TL for thermal break grille
NTJ1	140 x 280mm	200 x 340mm	
NTJ2	240 x 280mm	300 x 340mm	
NTJ3	190 x 305mm	250 x 365mm	
NTJ4	270 x 305mm	325 x 365mm	
NTJ5	340 x 380mm	400 x 440mm	

References shown for manual reset grilles only. Other grilles made to order.

There are four re-setting options for the TJ Grille:

- Manual re-set (by hand, with a screwdriver or knife) with a permanent loading of 125mA 24V
- An automatic re-set grille with a permanent loading of 125mA, with a re-set loading of 6A 24V for a period of 1 second
- A non-electrical grille containing a thermal breaker that automatically activates at 70°C, moving the shutter to the closed position
- A non-electrical grille containing a memory spring device that operates in the temperature range 50°C to 65°C, closing the shutter to fire and smoke in about 47 seconds

Also available are TJ grilles that open when activated by the fire alarm system, to allow smoke to escape into designated outlets.

**TJ Grilles are available with the following optional extras:**

- CTJ1:** A control unit supplying up to 3 grilles (2 if the grilles are larger than 400x400mm and 1 if over 500x500mm) with a smoke detector circuit with N/O or N/C terminals for AC mains to 24V supply
- SG/S:** Smoke detector and base for use with the CTJ1 Control Unit
- SG/CB:** A control unit with a battery back-up and charger to keep the grille open in a 24 voltpower failure



**DESCRIPTION**

An intumescent ventilation grille consisting of an inner and outer plate having a total thickness of 5mm. These plates house the intumescent material which, in a fire, would seal up the slots or louvres in **under 40 seconds**, giving up to 73 minutes of fire protection.

**USE**

These grilles are used for both sides of doors and walls. Two types of plate are supplied: Type MG is slotted for more ventilation and type MGL is louvred, non viewing. The grilles are finished in brown,

white, stainless steel, and polished brass finish. Other sizes and colours are made to order. Each slot gives approximately 6cm<sup>2</sup> and each louvre gives 3.2cm<sup>2</sup> free ventilation area. Can be used internally, externally, and on ceilings.

**PERFORMANCE**

Tested to BS476 Part 22 (1987), achieving 67 minutes integrity and 65 min. insulation. EN1366-3:2005 - 122 min. integrity & insulation. EN13501-2:2004 - 120 min. integrity & insulation.



Now with Thermal breaker option



MG Grille before the test



MG Grille after the fire test



MGL Grille inside the furnace before the test



MGL Grille inside the furnace after the fire test

**ORDERING REFERENCES:**

SLOTTED / LOUVRED*	EXTERNAL SIZE H x W (mm)	HOLE SIZE H x W (mm)	NUMBER OF VENT HOLES	SLOTTED AREA MG (cm <sup>2</sup> )	LOUVRED AREA MGL (cm <sup>2</sup> )
MG1/MGL1	150 x 200	100 x 150	10	58	27
MG2/MGL2	200 x 200	150 x 150	14	81	38
MG3/MGL3	275 x 200	225 x 150	22	127	60
MG3A/MGL3A	200 x 275	150 x 225	24	139	66
MG4/MGL4	275 x 275	225 x 225	30	174	82
MG4A/MGL4A	300 x 300	250 x 250	33	191	91
MG5/MGL5	350 x 350	300 x 300	52	301	143
MG6/MGL6	350 x 425	300 x 375	75	434	206
MG7/MGL7	425 x 350	375 x 300	68	393	187
MG8/MGL8	425 x 425	375 X 375	90	521	247
MG8A/MGL8A	350 x 500	300 X 450	84	486	230
MG9/MGL9	500 x 500	450 x 450	126	729	346
MG10/MGL10	650 x 650	600 x 600	216	1250	592
MG11/MGL11	550 x 550	500 x 500	132	764	362

\*To the references shown, please add /S for single risk side applications (one intumescent grille and one plain front plate supplied) or add /D for double risk side applications (two intumescent grilles supplied). **Other sizes can be made to order**



**BLOCK GRILLE IN DUCTING BEFORE A FIRE TEST**



**BLOCK GRILLE IN DUCTING AFTER A FIRE TEST**

**DESCRIPTION**

A slim block-type intumescent grille, giving an excellent 90% free ventilation area. The openings would be sealed off in **under one minute** when attacked by fire. Can be made as shallow as 15mm deep to special order. Standard depth 38mm.

**USE**

These grilles are used in ceilings, doors, walls, and ventilation ducting.

**PERFORMANCE**

This product underwent a fire resistance test employing the general procedures and criteria of: BS476 Part 22 (1987), achieving an integrity of 240 minutes. EN1366-3:2005 - 127 minutes. EN1363-1:2000 , EN13501-2:2004 - 120 min.

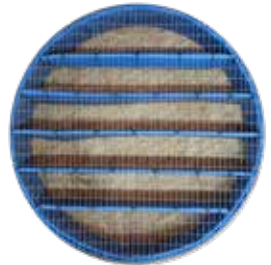


**BLOCK GRILLES BEFORE FIRE TEST**



**BLOCK GRILLES AFTER A FIRE TEST**

Made square, oblong or round. Any type of face plate can be fitted.



**BLOCK GRILLE BEFORE FIRE TEST**



**BLOCK GRILLE AFTER A FIRE TEST**



**ORDERING REFERENCES:**

**BG** Original Style – Sizes from 100mm up to 500mm (plus specials)  
Block grilles are made 15mm or 38mm deep. **SEE PRICE LIST FOR SIZES**

**PATENTED**



**NEW-STYLE BG GRILLE**

**NEW STYLE ALL-IN-ONE BLOCK GRILLE WITH FACE PLATES**

**ORDERING REFERENCES:**

- NBG100** 100 x 100mm
- NBG200** 200 x 200mm
- NBG300** 300 x 300mm

**PATENTED**

**OTHER SIZES MADE TO ORDER**





## DESCRIPTION

These can be upgraded in different ways according to the thickness of the edge of the door & thickness of panels.

If the edge of the door is 30mm or more & panel thickness 9mm or more then these can be upgraded with our Product 42, Clear or White system.

If the panels are less than 9mm then you have to use our card or veneered intumescent sheet material. Do contact us on 01304 842 555 for advice.

If the edge of the door is 30mm or more & panel 8mm or less then do the following on the room side only.

## White Doors:

Wash door down, rub the panel up with coarse glass paper to key the adhesive. Paint all the doors ( except panels ) with one coat HW/AP Clear Primer at 12m<sup>2</sup> per litre. Then 2 coats of HW01 at 8m<sup>2</sup> per litre per coat.

Apply to the panels: 1 coat of Stabond ( allow all to dry ). Cut the card to size, apply IA Adhesive to the panel and grey side of the card & apply card to the door. Allow 3 hours, then apply 1 coat HW04/S Undercoat to all door. When dry, apply any top coat.

## Clear Doors:

Wash door down, rub the panel up with coarse glass paper to key the adhesive. Paint all the doors ( except panels ) with one coat HW/AP Clear Primer at 12m<sup>2</sup> per litre. Then 2 coats of HW02/E at 8m<sup>2</sup> per litre per coat.

Cut veneered card or ply wood to size. Apply the adhesive to the panel and back of veneer/ply & adhere to panel of the door. Then leave till the HW02/E is clear & dry. Apply to hole face of door & veneers with HW Excell Clear Top Coat.

## ORDERING REFERENCES:

**PATENTED**

**ES/MP** Cloth 1220mm wide for composite panel door manufacture

### Cloth with protective fire card for normal on-site upgrading:

**ES/MP/900** White Card for painting over 900mm wide (supplied by the metre)  
**ES/MP/FC3/2** White Card for painting over 1000mm wide x 1220mm long  
**ES/MP/FC3/3** White Card for painting over 1220mm wide x 2000mm long  
**ES/MP/GP** Gaboon ply faced  
**ES/MP/V** Veneered finish (please ask for details of available finishes)  
**ES/MP/PLY** Birch faced ply

For veneer and ply use TCA Adhesive contact type

**TCA** Thixotropic Contact Adhesive for adhering plywood to doors.

For 30 minutes the edge of door 30mm to 40mm  
 60 minutes the edge of door 44mm to 52mm

## USE

Applied to panels in doors, in conjunction with Product 42.

## PERFORMANCE

Achieved in excess of 30 minutes of fire resistance on softwood doors made from 31mm stiles and rails, and panels 6mm. For 60 minutes doors the thickness of the door should be 44mm minimum.

The intumescent card, ply & veneer have all been fully tested to BS476 Part 22 (1987) on newly-manufactured and old doors, at UKAS-approved test centres. EN1634-1:2000 & EN13501-2:2007 achieving 68 minutes integrity and 57 insulation.

In case of the door for 1 hour, if the panels are 18mm thick and over so again these do not need card or veneer just Product 42 coating.



BS476 Part 20 (1987)  
gaps 55mm & 70mm achieved 125 minutes  
integrity and insulation.

#### DESCRIPTION

Envirogra® intumescent expansion joints are made from compressible fireproof sponge strips with a foiled intumescent material on one or both sides. The product is unaffected by water, chemicals or oil and easy to install.

#### USE

Useful as movement or expansion joints in fire walls, floors, concrete slabs, and steel work, or as a cavity joint between brickwork and timber structures. They can be used around ventilation ducting as a movement

#### ORDERING REFERENCES:

<b>E</b>	Ten standard sizes available (others made to order)	<b>PATENTED</b>
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30mm gaps to BS476 Parts 20/23 (1987)

and anti-vibration joint, using double-sided tape to adhere to the ducting, and can also be fitted to seal over the tops of cable trays passing through protected building elements.

#### PERFORMANCE

Tested to BS476 Part 22 (1987), sealing horizontal and vertical expansion joints of different widths, achieving integrity and insulation results of up to 240 minutes. EN1366-4:2006+A1:2010 achieving 124 min. integrity & 52 min. insulation.



**ANY SIZE SUPPLIED**

#### DESCRIPTION

Fireproof sponge impregnated and coated with intumescent material. Very flexible, but stable in small or large apertures. Unaffected by water or chemicals. Supplied in sheets or strips from 10mm to 100mm thick. Can be cut to size.

#### USE

For small or large expansion/movement joints, under raised computer floors,

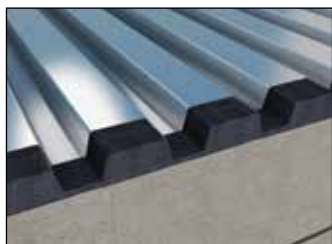
#### ORDERING REFERENCES:

<b>FCS1/30</b>	– 30mm thick for 1 hour rating	<b>PATENTED</b>
<b>FCS2/40</b>	– 40mm thick for 2 hours rating. This cavity barrier has 1 thin foiled intumescent strip down one edge. (See price list for full range)	

between glass screen walls (rainscreens, with or without ventilation) and concrete floors, and between metal cladding and concrete. Between modular buildings on top of each other.

#### PERFORMANCE

Tested to BS476 Parts 20 & 22 (1987) achieving 240 minutes integrity and 138 minutes insulation. EN1366-3:2009 achieving 88 minutes. Thermal resistance testing carried out to EN12667.



#### DESCRIPTION

A fireproof sponge that emits no toxic fumes and is incombustible. Supplied in standard strips and sheets (see price list). Other sizes made to order. Product 41 can be supplied cut to match steel cladding profiles.

#### USE

The fireproof sponge can be used under roofing sheets, between walls and floors, or

#### ORDERING REFERENCES:

<b>F</b>	– Fireproof Sponge	<b>MP</b>	– Profile Sponge (See price list for details)	<b>PATENTED</b>
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as packing around small openings (such as spaces around windows and door frames in timber buildings) and it can be faced with Envirogra® Product 63 (Cement Filler).

#### PERFORMANCE

This product has been used in a fire resistance test employing the general procedures and criteria of BS476 Part 22 (1987) achieving an integrity of 240 minutes. EN1366-3:2009 achieving 88 minutes.

**MADE IN PIECES OR METRE LENGTHS**

Upgrading wood surfaces within building structures to a fire rate specification is now a common requirement throughout United States of America and Europe. Envirograf fire protection coatings have been developed to meet even the strictest requirements of UL Classification ANS/UL723 Tenth Edition, (ASTM E84-13A).

## ANS/UL723 CERTIFIED

Envirograf® is now proud to announce the attainment of Class A Flame Spread Classification to UL723 Standard (Test for Surface Burning Characteristics of Building Materials) with Flame Spread 25 and Smoke Development 300.



**THE ONLY COATING SYSTEM FOR INTERNAL AND EXTERNAL UNTREATED WOOD OFFERING UP TO 66 MINUTES PROTECTION**



### DESCRIPTION

Envirograf® Product 42 is a range of clear and white intumescent coatings, giving protection to a range of wood and wood-derived materials with anti fungus. A UV protection product also available.

### USE

These coatings can be used on insulation board, MDF board, plasterboard, wood, and some wood-derived products. There is no need to strip off the existing paint or varnish, as Envirograf® adhesion primer can be used. See data sheet for full details.

### PERFORMANCE

All types of new and old doors (some over 200 years old) have been tested in accordance with BS476 Part 22 (1987), and their fire resistance was upgraded to an integrity of over 60 minutes. The HW range can also upgrade wood panelling to 30 minutes or 60 minutes fire rating, according

to the type of wood and its thickness. Open joists and floorboards have achieved 60 minutes of fire protection on a loaded floor to BS476 Part 20 (1987). Timber mouldings and carcasses have achieved 90 minutes of fire rating to BS476 Part 20 (1987). A range of timber types, including MDF, plywood, etc, have been tested and complied with BS476 Parts 6 and 7 (1987) Classes 0 and 1. Also tested to EN1364-1 (1999) for 66 minutes. This coating system now complies with the Classification B/S1/d0 of European Standard EN13501 Parts EN13823 (2002) single burn test (SBI) and EN11925-2 (2002) ignitability. Timber doors tested to BS476 Part 22 (1987) , EN13641-1:2014 , EN13501-2:2016 , EN1634-1:2000 giving 30 & 60 minutes fire protection and insulation. Loadbearing floor - EN1365-2:2014 57 min. integrity, insulation and loadbearing



## Timber ceiling at Clifton Hill House, University of Bristol

The Envirograf® team had the pleasure of working on University of Bristol's Clifton House, a Victorian mansion originally built in 1896 for the Tyndall family.

The aim of the architects working on the project was to ensure the building remained in its original style, which was the challenge we gladly took on.

Through the use of our products 38, 42, AM mastics as well as HW systems, we were able to give 60 minute fire integrity to the building, without sacrificing its original image.

To keep the appearances and to be able to use upper floors at University of Bristol, the open joists and floor boards were again coated with 3 coats of HW02/E at 8m<sup>2</sup> per litre per coat and brown AM mastic between joints which had shrunk over the years, giving 60 minutes integrity, insulation and load bearing.

There have been hundreds of these type of floor structures treated to give the 60/60/60 requirement to BS 476 Part 21 1987.

### ORDERING REFERENCES:

**PATENTED**

Please refer to our new data sheet before specifying coatings.

**HWAP/WB** Clear adhesion primer supplied in 1 litre, 2½ litres, or 5 litres

**HW01F** White intumescent coating supplied in 1 litre, 2½ litres, 5 litres or 20 litres (Top coat can be acrylic, white spirit or water based top coats)

**HW/ACRYLIC** Acrylic Emulsion Coating (matt and satin finish, use over HW01F)

**HW02E** Clear intumescent coating supplied in 1 litre, 2½ litres, or 5 litres (Top coats can be water based, white spirit based or thinners based laquers.)

A range of top coats is available.

Please read coating brochure for more information.



After 10 minutes the fire only got to the tongue and groove of the profiles, which is about 7mm

## Envirograf® HW intumescent paint achieves Scandinavian test requirements EN 14135 TEST

### Outstanding performance by HW02

The Envirograf® HW02E intumescent paint system was recently used in one of the most rigorous fire tests designed for testing coating systems, known as the K<sub>2</sub>10 test. The HW system was applied onto 15mm tongue and grooved pine-wood profiles, a typical surface cladding (or wooden lining) used in the Scandinavian house sector.

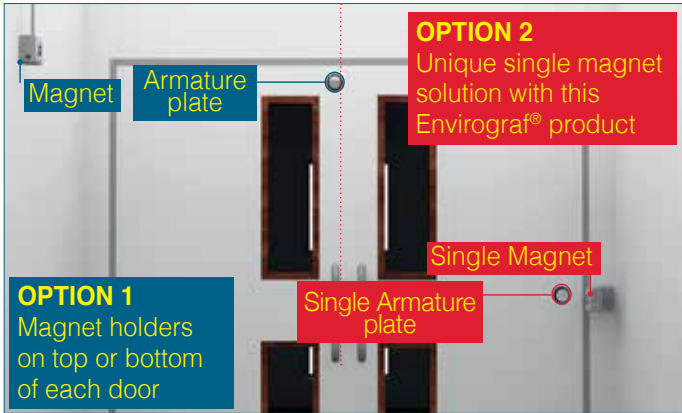
The test is designed to evaluate the coverings ability to protect the construction behind the covering. According to regulations a K<sub>2</sub>10 rating is required, ensuring that wooden linings of this type resist the fire for a full 10 minutes ensuring that more flammable material behind the covering does not ignite for that set time, in this way reducing the intensity of the fire for the first critical 10 minutes, allowing the occupants effective escape to safety.

The HW system successfully passed the EN 14135 test at the Danish Institute of Fire and Security Technology (DBI) in Copenhagen, and is now being specified throughout the Scandinavian housing sector market.





## ACCEPTED BY FIRE BRIGADES AND BUILDING CONTROL OFFICERS

**DESCRIPTION**

A stand alone door hold system, not connected to a fire alarm & where no fire alarm system is installed. 240V supply to a 24V system for single & double doors holding open for 57 seconds.

**USE**

Designed to hold single or double doors open for a maximum of 57 seconds. The time can be reduced to as far as 20 seconds, cutting door draught, noise and loss of heat, but keeping fire protection. A fail proof system where doors are normally held open for long periods tends to buckle the door. No special wiring, can use bell flex. Ideal for Residential Houses, for Disabled, Warehouses, Hospitals, Offices etc. When you push to door open, the magnet & armature magnetise for the period set up (up to 57 seconds). Then automatically releases closing the door. The time period for staying open was designed by Fire Brigades Head Quarters at Moreton-in-Marsh.

Extra options - a bracket can be fixed to the door frame and be used for the magnet, as shown in the picture.

For blind people, an automatic opening device can be fitted to the door to open & hold for the 57 seconds.

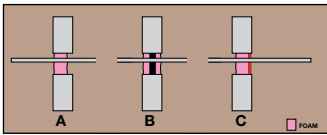
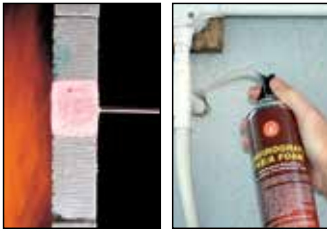
**ORDERING REFERENCES:**

<b>MHK1</b>	Kit for one door	(1 control, 1 magnet, 1 plate)
<b>MHK2</b>	Kit for two doors	(1 control, 2 magnets, 2 plates)
<b>MHK4</b>	Kit for four doors	(1 control, 4 magnets, 4 plates)
<b>MH24</b>	24V magnet and armature (parts can be supplied separately)	
<b>MH240</b>	240V magnet and armature (parts can be supplied separately)	
<b>SGC/2</b>	Control unit only (if required separately)	
<b>MDHB</b>	Bracket for fixing magnetic door holder to wall	

**PATENTED**

Also see product 108

## FIREPROOF PVE/A FOAM

**KEY TO ILLUSTRATION**

- A:** PVE/A foam filling a hole 100 mm wide x 215 mm deep x 830 mm high in a block wall gave 105 minutes of fire protection
- B:** With a 30mm Envirograf® sponge (Product 41) sandwiched between foam gave 2 hours
- C:** A facing of 2mm intumescent cement (Product 63) gave 2 hours of fire protection

**DESCRIPTION**

A polyurethane foam that emits no fumes or gases when affected by flame. The can contains 2 liquids, which mix when leaving the can and expand by absorbing moisture from the air. It expands up to 40 times its original volume on application. Supplied in 750ml environmentally-friendly aerosol spray can (PVE/A) for application by tube. It can also be supplied in a 750ml screw-top can (PVE/A/G) for use with industrial trigger gun (PVE/A/IG). A red identification coating and labels are available on request, to show building control and fire officers it is our fire-tested foam. In order to maximise the yield of each can, spray with water. This increases the expansion. **Envirograf® solvent cleaner (PVE/A/S)** should be purchased, so that as you use the can you can clean out the applicators tube and clean up any spillage.

**ORDERING REFERENCES:**

<b>PVE/A</b>	750ml aerosol can with application tube
<b>PVE/A/G</b>	750ml aerosol can for use with industrial applicator
<b>PVE/A/IG</b>	Trigger applicator for use with PVE/A/G industrial aerosol pack
<b>PVE/A/S</b>	Do not forget: solvent cleaner (supplied in 150ml or 500ml cans)

**PATENTED****USE**

For filling around awkward openings, around services, and behind door frames (without taking off architraves) and behind window frames. For fire sealing of services passing through the foam, use Envirograf® Product 110. Use Envirograf® solvent cleaner to clean the application tube (and spills) immediately after use, saving the foam remaining in the can. Can be painted over.

**PERFORMANCE**

The product has been used in a 1 hour rated plasterboard wall with gaps up to 30mm, achieving 123 minutes integrity at BTC. In a fire resistance test employing the general procedures and criteria of BS476 Part 22 (1987), it achieved an integrity of 130 minutes. The foam is not affected by UV light.



**DESCRIPTION**

A water-based acrylic intumescent thixotropic adhesive, which when set is water resistant. Available in ½ litre, 1 litre, 2½ litres, and 5 litres tubs and 310ml tubes.

**USE**

For fixing wood, plasterboard, concrete, foam backing of carpet, ceiling tiles, ceramic tiles etc. Applied at 4m<sup>2</sup> per litre. Can also be used with Envirograf® Products 38 (intumescent cloth), 39, 40, & 41 (fireproof sponge products), manufacturing fire doors.

**PERFORMANCE**

Used to adhere Envirograf® intumescent paper onto door panels in fire resistance testing to BS476 Part 22 (1987) on various doors with differing constructions, achieving integrity and insulation up to 68 minutes. Tested to BS476 Part 21 (1987), achieving 90 minutes integrity. Also tested in Spain to European Standard EN1363-1 (2000), achieving 2 hours integrity. Tested to EN 1634-1 : 2000 at Efectis, adhesive for fire doors.

**ORDERING REFERENCES:****PATENTED**

**IA** Supplied in ½ litre, 1 litre, 2½ litres, 5 litres, and 310ml tubes

**BUILDFIX MULTI-PURPOSE FLEXIBLE BUILDING ADHESIVE**

**"YOU'LL NEVER GET A FIXING THERE!"**

**BUILDFIX CAN!**

DIFFICULT-TO-REACH AREAS, THIN SECTION WALLS, BAD UNEVEN SURFACES, BRITTLE SURFACES, HARD SURFACES, CONCEALED AREAS, AND TIGHT CORNERS.

**DESCRIPTION**

A multi-purpose adhesive that remains flexible, does not become brittle and crack. Extremely high adhesion. Although water based, once dry is not affected by water. Can be used both internally and externally

for timber, plasterboard, ceramic tiles, plasterboard & wood to timber. Once things like skirting, architraves, boards etc. are adered in place it is virtually impossible to remove.

**ORDERING REFERENCES:****PATENTED**

**BUILDFIX** Supplied in 310ml tubes

**ECONOMY INTUMESCENT LETTERBOX COMPLETE WITH INTUMESCENT LINER****DESCRIPTION**

Plastic bodied black frame, aluminium face plates, complete with smoke, weather and draught seal. Intumescent seal fitted round the body of the letterbox to crush and seal in a fire.

**PERFORMANCE**

The letterbox was included in a test employing the general procedures and criteria of BS476 Part 22 (1987) built into a composite door, maintaining the integrity of the door for 61 minutes. Also tested to European Standard EN1634-1 (2000), achieving 68 minutes.

**ORDERING REFERENCES:****PATENTED**

**LPB/C** Chrome finish  
**LPB/SC** Satin Chrome finish  
**LPB/G** Gold finish  
**LPB/B** Black finish  
**LPB/W** White finish

**Internal Size : 250mm x 35mm**  
**External Size : 300mm x 67mm**



**DESCRIPTION**

An intumescent fire and smoke protection letter flap system comprising a frame fitted with smoke protection seal and a spring-loaded flap, which can be used on either side of a door, and an intumescent liner to fix into the door aperture, only 3.5mm thick. A security hood with brush seal to stop people putting their hand through the letter box. Opening size 275mm wide 60mm high.

**USE**

Intumescent letter boxes are mainly used on door of flats, so that if there was a fire in the flat, the fire wouldn't get onto the outside escape route.

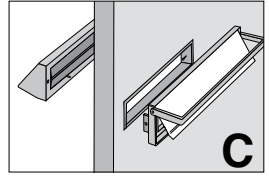
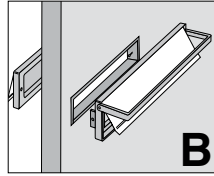
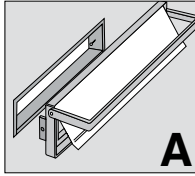
**PERFORMANCE**

This product has been included in a fire test employing the general procedures and criteria of BS476 Part 22 1987, built into a composite door, maintaining the integrity of the door for 61 minutes. Also tested to European Standard EN1634-1 (2000), achieving 68 minutes.

**LETTER FLAP KIT SYSTEM**

The flap system is supplied in three different kits as follows:

- (A) Front frame and flap + intumescent liner  
 (B) Front frame and flap + intumescent liner + rear frame and flap  
 (C) Front frame and flap + intumescent liner + rear security hood



There are two sizes of the units:

	HOLE SIZE	OVERALL SIZE	
L1 - L4	50 x 267mm	75 x 315mm	Standard Size
L6 - L8	69 x 290mm	100 x 335mm	For large packages

Supplied with fixing screws.

**COLOURS AVAILABLE**

Brown	L1A	L1B	L1C	White	L2A	L2B	L2C
Stainless	L3A	L3B	L3C	Brass	L4A	L4B	L4C
Coloured	L6A	L6B	L6C	Stainless	L7A	L7B	L7C
Brass	L8A	L8B	L8C				

Special BS and RAL colours made to order at an extra charge.

**INTERNAL SMOKE FLAP**

INTERNAL SMOKE FLAP, consists of a 10mm deep metal surround, with a metal flap, housing a smoke and draught seal to suit hole size 267 x 50mm. These are made in the standard colours shown below.

SM/S	Black/Brown/White
SM/S	Stainless steel (brushed with black surround)
SM/S	Brass
SM/LIN	Intumescent liner

Can be used with any external flap plastic or aluminium, but advisable to use with letter box liner.

**NEW LETTER BOX UNIT**

NEW LETTER BOX UNIT Complete with intumescent liner. Overall size 76mm x 310mm, deep to suit door sizes 38-60mm.

LP/BC	Bright Chrome
LP/SC	Satin Chrome
LP/BRS	Brass
LP/WH	White

Has smoke sealing



Stupidly in the past few years Fireworks or lighted paper has been dropped through letter flaps.

Designed with the help of the Fire Brigade two types of lockable letter flaps To save lives & Your home.

### Internal lockable letter flap in two sizes:



		hole size	overall size
LLP1	to suit	40 x 260mm	70 x 310mm
LLP2	to suit	60 x 275mm	100 x 335mm



### Internal lockable with key holder:

This is where front doors have multiple locking device so key to the front door is left in the key holder at night for emergency.



		hole size	overall size
LLP3	to suit	40 x 260mm	70 x 310mm
LLP4	to suit	60 x 275mm	100 x 335mm



Standard colour is Cream, White or Brown. State colour when ordering

Both types of internal letter flaps can be supplied with an external flap with or without knocker.



### DESCRIPTION

An intumescent liner comprising two L-shaped sections fitted with self-adhesive backing for ease of fixing. The liner can be cut to size with a sharp knife to fit the opening. Sizes to suit other openings can be made to order.

### USE

For mail apertures in fire doors, where existing letter flaps are to be used. Aperture sizes up to the limit for each type (LBL1 and LBL2) can be accommodated by cutting the liner with a sharp knife as required. A

bare wood aperture must be sealed with paint or wood sealer before fixing the liner. Suitable for fitting to doors from 38mm to 70mm thick.

### PERFORMANCE

These products were included in a test employing the general procedures and criteria of BS476 Part 22 (1987) built into a composite door, maintaining the integrity of the door for 61 minutes. Also tested to European Standard EN1634-1 (2000), achieving 68 minutes.

### ORDERING REFERENCES:

**LBL1** (85x340mm)    **LBL2** (65x290mm)    **LBL3** (39x254mm)

(Special sizes made to order)

**PATENTED**



DEMONSTRATION DVD AVAILABLE



**Envirograf® Fire Bags fitted to the inside of the door gives complete protection, petrol & paper won't burn the bag.**



FLEXIBLE FIRE BAG



METAL BOX

**DESCRIPTION**

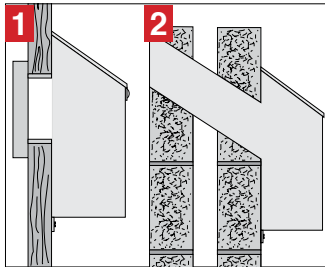
Burning paper and liquids put through mail apertures in doors and walls can have devastating consequences, especially if premises are occupied. Nocturnal arson attacks on homes can be particularly worrying for domestic residents. The Envirograf® rigid firebox or flexible firebag protects mail slots, so homes and businesses can have the confidence that their premises are guarded against damaging and disruptive arson attacks. 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.

**PERFORMANCE**

Tested to BS476 Part 22 (1987). Fire boxes & bags self extinguish flames and fire, so will not allow anything to burn.



DOOR SIDE



OUTER SIDE

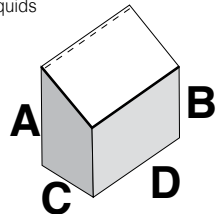
**ORDERING REFERENCES:**

**PATENTED**

Ref	A	B	C	D	Aperture
<i>Fire Boxes</i>					
<b>FB1</b>	360mm	300mm	170mm	375mm	70mm x 275mm
<b>FB2</b>	360mm	300mm	90mm	375mm	70mm x 275mm
<b>FB3</b>	360mm	300mm	200mm	400mm	70mm x 275mm
<b>FB4</b>	675mm	600mm	300mm	600mm	70mm x 275mm
<i>Flexible Fire Bags</i>					
<b>FLEX1</b>	335mm	335mm	130mm	420mm	70mm x 315mm
<b>FLEX2</b>	335mm	335mm	130mm	420mm	55mm x 330mm
<b>FLEX3</b>	260mm	260mm	95mm	400mm	55mm x 290mm
<b>FLEX4V</b>	560mm	560mm	130mm	360mm	70mm x 315mm
<b>FLEX5V</b>	530mm	530mm	100mm	300mm	55mm x 290mm

State if a front access door is required in the metal box (extra cost item). The standard metal box (FB) is fitted with a flush lock as standard. Other sizes made to order.

Sealed against petrol or liquids



NB: FLEX3, FLEX4V, and FLEX5V are for use in UPVC moulded doors, with FLEX4V and FLEX5V being used in a vertical orientation. Flexible bags (FLEX) are fitted with metal turn-buttons and pressure-fastening strips.

ACOUSTIC PRODUCTS ACCEPTED BY ROBUST DETAILS



**DESCRIPTION**

Under floor fire barrier **UF60** (60 minutes) is made from graphite impregnated cloth covered with a reinforced Craft paper. Giving 60 minutes fire & insulation protection.

**UF104** is made the same but has a wire mesh inside the unit as added support, approximately 5mm thick. Standard lengths are 1800mm long. Standard width 400mm, 450mm, 500mm and 600mm. Other lengths & widths made to order.

The under floor fire barrier is layed on top of the ceiling. Allow for a 50mm up each side of joist ie gap between joists 400mm, so 500mm under floor is required. 12 long fixing washers are supplied for fixing every 300mm apart per barrier & overlap by 50mm.

For acoustic requirement to U value and meet Document E ( H in Scotland) a 40mm thick sponge is supplied for the width between the joists.

**USE**

To install the barrier, lift three floorboards 2100mm apart, slide the barrier under the floor, bend 50mm of the barreir up each side of the joists, then fix the barrier to the joists with the supplied rectangular metal plates. Where the barrier touches the wall, bend it upwards and fix it to the wall with the supplied rectangular metal plates (to be

fixed with 30mm clout nails, 300mm apart) (see illustration A). Overlap adjacent pieces by 50mm. Once fixed, replace the floor boards. If sound insulation is required, a acoustic fire resistant sponge can be laid over the barrier between the joists (see illustration B).

**NB:** The under-floor fire barrier is supplied to fit a standard 400mm gap between joists, allowing a further 50mm on each side for fixing. Please state if the joist gap differs from 400mm. The barriers are very strong but can be cut with a sharp knife where there are herring box joints. All of the supplied metal plates must be used when fixing the barrier in position.

**PERFORMANCE**

The **UF104** under-floor barrier was installed in a ceiling/floor without any plasterboard or lath-and-plaster (just the barrier itself) and tested to BS476 Part 21 (1987), achieving 104 minutes integrity, insulation, and load-bearing. **UF60** tested to BS476 Part 21, achieved 62 minutes.

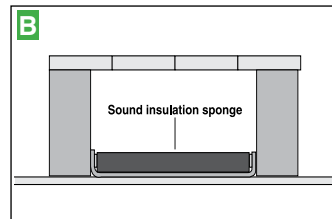
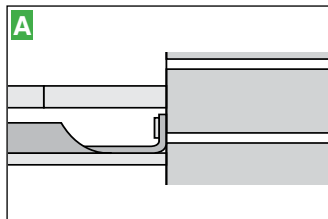
EN1365-2:2014 achieving 71 min. integrity and insulation.

Acoustic testing to :

BS EN ISO 140-3:1995

BS EN 140-6:1998

Airborne 44dB & Impact 74dB



**ORDERING REFERENCES:**

**PATENTED**

- UF** Under-floor barrier (state type/size) supplied with fixing plates
- UFS** Acoustic sponge slabs for use between joists (state size)

See Product 131 for floor impact sound protection strips





**DESCRIPTION**

IFB1: fire barrier giving up to 77 minutes integrity and radiant heat protection. Easily fixed with FB/C1 metal straps. Overlap by 50mm and adhere together with Envirograf® Product 46 (IA) intumescent adhesive supplied. The barrier is 6mm thick and made from layers of impregnated cloth. No gloves or masks are necessary. It can be cut with a sharp knife or scissors.

IFB2: a similar fire barrier to IFB1 but 8mm thick, including extra insulation material. This gives up to 87 minutes integrity and radiant heat protection.

Both IFB1 & IFB2 barriers can be made acoustic to meet the requirements of Document E of UK Building Regulations for airborne sound.

**USE**

The curtain is used for fixing to timber or steel trusses, or between concrete soffits and suspended ceilings, etc. It fits easily around services or into awkward corners, and can be used to wrap around metal trunking to upgrade protection.

**PERFORMANCE**

IFB1 was tested at TRADA (achieving 77 minutes integrity) and IFB2 was tested at BTC (achieving 87 minutes integrity and radiant heat protection) to BS476 Part 22 (1987).

EN1364-1:2015 - 100minutes

**ORDERING REFERENCES:**

<b>IFB1</b>	Fire Barrier rated 77 minutes integrity/radiant heat protection
<b>IFB2</b>	Fire Barrier rated 87 minutes integrity/radiant heat protection
<b>IFB1/S</b>	Acoustic Sponge version of IFB1
<b>IFB2/S</b>	Acoustic Sponge version of IFB2
	State width and length required for the above
<b>FB/C1</b>	1000mm metal straps with fixing holes at 300mm centres

**PATENTED**

**We can increase the protection to 2 hours**

### FLEXIBLE FOILED CAVITY BARRIERS ( WB & VWB )



**FLEXIBLE FOILED FIRE BARRIER ( VENTILATED )**



**FLEXIBLE FOILED FIRE BARRIER**



**SELF DRAINING AND AIR FLOW SYSTEM - VWBG**

#### **BENEFITS**

##### **High tensile foil protection**

Ensures optimum durability and moisture protection.

##### **Flexible mesh structure**

Offers enhanced robust strength and flexibility to the barrier section.

##### **Powerful intumescent seal**

In the event of a fire the cavity barrier seal will expand filling the cavity stopping the spread of fire and smoke.

The **WB** Cavity Barrier is a thin flexible foil faced intumescent strip which is fixed in a horizontal position in a brick/block cavity which is fixed in with mortar.

The **VWB** Cavity Barrier is supplied with the air flow system with one, two or three rows of holes ( depending on the width of the barrier ).

The **VWBG** Cavity Barrier is supplied as a self draining and air flow system. Tubes are fixed into the barrier unit that are then set into the mortar allowing all moisture to drain to the external area, whilst also allowing a free air flow into the cavity area where **smoke sealing** is required.



**Flexible mesh structure**

Offers enhanced robust strength and flexibility to the barrier section.

**WHEN ORDERING, PLEASE SPECIFY THE OVERALL CAVITY SIZE AS WELL AS REQUIRED VENTILATION GAP**

#### **ORDERING REFERENCES:**

<b>WB</b>	Foiled cavity wall barrier ( non-ventilated )
<b>VWB</b>	Foiled cavity wall barrier ( ventilated with apertures )
<b>VWBG</b>	Foiled cavity wall barrier ( ventilated with grommets and tubes, stopping smoke in the cavity)

**PATENTED**

#### **PERFORMANCE**

**BS EN 1363-1 1999 up to 132 min**

FOILED CAVITY BARRIERS WITH L-SHAPE BRACKET FIXINGS



RS/WB/B BARRIER ( L-SHAPE BRACKET FIXING )



RS/VWB/B BARRIER ( L-SHAPE BRACKET FIXING )



RS/WB/CV/B BARRIER ( L-SHAPE BRACKET FIXING )

- These barriers can be made with or without ventilation and drainage holes
- Can be used both vertically and horizontally.
- Can be placed over and under insulation material or next to it in vertical position, and can have insulation material on top of and next to the barrier.

**RS/WB/B** | Non-ventilated  
**RS/VWB/B** | Ventilated with ventilation holes, either 1, 2 or 3 holes\*  
**RS/WB/CV/B** | With intumescent strip on the face to allow barrier to have air flow opening up to 100mm. The intumescent strip will expand in a fire, filling the opening. ( please state size of the gap required ).

**RS/WB/B | RS/VWB/B | RS/WB/CV/B**  
 They have a 30mm up stand at the back and has supporting **L-shape metals** to support the barrier and allow for screw or nail fixing to concrete, brick, block, cement board, etc.  
 The barrier contains intumescent-coated cloth on a galvanised mesh 1.5mm x 1mm hole size. Then covered in reinforced craft paper which is impregnated in a Envirograf® Fire Proof Adhesive. Lightweight, clean, easy to handle. Can be bent to a shape or bent over without harming the integrity.

**RS/WB/B** Cavity also stops smoke penetration.

\* According to the width of the barrier

Hole patterns for RS/VWB/B

- Pattern A**  
 1 hole 30mm apart 10mm diameter
- Pattern B**  
 2 holes 30mm apart 10mm diameter
- Pattern C**  
 3 holes 30mm apart 15mm diameter

The RS/WB Range B is supplied with brackets, but we can fit to the upper back mesh washers to screw or nail through.

Change B for W washers up to 350mm wide.

**WHEN ORDERING, PLEASE SPECIFY THE OVERALL CAVITY SIZE AS WELL AS REQUIRED VENTILATION GAP**

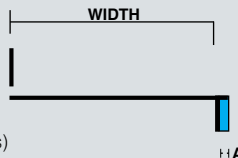
ORDERING REFERENCES:

- RS/WB/B** Foiled cavity barrier with L-shape brackets  
**RS/VWB/B** Ventilated foiled cavity barrier with L-shape

PATENTED

	thickness (A)	Seal gap
RS/WB/CV/B/3	3mm	25mm
RS/WB/CV/B/4	4mm	45mm
RS/WB/CV/B/6	6mm	60mm
RS/WB/CV/B/8	8mm	70mm
RS/WB/CV/B/10	10mm	90mm
RS/WB/CV/B/15	15mm	120mm

Width - made to specification (total insulation thickness)



**PERFORMANCE**  
 BS EN 1363-1 (2012) - 68minutes

Fire test at Efectis Nederland



EN 1363-1 2012



Cutting the barrier to fit round the cladding frame won't compromise its performance, as the intumescent expanding will seal any imperfections in cutting.

Cutting the foil does not affect the performance.



All the RSWB Range can have insulation material both underneath & on top of the barrier. At 180 °C polystyrene would just soften & at 220 °C the polystyrene would start to melt, 22 minutes into the fire test.

## FLEXIBLE SPONGE CAVITY BARRIERS ( WBS & VWBS )



FLEXIBLE SPONGE FIRE BARRIER (VENTILATED)



FLEXIBLE SPONGE FIRE BARRIER

The WBS Cavity Barrier is a flexible fire proof sponge which is fixed in a horizontal or vertical position in a brick/block cavity. The WBS has unique self spring properties and is fixed into the cavity by simply pressing the seal into place.

### BENEFITS

#### Fire proof sponge (WBS)

Ensures optimum durability and moisture protection as well as offering continued thermal insulation within the cavity section.

#### Powerful intumescent seal (VWBS)

In the event of a fire the intumescent seal will expand filling the ventilation and moisture holes, stopping the spread of fire and smoke.

The intumescent is rubberised to stop moisture impregnation.

### PERFORMANCE

BS EN 1363-1 1999 up to 138 min

### ORDERING REFERENCES:

<b>WBS</b>	Non-ventilated sponge version ( widths 80mm - 265mm )
<b>VWBS</b>	Ventilated sponge version ( widths 80mm - 265mm )

State 1 or 2 hours according to width



### THERMAL FIRE CAVITY BARRIER ( TCB )



**THERMAL FIRE CAVITY BARRIER (TCB)**



**THERMAL FIRE CAVITY BARRIER (TCB)**

The Envirograf® Thermal Cavity Barrier is an ideal solution where both fire and thermal protection is required, particularly in cavities around window and door apertures. The barrier is waterproof and completely moisture resistant and offers over 1 hour fire protection, as well as creating an effective thermal barrier between the cavity and window/door frame section.

**ORDERING REFERENCES:**

**PATENTED**

**TCB** Thermal fire cavity barrier ( for sizes see price list )

**FIXING**

The TCB Cavity Barrier comprises of a flexible fire proof sponge fixed to a thin foil faced intumescent strip. The system is completely moisture resistant. Simply cut to the length required and fix using clout nails at 3 inch (75mm) centres.

**PERFORMANCE**

BS EN 1363-1 1999 up to 132 min  
BS 476 Part 20 66 minutes

### FREE-AIR-FLOW CAVITY BARRIER ( FB/TS )



**PARTY FLOOR SECTIONS (TCB)**



**PARTY WALL SECTIONS (TCB)**

**Party Floor Sections**

Party floors (loadbearing and non loadbearing) are floors that separate compartments. Timber party floors are required to offer fire resistance from below and should offer the same fire rating as the connected walls.

It is crucial that the correct passive fire cavity barrier is fitted and located in the correct position.

The Envirograf® FB/TS Cavity Barrier (Product 55) is probably one of the simplest cavity seals to install in these areas, and because it has a protective outer sleeve offers full condensation protection and 142 minutes fire rating.

**Party Wall Sections**

Party walls (loadbearing and non loadbearing) are walls that act as separating or compartment walls. All of these wall types are required to offer a fire resistance rating, dependent upon the building design, type and how many floors it has. At the party wall juncture there will be cavity areas and it is crucial that the correct passive fire cavity barrier is fitted and located in the correct position. These barriers are required to offer moisture and condensation resistance. The Envirograf® FB/TS is a non-fibrous sponge faced with an intumescent strip and covered in an outer protective sleeve offering full condensation protection and 142 minutes fire protection. The FB/TS is simply fixed into position with a high-tack self adhesive tape supplied on the fixing side.

**PERFORMANCE**

BS EN 1363-1 & EN 1363-2 73 min

**ORDERING REFERENCES:**

**PATENTED**

**FB/TS** Free-air-flow cavity barrier



### FREE-AIR-FLOW CAVITY BARRIER ( FB/TS )

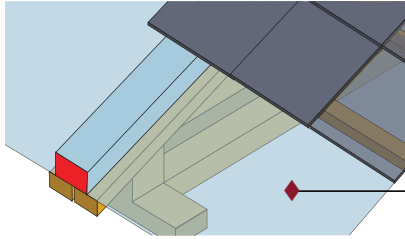
#### Roof Sections (Product 55)

Building design requirements and their respective fire resistance ratings are no different for timber framed buildings compared to other building types as detailed in the Building Regulation Documents. There are no fire resistant ratings required for roof areas unless they are used as an occupied space. If the roof area is to be used as habitable accommodation, the floor and wall should have the same fire resistance as the respective walls and ceilings as specified by the Building Regulations.

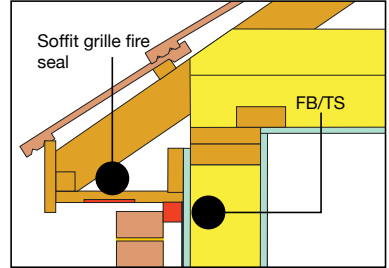
The design detailing should include a cavity barrier at the top section of the party wall, maintaining its fire resistance into the roof space.

Soffit ventilation grilles offer a fire rating, that prevents fire from spreading into the roof void.

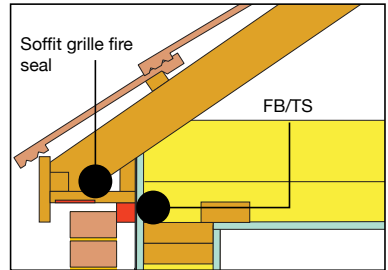
Soffit boards can be fire rated using one of the Envirograf® Fire Protection Coatings - please see data sheet or call our Technical Department - 01304 842 555.



Product 55  
Located at both the spandrel section between the roof membrane and at the boxed eaves section.



Cavity seal fixed in cavity roof section:  
Projected boxed eaves



Cavity seal fixed in cavity roof section:  
Clipped eaves

#### FIRE-STOPPING ROOF DIVIDER FOR USE IN TERRACED OR SEMI-DETACHED HOUSES

◆ This product comprises of Envirograf® fireproof sponge with an intumescent coating, covered in a red PVC material which is completely waterproof. Product references: FB/TS and FB/TS/TB.

◆ In a fire, it seals off one roof from the next, because of its highly-effective intumescent coating material, which expands in all directions to close any gaps and stop fire penetrating.

◆ Lays flat onto the party wall (brick, block, or timber) or on top of the roofing felt.

◆ Standard sizes available: 1m length; 25mm, 40mm, and 50mm thickness; 40mm and 50mm width (other sizes made quickly to order).

◆ Can be compressed to 50% of its original thickness (e.g. 50mm thickness can be compressed down to 25mm thickness).

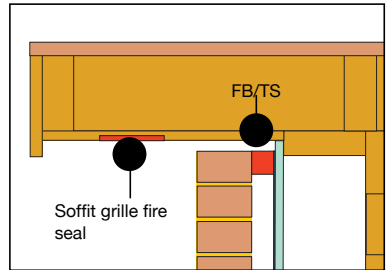
◆ Quick and easy to fit, thanks to its double-sided self-adhesive backing tape for adhering into place.

◆ Can be cut to length with a sharp knife.

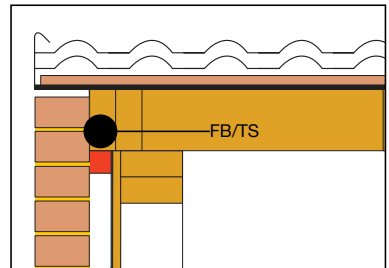
◆ It contains no harmful fibres or other harmful materials, so it is completely safe to handle.

◆ In a fire, the product does not give off any toxic fumes.

◆ Fire protection up to 3 hours.



Cavity seal fixed in cavity roof section:  
Projected verge using gable ladder



Cavity seal fixed in cavity roof section:  
Clipped verge end

### FLEXIBLE STRIP CAVITY BARRIER



CV30 CAVITY BARRIER

The Envirograf® flexible strip range barrier is a thin flexible PVC & foiled clad intumescent material with a self adhesive backing tape for adhering to the wall, additional fixing can be done by using staples, nails or screws. **The seals can be cut to any length with a joint sleeve supplied for sealing off the ends.** A strip form of high expansion with medium pressure to lock against the internal side of the external wall in a fire giving full fire protection without affecting the outer wall. A quick and easy method of application and fixing. The strips are in a blue plastic sleeving robust enough to stop any damage by water or insect/animals or when fixing. Can be sleeved in other colours (White, Black or Red). Strips for gaps 80mm and over will be fitted with L shape brackets.

#### PERFORMANCE

Tested to BS476 parts 20, 22 and BS EN 1364-1 (1999) giving fire protection from 60 to 120 minutes.

#### ORDERING REFERENCES:

**PATENTED**

Product	thickness	1 hour protection max. gap size	2 hours protection max. gap size
CV30/3	3mm	25mm	25mm
CV30/4	4mm	45mm	40mm
CV30/6	6mm	60mm	50mm
CV30/8	8mm	70mm	60mm
CV30/10	10mm	90mm	70mm
CV30/15	15mm		95mm
CV75/4	4mm	50mm	
CV75/10	10mm		95mm

CV30/8 , CV30/10 , CV30/15 are supplied with metal brackets for additional support.

**WHEN ORDERING, PLEASE SPECIFY THE OVERALL CAVITY SIZE AS WELL AS REQUIRED VENTILATION GAP**



FLEXIBLE STRIP CAVITY BARRIER

### BOTTOM CAVITY STOP FIRE AND RODENT BARRIER



VWB/M BOTTOM CAVITY BARRIER



FIRE AND RODENT BARRIER

The VWB/M cavity barrier is designed for the bottom edge cavity of timber framed buildings outer cladding sections. The VWB/M is used to stop fire penetration getting behind the boards and wall face. Comprising galvanised 12mm mesh foiled with 2mm Envirograf® multigraf intumescent. The VWB/M includes a series of ventilation holes 10mm dia either in one or two rows allowing for both air flow moisture release. The VWB/M also offers protection from rodents getting into the cavity. Supplied in 920mm lengths with standard sizes of 50mm, 80mm, 100mm, 120mm. Can be bent easily.

#### ORDERING REFERENCES:

**PATENTED**

VWB/M80/A or B  
VWB/M100/A or B  
VWB/M120/A or B

**Pattern A** : for 1 line of ventilation holes  
**Pattern B** : for 2 lines of ventilation holes

#### PERFORMANCE

Tested to BS476 Part 22 (1987), and BE EN 1363-1.

To a small width ie 50mm down to 30mm.

### RSM & RSF CAVITY BARRIER RANGE



The range has been especially designed to offer excellent passive fire protection for **rainscreen and other types of cladding**.

**Can be use as horizontal or vertical barrier.**

This range uses fireproof sponge instead of mineral wool fibre, which offers many advantages:

- ◆ barrier is much thinner and offers better fire rating
- ◆ easy to fix - no masks needed ( non-fibrous )
- ◆ fixing brackets already in place - fix with screws, nails or spit nails

The barrier is made in 1 metre lengths, with 4 fitting brackets for horizontal application ( 3 brackets for vertical ). Can be cut to go round metal work with sharp knife. The cover is made from a strong, intumescent-coated material, completely water resistant.

RSF Range is the same a RSM but with a foiled reinforced craft paper covering water resistant & can be cut round metal work.

Both barriers can be plain **RSM & RSF**

**RSM/I & RSF/I** are with intumescent in front to expand in the fire filling the ventilation gap.

**RSM/A & RSF/A** are with ventilation holes ( either 1, 2 or 3 holes, depending on the width of the barrier )

Depending on the fire rating required, the barrier can have different thickness

30mm thick barrier	60 minutes fire rating	add suffix /30
40mm thick barrier	120 minutes fire rating	add suffix /40

#### PERFORMANCE

BS EN 1363-1 & EN 1363-2 133 min

BS 476 Parts 20/22 66 minutes

**RSF** tested to EN 1363-1 170 min integrity, 103 min insulation



Both RSF & RSM can have thermal insulation material both under & on top of the barrier, but ventilation holes must not be covered.

#### ORDERING REFERENCES: **PATENTED**

**RSM RSF** Can have intumescent strip on one side, ventilation holes if required, please refer to Price List for all configuration options

**WHEN ORDERING, PLEASE SPECIFY THE OVERALL CAVITY SIZE AS WELL AS REQUIRED VENTILATION GAP**



#### Tests at Efectis Nederland EN 1363-1 2012

RSM and RSM/A Cavity Barriers tested at Efectis Nederland, achieving:

68 minutes integrity and 50 minutes insulation for RSM

85 minutes integrity and 50 minutes insulation for RSM/A

### RAINSCREEN FAST FIX CAVITY BARRIER



**RAINSCREEN FAST FIX CAVITY BARRIER**

#### ADVANTAGES

- Effective solution for ventilated rainscreen cavities
- Suitable for both horizontal and vertical application
- Maximum air gap up to 40mm
- Very simple installation process
- Supplied in 1200 mm lengths with 3 fixing brackets
- 2 hours fire protection for cavities from 75mm to 315mm



Brackets are easily pushed through the barrier



3 brackets supplied for every 1200mm barrier

#### ORDERING REFERENCES:

Supplied in 1220mm lengths.

##### 25mm Airflow Gap ( white pins )

PART NO	CAVITY WIDTH	WIDTH	THICKNESS	AIRFLOW GAP
RS/FFCB/50/25	75mm	50mm	60mm	25mm
RS/FFCB/60/25	85mm	60mm	60mm	25mm
RS/FFCB/75/25	100mm	75mm	60mm	25mm
RS/FFCB/100/25	125mm	100mm	60mm	25mm
RS/FFCB/150/25	175mm	150mm	60mm	25mm
RS/FFCB/175/25	200mm	175mm	60mm	25mm
RS/FFCB/200/25	225mm	200mm	60mm	25mm
RS/FFCB/225/25	250mm	225mm	60mm	25mm
RS/FFCB/250/25	275mm	250mm	60mm	25mm
RS/FFCB/275/25	300mm	275mm	60mm	25mm

##### 40mm Airflow Gap ( red pins )

PART NO	CAVITY WIDTH	WIDTH	THICKNESS	AIRFLOW GAP
RS/FFCB/50/40	90mm	50mm	60mm	40mm
RS/FFCB/60/40	100mm	60mm	60mm	40mm
RS/FFCB/75/40	115mm	75mm	60mm	40mm
RS/FFCB/100/40	140mm	100mm	60mm	40mm
RS/FFCB/150/40	190mm	150mm	60mm	40mm
RS/FFCB/175/40	215mm	175mm	60mm	40mm
RS/FFCB/200/40	240mm	200mm	60mm	40mm
RS/FFCB/225/40	265mm	225mm	60mm	40mm
RS/FFCB/250/40	290mm	250mm	60mm	40mm
RS/FFCB/275/40	315mm	275mm	60mm	40mm

#### PERFORMANCE

Fire test performance according to the EN 1363-1:1999 achieving 238 minutes integrity and 153 min. insulation.

#### INSTALLATION:

The barrier must be mechanically fixed to the substrate at maximum 500mm centres with non-combustible fixings. When fixing the brackets into the barrier, ensure they are fully pushed and centered in the middle. When attaching to the wall, ensure there are no gaps between the substrate and the barrier.





### DESCRIPTION

FB30 is a 1mm thick x 1220mm wide reinforced glass cloth impregnated with red Envirograf® intumescent coating, made up to 40m long rolls. A very robust material which can be used for drop curtains up to 10m. An acoustic version (FB30/AC) is available to meet the airborne and impact sound reduction requirements of Document E of UK Building Regulations. FB30/AC has 15mm acoustic sponge adhered to the cloth but, for greater acoustic properties, sponge up to 20mm can be used. The barrier can also be used horizontally over a suspended ceiling to give more fire protection or between floorboards and a secondary floor.

### USE

The barrier can be fixed to steel, wood, and between concrete soffits and suspended ceilings with Envirograf® metal straps (FB/C1). The straps can be cut with metal snips. Or use our FB/FP metal washers with intumescent-coated material on top. Joints should be overlapped by 50mm and adhered with the supplied Envirograf® IA adhesive. FB30 can be wrapped around steel, trunking, or wood as a fire barrier. If more insulated fire barrier is required, see Envirograf® Product 54. Lightweight and easy to install. Can be cut with a sharp knife. Does not shed fibres – ideal for hospitals, 'clean' areas, and computer rooms. Services

can be passed through in conjunction with Envirograf® Products 13 and 16. Openings can be made in the barrier for access fire doors, as shown above.

### PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 35 minutes integrity and 21 minutes insulation. Tested over Class 0 suspended ceiling horizontally, achieving 22 minutes insulation to BS476 Part 22 (1987). Tested to BS476 Part 23 (1987) over light fittings, achieving 46 minutes integrity.

### ORDERING REFERENCES:

**PATENTED**

<b>FB30</b>	Standard	1220mm width
<b>FB30/AC</b>	Acoustic	1220mm width

Fire barrier curtain fixings are as follows:-

<b>FB/C1</b>	1000mm metal straps with fixing holes at 300mm centres
<b>FB/FP</b>	30mm x 40mm washers with intumescent-coated material on top
<b>FB/CLIP3</b>	Suspended ceiling clip (T-bar clips fixed every 500mm)
<b>ST50</b>	Jointing tape for strength

(See Product 137 Hi-Tak 500ml aerosol jointing spray)







### DESCRIPTION

FB70 is a 1.2mm thick x 1220mm reinforced glass cloth impregnated with yellow Envirograf® insulation coating, giving up to 81 minutes fire integrity. An acoustic version (FB70/AC) approximately 17mm thick is available with Envirograf® sponge adhered to one face of the cloth, meeting the airborne and impact sound requirements of Document E of UK Building Regulations. If more insulated fire barrier curtain is required, see Envirograf® Product 54.

### USE

For use in loft areas, from ceilings to the top of partitions, under computer floors, or for wrapping around trunking, steel, and wood. Joints should overlap by 50mm and be adhered with the supplied adhesive, and fixed with Envirograf® metal straps (FB/C1). The straps can be cut with metal snips. Openings can be made in the barrier for access doors or drop vents (the drop vent shown below right allows protected batts to fly through).

### PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 70 minutes integrity and 18 minutes insulation.  
Tested to EN 1366-3:2009 achieving 95 minutes fire protection.

### ORDERING REFERENCES:

- FB70** (Standard 1220mm wide)  
**FB70/AC** (Acoustic 1220mm wide)

Fire barrier curtain fixings are as follows:-

- FB/C1** 1000mm metal straps with fixing holes at 300mm centres  
**FB/FP** 30mm x 40mm washers with intumescent-coated material on top  
**FB/CLIP3** Suspended ceiling clip (T-bar clips fixed every 500mm)  
**FPA** Overlap joint adhesive ( the curtain is supplied with a small quantity of fire-proof adhesive for joints )  
**ST50** Jointing tape for strength

**PATENTED**

Fire rated opening for batts to go through



**DESCRIPTION**

A halon-free, intumescent mastic with good adhesion to all materials. Available in standard colours brown, grey, black and white (other colours available). Supplied in 310 ml tubes.

**USE**

For fire stopping gaps from 1mm up to 60mm wide. For wider gaps, fit Product 40 (fireproof sponge) into the gap first.

After application, a skin forms that allows painting, but the material stays permanently flexible. It is a low-pressure material with good cooling ability for metals, and expands up to five times its volume in a fire. Ideal for use horizontally or vertically around exit door frames, cable trays, ducting, and partitions.

**PERFORMANCE**

This product has been used in numerous fire resistance tests employing the general procedures and criteria of BS476 Parts 20, 21 & 22 (1987). Integrity ratings of up to 249 minutes were achieved. EN 13501-2:2007 achieving 120 min integrity and insulation.

**ORDERING REFERENCES:**

**AM** 310ml tube  
State colour required

**PATENTED**

An acoustic acrylic mastic is now available to meet Document B, E & L

**DESCRIPTION**

Envirograf® intumescent putty, buff in colour (colour may vary), applied like normal putty. It can be painted over. Stays permanently flexible internally. Unaffected by moisture. Ideal for use around copper pipes and cables, and around steel electrical trunking. Available in 310ml tubes and 1kg, 2½kg, and 5kg tubs.

**PERFORMANCE**

This product has been subjected to a fire test in accordance with BS746 Part 22 (1987), achieving an integrity of 97

**Please look at Product 146**

**ORDERING REFERENCES:**

**BP** 310ml tubes or tubs of 1kg,  
2½kg, or 5kg

**PATENTED****DESCRIPTION**

A flexible silicone sealant which, on curing, is like rubber in consistency. A food-safe version is available for use in food preparation areas.

**USE**

For use at joints between many building elements and materials, giving a water-tight, gas-tight and flexible seal. For example, in steel, brick and blockwork, concrete, ceiling, walls and partitions. Supplied in 310ml tubes, available in white, clear, grey or black. For gaps up to 50mm wide.

**Not for use on boilers, hot flues, or stoves. See Product 115 for self-adhesive silicone tape for sealing gaps around boiler plates, heating flues, and pipe joints.**

**(Can be used on log stoves in areas where there are no flames)**

**PERFORMANCE**

Tested to BS476 Parts 20, 21 & 22 (1987) when used for sealing around a number of penetrations and expansion joints. Integrity ratings of up to 240 minutes were achieved. BS EN 1364-1:2015 for 65 minutes.

**ORDERING REFERENCES:**

**SIL** 310ml tube standard (White, Clear, Grey or Black)

**PATENTED**

**DESCRIPTION**

A ready-mixed intumescent cement filler that sets hard, like normal cement, but it does not crack. It expands in a fire. Supplied in 310ml tubes.

**USE**

Ideal for application around pipes, services, and behind door frames, for filling-in small holes or cracks, and as a facing top coat over Envirograf® Product 44 (PVE/A foam). Also used to fill cracks in ceilings and walls before Envirograf® Product 84 (S/Paper) is

applied. Applied by trowel or spatula. When dry, it becomes hard like cement and it can be painted over.

**PERFORMANCE**

This product has been used in conjunction with PVE/A foam around cables and pipes, in a fire resistance test employing the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of 130 minutes.

**ORDERING REFERENCES:****PATENTED**

CFT	310ml tube
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Please look at Product 146

**ORDERING REFERENCES:**

WF	250ml
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**PATENTED****DESCRIPTION**

Envirograf® Wood Filler (WF) is used to: fill gaps around joints and sight panels on doors; fill holes in wood; and fill over fixing screws to improve the appearance at the surface and to prevent moisture ingress. It is a versatile water-based wood filler which is light buff in colour, but can be coloured as required by mixing-in a water-based stain or emulsion paint. It can also be prepared for painting when hardened. Can be coated over with either Envirograf® Product 42 (HW01 or HW02) or Product 92 (ES/VFR or QVFR) to give robust protection from fire.

**USE**

WF is easily-applied with a putty knife or spatula. It becomes touch-dry in approximately 30 minutes and, when hardened, it can be rubbed down with a light abrasive paper before painting over with Envirograf® Product 42 (HW01 or HW02) or Product 92 (ES/VFR or QVFR), or any other good-quality coating. EN 1341-1:2014 & EN 1341-1:2015 achieving 64 minutes integrity and insulation.

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[www.envirograf.com](http://www.envirograf.com)

**Be up to date with all the latest product designs and developments.  
 Receive our Monthly Newsletter with Product Releases  
 and Case histories**



### DESCRIPTION

Envirograf® 3-2-1 and 3-2-1W are clear odourless liquids for spraying onto most absorbent materials, including paper, card, carpet, cloth, polyurethane, upholstery, curtains and mattresses. They are safe to use and have been tested and approved for use on children's bedding. Treated items can be dry-cleaned and remain fireproof. When attacked by flame, treated materials will turn black but will not hold a flame. Items treated with Envirograf® 3-2-1W

can also be washed up to eight times before they need re-treatment. Standard Envirograf® 3-2-1 can be sprayed onto real or artificial Christmas trees to protect them from fire.

### USE

Before applying 3-2-1 or 3-2-1W, test on a small area first to ensure compatibility with the material and dyes. When spraying 3-2-1 onto materials such as curtains, cardboard, etc, use just a fine spray to dampen the

material (just like a fine rain – do not soak the material). Give polyurethane furniture a fine spray on the outer cloth and press it into the polyurethane with your hands or a clean cloth such as a handkerchief, then spray over the outer covering material with a fine spray of 3-2-1W.

### PERFORMANCE

Envirograf® 3-2-1 and 3-2-1W have undergone stringent test procedures. Before specifying, please refer to the data sheet. Tested to BS5852 Parts 2 & 14 (1982) Cribs, Class 0/1, BS4790 (1987), BS5665 (1989), BS5852 (1990), BS5867 Part 2 (1980), EN597-1 (1995), BS5438 (1988), BS7175 (1989), BS6807 (1989), BS7177 (1989), BS6809 (1989). Tested to EN71 (1988 & 1994) plus BS5865 (1989). Not harmful to children or adults. CAA-approved. For Christmas trees, the tree must be in earth or sand and must be watered daily.

### ORDERING REFERENCES:

**PATENTED**

<b>3-2-1</b>	For all materials to be dry-cleaned
<b>3-2-1 W</b>	For bed linen and other fabrics that require regular washing



### DESCRIPTION

An odourless flame retardant liquid.

### USE

For use on plastic and nylon foliage, or flowers for example in hotels, hospitals, restaurants, foyers and for Christmas Grotto materials.

### PERFORMANCE

3-2-1 S has been tested to BS5852 Part 1 (1982) on nylon and plastic foliage.

### ORDERING REFERENCES:

**PATENTED**

<b>3-2-1 S</b>	For artificial flowers and synthetic materials
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# ENVIROGRAF®

*We can design a solution to any fire protection problem*

*We are the world leaders in design, testing and manufacturing of passive fire protection products. Our knowledge is backed with almost 30 years of experience. We can help you meet all the required Building Regulations and satisfy your need for passive fire protection. Do not hesitate and contact our Technical Department for advice.*

*Some of the solutions that we've designed:*

## **Envirograf® - helping to protect the St Pancras Chambers**

The St Pancras railway station (Kings Cross) was one of the most stunning architectural achievements of the 19th century. The design was an engineering marvel of the time, and became a world famous architectural site. In May 1865, (while the station was still being constructed), the Midland Railway Company launched a competition for the design of a 150 bed hotel, with eleven architects asked to submit their entries. One of the architects, Sir George Gilbert Scott (1811-1878), got completely carried away and submitted a grand plan bigger and far more expensive than the original specification. But his bare-faced audacity paid off and he was awarded the contract - although the Directors of the Midland Railway immediately demanded some hefty cost cutting measures which included knocking off two floors of office accommodation and one floor level from the hotel.

### **St Pancras station, shortly after opening**

The Midland Grand soon acquired an excellent reputation as an upmarket, 300-room hotel, charging 14 shillings (70p) a night in 1879 - only six pence (2.5p) more than the luxurious and famed Langham in Portland Place, W1. The building included many innovative features including hydraulic 'ascending chambers', concrete floors, revolving doors and a fireproof floor construction. The Victorian decor was

rich, lavish and expensive, with suites of rooms decorated with gold-leafed walls and a blazing fire in every room.

The hotel managed to prosper until after the First World War, but even the Moroccan coffee house and in-house orchestra couldn't protect the hotel from the countrywide decline in the hotel trade.

### **Into decline**

The Midland Grand was taken over by the London, Midland and Scottish Railway in 1922, before closing in 1935 - its facilities were outdated and it had become too expensive to run and refurbish. Now renamed St Pancras Chambers, the premises settled down to a somewhat less glamorous existence as railway office.

The building survived the bombing raids of the Second World War but found itself threatened with complete demolition in the 1960s. Thankfully, this incredible building was saved from being swept away, and was awarded Grade 1 listed status in recognition of its importance as an example of high Victorian Gothic architecture. In the 1980s, the building failed its fire certificate and was closed down, remaining empty for many years.

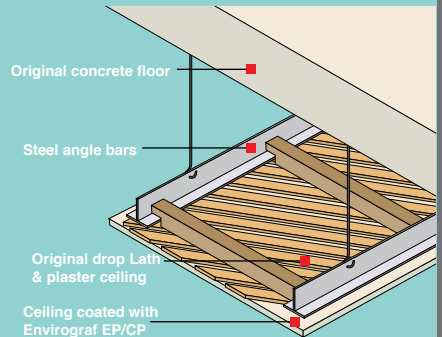




St Pancras Chambers have enjoyed extensive restoration work, with London & Continental Railways Corporation working with Manhattan Loft Corporation to turn the once-derelict hotel into a 5 star Renaissance Marriott hotel with 244 bedrooms, 2 restaurants, 2 bars, a health and leisure centre, a ballroom, 20 meeting and function rooms, and 67 private apartments and penthouses. During this restoration work a particular problem was identified that required an innovative solution. Many original lath and plaster ceilings required upgrading to a 60-minute fire rating. These ceilings often included ornate plaster castings dating back to the original construction period and were therefore protected under the Grade 1 rating. These ceilings were also unique in their construction. The laths were fixed to a complex steel beam sections suspended from the concrete floor above, so whatever fire protection was to be used it not only needed to be light in weight but also able to offer an insulation barrier that would prevent these metal beams from buckling in heat, which would inevitably cause the ceiling to collapse.

Fire Prevention Products London, were approached and after an extensive survey developed a solution perfect for the job. The Envirograf® EP/CP coating was specified.

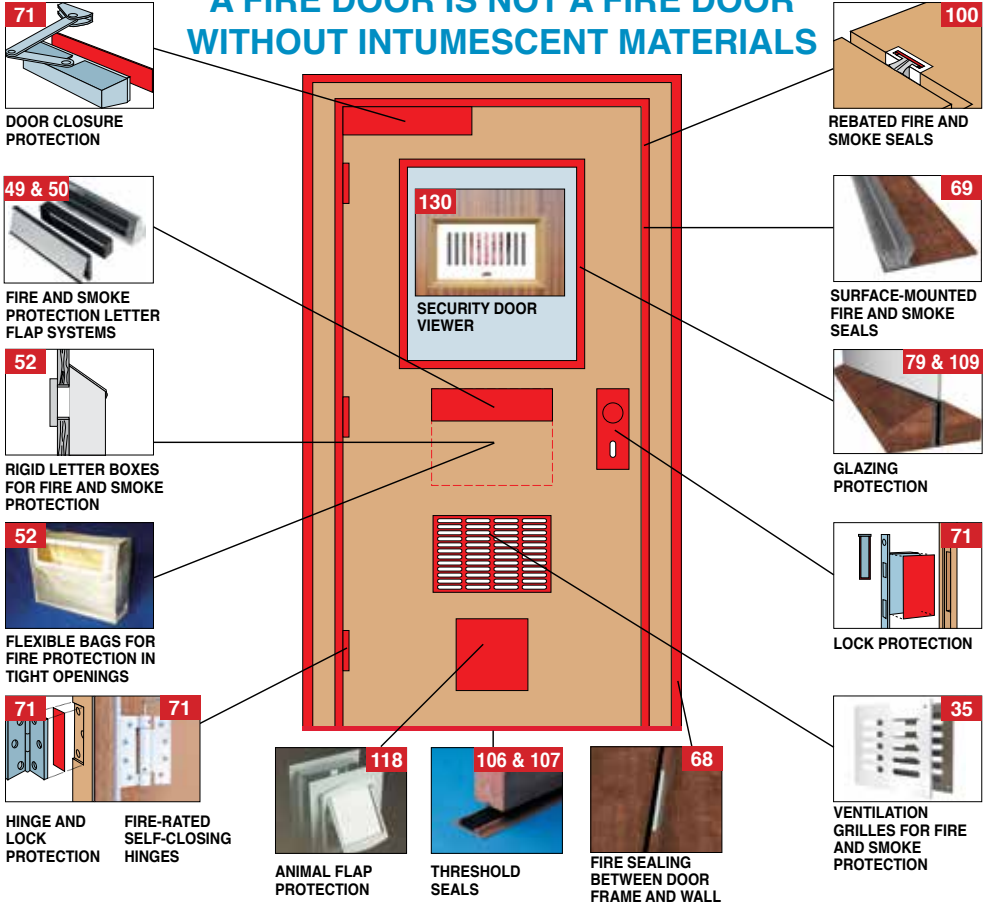
EP/CP is an intumescent coating that expands in a fire offering an excellent insulation quality to the substrate structure above. However, due to the importance of the building project and the sensitivity of the original features a test was commissioned. The test house built an exact simulation of the complex ceiling steel structure that also comprised of the lath system. Carried out at Warrington Test House according to the principles of BS 476:Part 20:1987 the test was a total success achieving the 60 minute requirement leading to the Envirograf® EP/CP being specified and now used throughout the St Pancras Chambers project playing a crucial role in restoring the original magnificence of one of London's most important buildings!



# NOTES ON FIRE DOORS

## ENVIROGRAF® FIRE DOOR PROTECTION PRODUCTS KEEPING FIRE DOORS EFFECTIVE!

### A FIRE DOOR IS NOT A FIRE DOOR WITHOUT INTUMESCENT MATERIALS



## INTRODUCTION

The role of the fire door is one of the most important elements of fire protection in a building. Its effectiveness in resisting flames and smoke helps to prevent a fire from spreading, thus saving property and lives by allowing time for the occupants to escape. This is particularly important in multiple occupancy housing, retirement homes, maisonettes, apartments, etc.

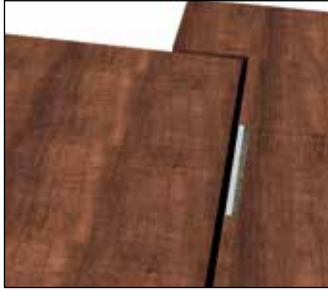
The fitting of a fire door is more complex

than it seems. For example, a fire door must have intumescent material around either the door edge or the frame. Smoke seals should be fitted, and the door furniture should be installed with fire protection in mind.

Despite the British Standard 5588 Part 31/1 and Document B of UK Building Regulations, which clearly states the required specifications of a fire door set, fire officers are constantly finding doors with items fitted that have no fire protection qualities, thus completely removing the door's fire integrity, e.g. letter boxes, hinges,

locks, and cat and dog flaps. If a fire should occur, these doors would be ineffective and could lead to the loss of life.

The Envirograf® range of products has been designed to maintain the integrity of the fire door, particularly doors used in houses of multiple occupancy. All of the products have been produced with cost-effectiveness and ease of installation in mind, and they have been tested to the relevant British Standards. For 'listed' buildings, old doors can be upgraded to fire-rated doors by utilising Envirograf® Products 38 and 42.



### DESCRIPTION

Rebated intumescent seals with self-adhesive backing, supplied in 1050mm and 2020mm lengths. Available in black, brown, red, white, and real wood veneer facings. These seals offer up to one hour of fire protection.

### USE

For use in frames, edges of fire doors and **behind door frames**. Once fitted, the facing of the seal can be painted. **Note: All fire doors must now be fitted with intumescent seals.**

### PERFORMANCE

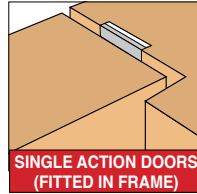
This product was used in hardwood doors fire resistance tests employing the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of up to 60 minutes. In softwood door fire resistance tests, up to 33 minutes of integrity was achieved.

EN 1366-3:2005 & EN 1363-1:2000 & EN 13501-2:2004 achieving 122 minutes integrity and insulation.

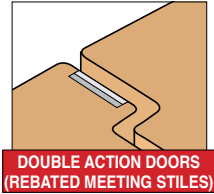
Also used for sliding doors and windows



**SINGLE ACTION DOORS  
(FITTED IN DOOR)**

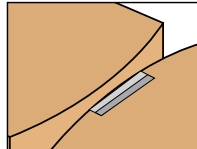


**SINGLE ACTION DOORS  
(FITTED IN FRAME)**

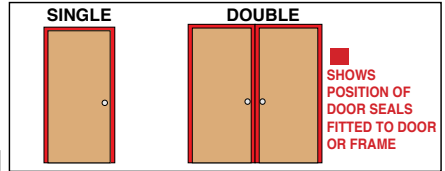


**DOUBLE ACTION DOORS  
(REBATED MEETING STILES)**

### FITTING REQUIREMENTS FOR PRODUCT 68



**DOUBLE ACTION DOORS  
(UNREBATED MEETING STILES)**



**SHOWS  
POSITION OF  
DOOR SEALS  
FITTED TO DOOR  
OR FRAME**

SEE ALSO ENVIROGRAF® PRODUCTS 69, 76, AND 100

### ORDERING REFERENCES:

**PATENTED**

Ref	Size (mm)	Protection	Ref	Size (mm)	Protection
<b>ES102</b>	10 x 2	Half Hour	<b>ES302</b>	30 x 2	One Hour
<b>ES103</b>	10 x 3	Half Hour	<b>ES303</b>	30 x 3	One Hour
<b>ES104</b>	10 x 4	Half Hour	<b>ES304</b>	30 x 4	One Hour
<b>ES154</b>	15 x 4	One Hour	<b>ES383</b>	38 x 3	One Hour
			<b>ES384</b>	38 x 4	One Hour
<b>ES202</b>	20 x 2	One Hour	<b>ES403</b>	40 x 3	One Hour
<b>ES203</b>	20 x 3	One Hour	<b>ES483</b>	48 x 3	One Hour
<b>ES204</b>	20 x 4	One Hour	<b>ES484</b>	48 x 4	One Hour
<b>ES252</b>	25 x 2	One Hour			
<b>ES253</b>	25 x 3	One Hour	<b>ES503</b>	50 x 3	One Hour
<b>ES254</b>	25 x 4	One Hour			
<b>ES283</b>	28 x 3	One Hour			

See price list for full range of sizes  
Available in 1050mm or 2020mm lengths  
Finishes: black, brown, red, white, or real wood veneer

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[www.envirograf.com](http://www.envirograf.com)

**Be up-to-date with all the latest product designs and developments.  
Receive our Monthly Newsletter with Product Releases  
and Case histories**



### 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 two labels printed "Fire Door – Keep Shut".

### USE

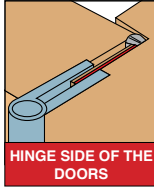
This product is fitted to door frames in minutes. A 3½mm or greater gap down the closing stile and across the door head is all that is required. Seals fit directly over hinges with no hinge bind and no special gap is necessary on hinge side. Once fitted, the face of the seal can be painted, although the brush smoke seal must NOT be painted. If the brush 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.

**The surface-mounted seals have been successfully used for over 25 years.**

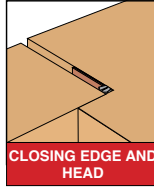
### PERFORMANCE

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).

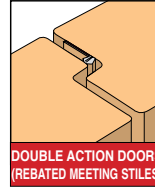
EN 1341-1:2014 & EN 1341-1:2015 achieving 64 minutes integrity and insulation.



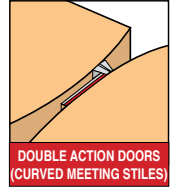
HINGE SIDE OF THE DOORS



CLOSING EDGE AND HEAD

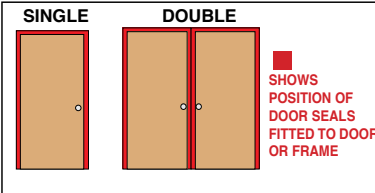


DOUBLE ACTION DOORS (REBATED MEETING STILES)



DOUBLE ACTION DOORS (CURVED MEETING STILES)

### FITTING REQUIREMENTS FOR PRODUCT 69



ALTERNATIVE SEAL - V-SHAPED RUBBER SURFACE FIRE/SMOKE SEAL AVAILABLE: PLEASE ASK FOR MORE DETAILS



**ORDERING REFERENCES:**  
ES/SDS/P FOR SINGLE DOOR SETS  
ES/DDSP FOR DOUBLE DOOR SETS

**TO USE THIS SEAL EDGES OF THE DOORS MUST BE ROUNDED**

### ORDERING REFERENCES:

**PATENTED**

ES/SDS for single door sets  
ES/DDSP for double door sets  
(ES sets are fire/smoke seals, but NS sets are fire seals only).

NS/SDS for single door sets  
NS/DDSP for double door sets

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" (See price list for full range).

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.

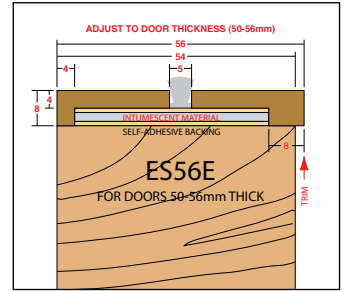
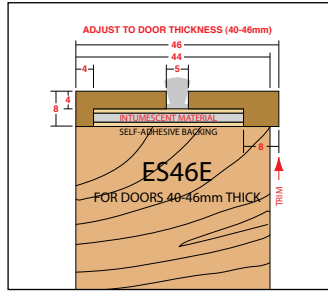
#### Single 1050mm fire/smoke seal strips can be supplied as follows:

ES/25/HS for head and closing stile – 2½mm thick x 25mm 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 – 2½mm thick x 25mm 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.



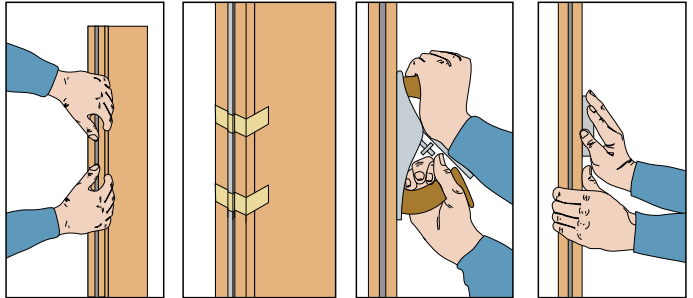
### DESCRIPTION

This replacement door edging is supplied to fit doors with a thickness between 40mm and 56mm, and it is supplied in 2100mm lengths. It is a complete door edging with concealed intumescent and smoke seal, available for gaps of 3mm, 5mm, and 7mm, with brush seals available for other gap sizes. Supplied with adhesive and full fixing instructions. The edging wood is supplied in standard sapele finish (other finishes are available) and the brush smoke seals are available in black, grey, and white.

### USE

Where door edges are regularly damaged and need maintenance, for example in hotels, hospitals, and computer rooms, Envirograf® easy-to-fit replacement door edging is ideal, as it saves the cost of replacing the entire door. See also Envirograf® Product 108 (door edge protector strips).

**HOW TO FIT:** Remove the existing door edge with a sharp knife, chisel, or saw, then rub down the edge with glass paper. If necessary (depending on the gap between door and frame) some planing may be required to allow for the replacement door edge. Replacement door edge fits flush one side (other side is wider to allow for planing down – see diagrams). Apply supplied glue to prepared door edge. Remove backing paper from self-adhesive strip on back of the replacement door edge. Press firmly into position. Hold the door edge firmly in place with masking tape while the glue sets (about 10-20 minutes). Finally, remove the masking tape and smooth down the projecting edge with a suitable plane and/or glass paper.



### ORDERING REFERENCES:

**PATENTED**

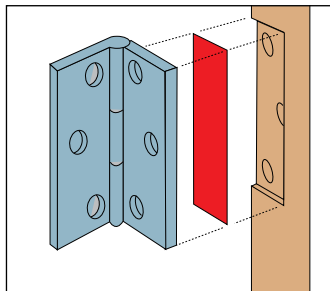
**ES46E** 46mm wide for door thicknesses 40-46mm (trim excess)  
**ES56E** 56mm wide for door thicknesses 50-56mm (trim excess)  
 State colour and size of brush smoke seal required



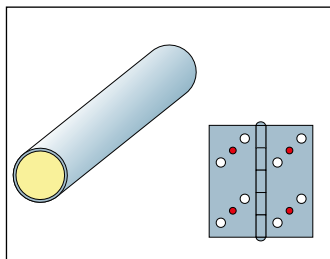
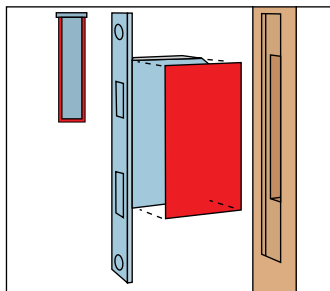
## MORE INFORMATION ON DOOR PROTECTION IN OUR BROCHURE

*One of the most extensive range of fire seals for use with fire doors and glazing systems. Helping to keep the means of escape safe in all building designs.*





**REQUIRED TO COMPLY WITH BS476 PART 22 (1987) AND DOCUMENT B OF UK BUILDING REGULATIONS**



**DESCRIPTION**

A flexible intumescent protection sheet 1mm thick, unaffected by moisture, and supplied in standard sizes for quick and easy fitting (some with self-adhesive backing , some plain ).

**USE**

For use behind hinges and steel door closers and completely wrapped around the hidden parts of lock hardware on a fire-rated door. When installed, the sheet compresses without compromising its protective qualities unlike mastic which is ineffective for hinge, lock and door closure

protection. The intumescent paper cools the lock, hinges, and screws and protects them from overheating in the event of a fire. Under UK Building Regulations and BS476 Part 22 (1987), all door furniture must be protected by intumescent material.

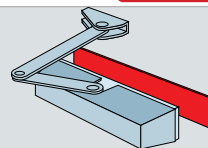
**PERFORMANCE**

This product was used to protect ironmongery in a number of fire resistance tests employing the general procedures and criteria of BS476 Part 22 (1987) without an integrity failure being recorded for up to 91 minutes. Also tested to EN1634-1 (2000) for 68 minutes. EN 1341-1:2014 & EN 1341-1:2015 achieving 64 minutes integrity and insulation.

**ORDERING REFERENCES:**

Ref	Size	Notes
HP 32 <input checked="" type="checkbox"/>	32 x 300mm	
HP 36 <input checked="" type="checkbox"/>	36 x 300mm	
HP 48 <input checked="" type="checkbox"/>	48 x 300mm	Behind hinge areas
HP300 <input type="checkbox"/>	300 x 300mm	Around lock areas
LPH <input type="checkbox"/>	150 x 225mm	Lock areas/closers

- = Items supplied with self-adhesive backing as standard.
- = Items NOT supplied with self-adhesive backing unless requested.



**PATENTED**

**NEW CE-APPROVED SELF-CLOSING HINGE (SET OF 3)**

This self-closing hinge set (Ref SCH, available in brass finish, brown, chrome finish, stainless steel, bronze and white) means there is no longer a need for unsightly surface door closers: ideal for use in conservation areas, student and rental accommodation where people often remove door closers from their doors. This set of 3 hinges acts as a complete door closer. Hinges can be individually adjusted, e.g. to latch, the centre hinge can have more tension, and the top hinge can be tightened to allow for buckled door tops. Hinges



tested to BS476 Part 22 (1987) to 30/60 minutes. Also tested to EN1634-1 (2000) for 68 minutes. Tested by FIRA for age, wear, and weight for 80,000 cycles at 90° and 90,000 cycles at 400mm opening and closing. EN 1341-1:2014 & EN 1341-1:2015 achieving 64 min. integrity and insulation.

**ORDERING REFERENCES:**

Ref <b>SCH</b>	Set of 3 hinges including screws (various colours)
-------------------	--

**PATENTED**

**FIRE RATED INTUMESCENT PLUGS**

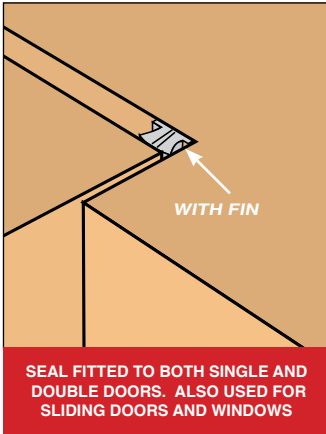
The product 71 range includes a plastic tubular plug containing flexible intumescent material for fixing into holes in solid surfaces (red dots in the picture). Plugs can be used in door hinges to protect the

hinges by cooling them down in a fire. The intumescent material expands around the hinges, cooling the metal. Available in 38mm lengths with a choice of two diameters: 6mm or 8mm.

**ORDERING REFERENCES:**

Ref <b>ES/PLUG</b>	Intumescent plugs for hinge screws
-----------------------	------------------------------------

**PATENTED**



**SEAL FITTED TO BOTH SINGLE AND DOUBLE DOORS. ALSO USED FOR SLIDING DOORS AND WINDOWS**

### DESCRIPTION

Surface-mounted black, brown, grey, or white brush smoke seals, either with or without polypropylene blade. 1050mm lengths or supplied in roll form. Backing 4.8mm wide.

### USE

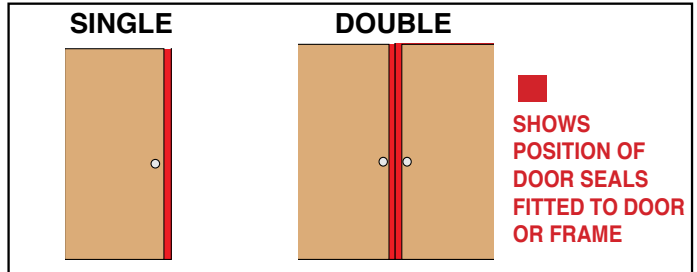
For use where intumescent seals are already fitted and smoke sealing is required. To fit the self-adhesive seal, simply peel off the backing material to reveal the adhesive

tape and press to the door frame, down the edge of the rebate. Panel pins are supplied for fixing top, bottom and 300mm apart. Brush seals without self-adhesive backing can be fitted into draught seal holders. See also Envirograf® Product 78 (Envirostrip®).

### PERFORMANCE

This product has been tested to comply with BS476 Part 31/1 (1987).

## FITTING REQUIREMENTS FOR PRODUCT 72



### ORDERING REFERENCES:

**PATENTED**

ES/SS 3	3mm brush	(Brown and White only)
ES/SS 5	5mm brush	
ES/SS 7	7mm brush	
ES/SS10	10mm brush	
ES/SS15	15mm brush	(white, grey - only with fin) (black - without fin)

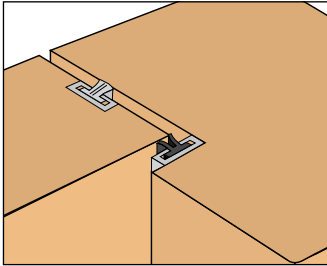
Brush is in Black, Grey, White and Brown with or without polypropylene blade.







Add suffix /S for a single door set, and /D for a double door set  
 Add suffix /R if you require a length in a roll (specify number of metres)  
 Add suffix /N if you do not require the self-adhesive backing tape  
 State the colour of brush required. See price list for full range

**VISIT**  
[www.envirograf.com](http://www.envirograf.com)

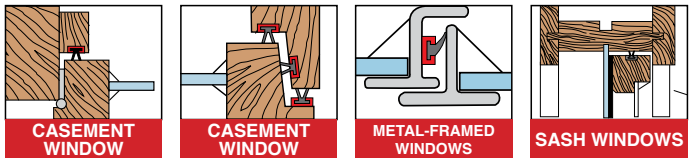
**You can find all of our products on our website.**

For over 30 years we've been leaders in developing, testing and manufacturing passive fire protection products - you can trust in our knowledge!



	 <b>HOLDER</b>	 <b>SEAL A</b>	 <b>SEAL B</b>	 <b>SEAL S</b>	 <b>SEAL T</b>	 <b>SEAL V</b>
<b>seal size</b>		<b>6/9 mm</b>	<b>3/5/7/10mm</b>	<b>5/7/9mm</b>	<b>6/9mm</b>	<b>6mm</b>
<b>USE FOR:</b>		SINGLE-ACTION DOORS AND CASEMENT WINDOWS	DOORS AND WINDOWS	SINGLE/DOUBLE DOORS WITH DOUBLE THRESHOLD	ACOUSTIC CUSHIONING	SINGLE-ACTION DOORS CLOSING ON DOOR STOP

**IMPORTANT: 1-1½MM OF THE BRUSH OR RUBBER SEAL IS HELD WITHIN THE HOLDER. BRUSH WITH FIN IS ALWAYS ½MM HIGHER THAN REGULAR BRUSH. MAKE ALLOWANCE FOR THIS WHEN SPECIFYING.**



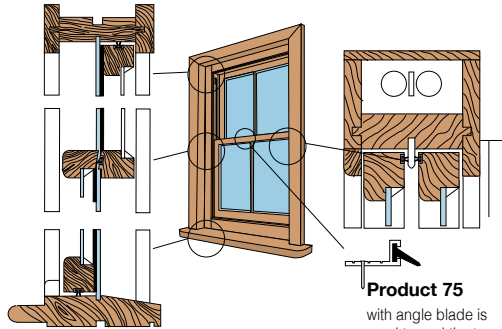
**ALSO USED FOR SLIDING DOORS AND SLIDING WINDOWS**

## DESCRIPTION

A 3mm deep x 10mm wide x 2100mm long aluminium or plastic holder (black, brown, cream, grey, red, or white plastic) containing a brush seal in various sizes and colours or a black rubber seal in various sizes and patterns. The holder has a self-adhesive backing for ease of fitting.

## USE

The seal holder is rebated into wooden doors or windows and adhered to the surface of metal windows using the self-adhesive backing on the base of the holder. It can be fitted to single or double doors, folding doors, sash windows, etc. See data sheet for details.



**Use Product 73 for draught, weather or acoustic protection**

## Fixing

- 1) Groove areas where seals will be fitted. In some cases this seal may be surface mounted
- 2) Remove double sided backing, position seal and fix, finish with panel pins supplied. The brush seal can also be used in the holder for sash windows

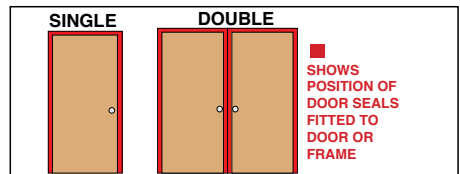
## ORDERING REFERENCES:

**PATENTED**

**ES/AH** Aluminium rebated holder (self-colour)  
**ES/PH** Plastic rebated holder (black, brown, cream, grey, red, or white)

**/A** Add suffix /A and size for angled rubber seal  
**/B** Add suffix /B and size and colour for brush seal  
**/S** Add suffix /S and size for straight rubber seal  
**/T** Add suffix /T and size for tubular rubber seal  
**/V** Add suffix /V and size for V-shaped rubber seal

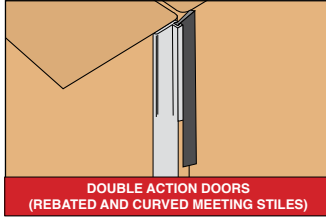
## FITTING REQUIREMENTS FOR PRODUCT 73



If plastic, state holder colour. If using brush seal, state its colour

## Ordering example:

Envirograf® Seals Plastic Holder (black) with Brush seal 5mm (grey) – ES/PH(black)/B5(grey)

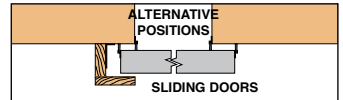
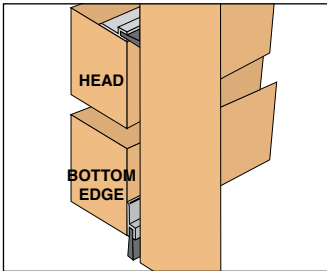


**DESCRIPTION**

Aluminium holder in white, brown, black or milled finish, 2m & 3metres in length with draught, smoke and acoustic seal. Supplied with different length brushes: 19mm, 25mm, 32mm, 50mm, 75mm, 100mm.

**USE**

For sealing the bottom of doors, the back edge of sliding doors, between a door and wall, and down the centre stiles of double doors.

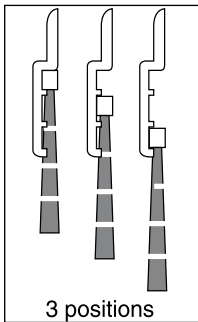
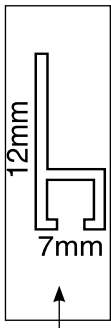


**ORDERING REFERENCES:**

ES/TB Aluminium holder for fixed depth of brush seal (state size)

**PATENTED**

2200mm long



**ADJUSTABLE BRUSH SEAL**

Adjustable surface-mounted threshold brush seal now available in white plastic holder (ES/ATB)

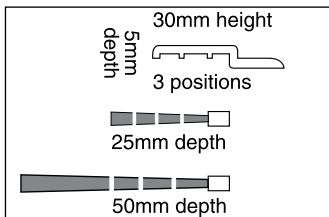


SIMPLY PULL THE CORD TO FREE THE BRUSH AND THEN PLACE IN THE PLASTIC HOLDER AT THE CHOSEN POSITION FOR THE BEST SEAL

Adjustable plastic surface-mounted threshold brush seal for use with sliding doors and windows, and for use with Envirograf® Products 106 and 107. Suitable also for sealing over tiled floors and linoleum or vinyl floor coverings. Brush lengths adjustable by moving position in holder, based on 25mm or 50mm maximum. Plastic holder supplied in 2100mm lengths. ( holder white only )

**ORDERING REFERENCE: ES/ATB**

ES/TB/P is a white plastic holder which accommodate both size brush seal.



**ORDERING REFERENCES:**

ES/TB/P Plastic holder for fixed depth of brush seal  
ES/ATB Adjustable depth brush seal (state maximum 25mm or 50mm)  
(See price list for full range)

**PATENTED**



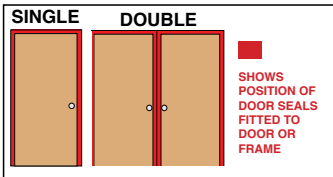
**DESCRIPTION**

Aluminium holder with screws and seals, or with a plastic holder with pins. Finish in black, brown, or white plastic. Containing a brush seal in various sizes and colours or a black rubber seal in various sizes and patterns.

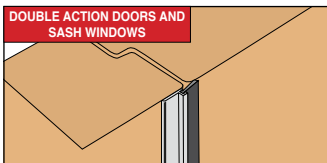
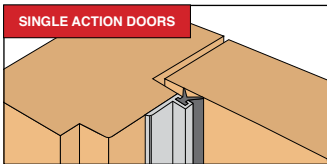
**USE**

Fitted onto door frames, the centre stiles of doors, and around casement/sash windows and glass doors, to give acoustic, draught, smoke, and weather protection.

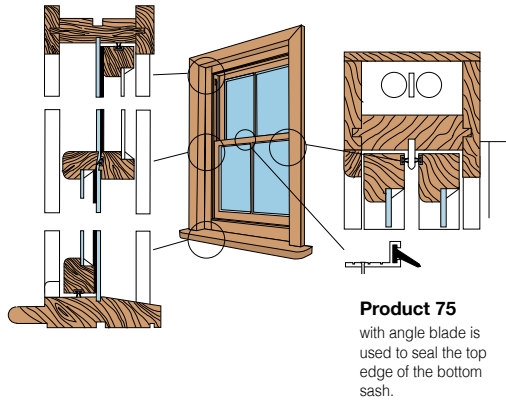
**FITTING REQUIREMENTS FOR PRODUCT 75**



Can also be fitted on bottom of the door



	<b>HOLDER</b>	<b>SEAL A</b>	<b>SEAL B</b>	<b>SEAL S</b>	<b>SEAL T</b>	<b>SEAL V</b>
<b>seal size</b>		6/9 mm	5/7/10mm	5/7/9mm	6/9mm	6mm
<b>USE FOR:</b>		SINGLE ACTION/ DOUBLE ACTION DOORS AND CASEMENT/ SASH WINDOWS (BELOW RIGHT: ADJUST ANGLE TO SUIT)	DOORS AND WINDOWS	SINGLE/DOUBLE DOORS	ACOUSTIC CUSHIONING	SINGLE-ACTION DOORS



**Use Product 73 for draught, weather or acoustic protection**

**Fixing**

- 1) Groove areas where seals will be fitted. In some cases this seal may be surface mounted
- 2) Remove double sided backing, position seal and fix, finish with panel pins supplied. The brush seal can also be used in the holder for sash windows

**Product 75**

with angle blade is used to seal the top edge of the bottom sash.

**ORDERING REFERENCES:**

**PATENTED**

- ES/SH** Aluminium surface-mounted holder (self-colour)
- ES/SP** Plastic surface-mounted holder (black, brown, or white)
- /A** Add suffix /A and size for angled rubber seal
- /B** Add suffix /B and size and colour for brush seal
- /S** Add suffix /S and size for straight rubber seal
- /T** Add suffix /T and size for tubular rubber seal
- /V** Add suffix /V and size for V-shaped rubber seal

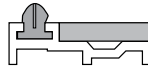
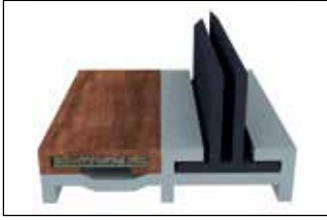
If plastic, state holder colour. If using brush seal, state its colour

**Ordering example:**

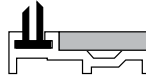
Envirograf® Seals Surface Plastic holder (black) + Brush seal 5mm (grey) ES/SP(black)/B5(grey)

**Important:** 1-1½mm of the brush or rubber seal is held within the holder. Brush with fin is always ½mm higher than regular brush. Make allowance for this when specifying.





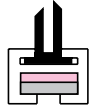
**ES/SM60**  
5/7/10mm Seal



**ES/SM60/S**  
5/7/9mm Seal



**ES/SM60/P**  
Plastic Strip Only



**ES/SM30/S**  
5/7/9mm  
(brush seal available)

**DESCRIPTION**

An aluminium holder with intumescent fire and smoke seal, fitted into rebated fire doors or frames.

**ES/SM30:** A fire rated 30 minutes seal 7mm deep 9mm wide with double sided high adhesive tape. 2200mm long.

**ES/SM30/S:** A fire & smoke 30 minutes fire seal. 7mm deep, 9mm wide, 2200mm long. With either straight twin blade rubber seal 5mm, 7mm or 9mm long or brush seal white, grey, brown or black 5mm, 7mm or 10mm long with or without a centre polypropylene blade.

**ES/SM60:** A 60 minutes fire & smoke rated aluminium holder 6mm deep x 20mm wide 2200mm long with either a twin rubber blade 5mm, 7mm or 9mm long or brush seal white, grey, black or brown 5mm, 7mm or 10mm long. The intumescent seal finished in aluminium colour or grey, white, brown, red or black.

**ES/SM60/P:** A plastic holder with intumescent material, 7mm deep x 20mm wide x 2200mm long in aluminium, black, brown, red, and white finish colour.

For fitting into the rebate opposite ES/SM60, providing increased protection and sealing efficiency or double door.

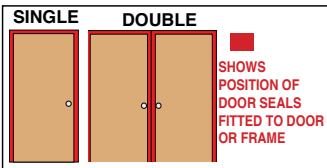
**USE**

The holder is rebated into wooden fire doors or frames, maintaining integrity and restricting the passage of fire and smoke in the event of a fire.

**PERFORMANCE**

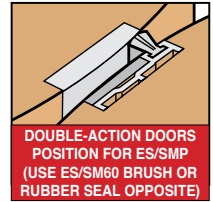
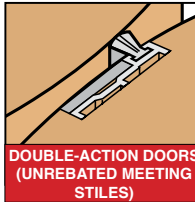
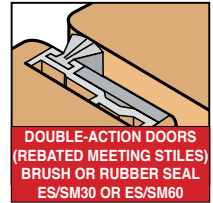
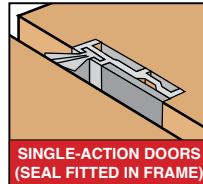
This product is an aluminium holder that houses Envirograf® Product 100, giving 30 or 60 minutes integrity to BS476 Part 22 (1987) and 69 minutes integrity to BS476 Part 23 (1987).

**FITTING REQUIREMENTS FOR PRODUCT 76**



**Important: 1-1½mm of the brush or rubber seal is held within the holder. Brush with fin is always ½mm higher than regular brush. Make allowance for this when specifying.**

**All can be fitted with brush or rubber fin**



Also used for sliding doors and windows. Plastic coloured hinge plugs filled with intumescent are available (Product 71)

**FITTING INSTRUCTIONS FOR ENVIROGRAF® PRODUCT 76  
REBATED FIRE AND SMOKE SEALS**

**ES/SM60:** fit the aluminium profile into the rebate and fix with the nails supplied. Peel off the backing strip from the intumescent finishing piece and adhere it to the aluminium holder, thus hiding the heads of the fixing nails.

**ES/SM60/P & ES/SM30:** peel off the backing strip from the profile and adhere into the rebate.

**ORDERING REFERENCES:**

**PATENTED**

<b>ES/SM30/B</b>	Aluminium holder 7x9x2200mm with brush seal
<b>ES/SM30/S</b>	Aluminium holder 7x9x2200mm with straight rubber seal
<b>ES/SM60/B</b>	Aluminium holder 6x20x2200mm with brush seal
<b>ES/SM60/S</b>	Aluminium holder 6x20x2200mm with straight rubber seal
<b>ES/SM60/P</b>	Plastic holder 7x20x2200mm opposite ES/SM60 seals ONLY

State holder colour/finish and intumescent colour if necessary

For single- and double-action doors, the straight rubber seal is preferred

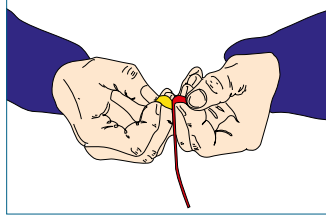


### DESCRIPTION

A 2mm thick compressible intumescent strip, coloured black, brown, grey, red, and white, with self-adhesive tape backing, supplied in 10m long rolls.

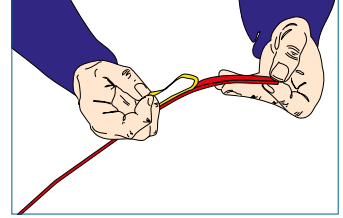
### USE

Used in steel doors, wood doors, and partitioning. The strips are fitted to beads each side of the fire-rated glazing. Although the seal is 2mm thick, it will compress to ½mm and this will not affect its performance.



### PERFORMANCE

This product was used in a number of fire resistance tests employing the general procedures and criteria of BS476 Part 22 (1987). An integrity of 45 minutes (10mm

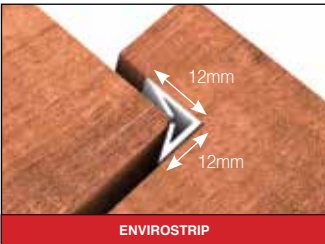


thick hardwood or 15mm thick softwood) and up to 71 minutes (20mm wide hardwood) was achieved. G15/10 used in aluminium window frames giving 49 minutes integrity.

### ORDERING REFERENCES:

**PATENTED**

Ref	Width	Protection	
<b>G 8/10</b>	8mm	Half hour	
<b>G10/10</b>	10mm	Half hour	
<b>G15/10</b>	15mm	Half hour	
<b>G20/10</b>	20mm	One hour	
<b>G23/10</b>	23mm	One hour	State the colour finish required



### DESCRIPTION

An L-shaped plastic (black, brown, cream, or white) strip 12mm x 12mm x 2200mm with rubber fin seals, offering an effective acoustic, draught, smoke, and weather seal that will accommodate the movement of the door. Quick and easy to apply. A fire seal version is available, giving up to 30 minutes integrity in a fire.

additional panel pin fixing may be employed if desired. This low-cost seal is ideal for public housing projects by councils and housing associations, to be fitted on all internal and external doors in apartments and houses, in positions where it will not be damaged.

### USE

Fitted into the rebate of a door or window frame. Self-adhesive backing for ease of fixing, with maximum adhesion achieved after 72 hours in situ. For extra security,

### PERFORMANCE

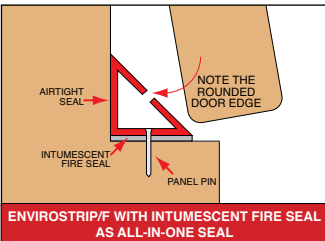
Fire rated version ENVIROSTRIP/F, with intumescent material fitted, was tested to BS476 Part 22 (1987) and achieved an integrity of 30 minutes. It also has acoustic properties for airborne sound.

This seal has been designed so that the fins are always in contact with the 2 surfaces. Making an air chamber giving excellent acoustic properties.

### ORDERING REFERENCES:

**PATENTED**

<b>ENVIROSTRIP</b>	(state colour required)
<b>ENVIROSTRIP/F</b>	(fire-rated version)



## DESCRIPTION

A complete glazing system consisting of 2100mm long wooden beads (with or without bolection moulding) treated with Envirograf® clear intumescent coating. Standard finishes include sapele and pine (others available to order)

## USE

Ideal for doors and screens. The beads can be painted or varnished, and they are supplied with appropriately-sized fixing pins or screws for fixing at 200mm intervals along the length.

## PERFORMANCE

This product was used in a number of fire resistance tests employing the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of over 45 minutes (10mm thick hardwood and 15mm thick softwood) and over 68 minutes (25mm hardwood). BS476 Parts 20-23:1987 - 65 min integrity & 14 min insulation.

## ORDERING REFERENCES:

**PATENTED**

Straight	Bead Size	To Suit	Wood Type	Protection
30/G10	10mm	44mm doors	hard	30 minutes
30/G15	15mm	44mm doors	soft	30 minutes
60/G25/44	25mm	44mm doors	hard	60 minutes
60/G25/54	25mm	54mm doors	hard	60 minutes

Add suffix /L if bolection moulding (lip) is required



## FOR INTERNAL AND EXTERNAL USE



The illustration above shows this product reacting during exposure to flame

## DESCRIPTION

A white odourless coating applied by brush or spray, and available in 1 litre, 2½ litre, and 5 litre tubs (larger quantities available). Each litre covers approximately 1m<sup>2</sup> of bunched cables or approximately 20m of 25mm diameter cable. If required, the coating can be coloured.

## USE

This Envirograf® coating is used for protection of plastic-covered electrical cables, giving a longer period of operation in a fire. It inhibits PVC fumes in a fire, and does not insulate or have any harmful effect on working cables. Dries in approx. 1 hour.

When dry, Envirograf® cable coating is flexible, and it will move without cracking, making it ideal for crane cables, elevator cables, mains cables, and buildings where elevators are required for evacuation.

## PERFORMANCE

This product was used to protect cables exposed to the furnace conditions of BS476 Part 22 (1987). Throughout the 97 minutes of testing, the cables continued to carry current. Another test on cable trays achieved an integrity of 4 hours. EN 13501-2:2007+A1:2009 achieving 120 minutes integrity and insulation.

## ORDERING REFERENCES:

**PATENTED**

EP/C

# 81 FIRE PROTECTION COATING FOR GLASS FIBRE AND PVC 81



## DESCRIPTION

A virtually odourless clear or white coating with coverage of approximately 4m<sup>2</sup> per litre, available in 1 litre, 2½ litre, and 5 litre tubs (larger quantities available). Other colours available.

## USE

Used on plastic and glass fibre, such as the internal section of glass fibre boats, cable housings, engine housings, and the internal side of glass fibre sheeting.

## ORDERING REFERENCES:

**PATENTED**

EP/GC State finish (clear or white)

# 82 DOUBLE-SIDED SELF-ADHESIVE TAPE

# 82

## DESCRIPTION

This Envirograf<sup>®</sup> product is a specially-formulated rubber-based double-sided tape that has very high adhesion and easy-peel backing, available in 5mm, 9mm, 12mm, 15mm, 19mm, 25mm, and 30mm widths, supplied in rolls of 50m. It has a 'curing' time of 48 hours.

## USE

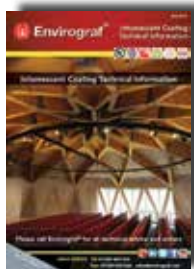
The tape can be used in many applications, even when fire resistance is not an issue.

## ORDERING REFERENCES:

<b>D 5</b>	5mm wide
<b>D 9</b>	9mm wide
<b>D12</b>	12mm wide
<b>D15</b>	15mm wide
<b>D19</b>	19mm wide
<b>D25</b>	25mm wide
<b>D30</b>	30mm wide
All supplied in 50m rolls	

**PATENTED**

## FIRE PROTECTION COATINGS FOR WOOD, STEEL, CONCRETE, FABRIC AND FIBRE-GLASS



Envirograf<sup>®</sup> now offers the most comprehensive range of intumescent and fireproof coatings available. The coatings cover a wide range of applications from wood surfaces, structural steel through to upgrading lath and plaster ceilings, concrete surfaces and fibre glass materials. These coatings have been extensively used in many buildings, including Alnwick Castle, Buckingham Palace, Cambridge University, Crewe Hall, Lilleshall National Sports Centre, Shenley Manor, Walmer Castle and the Oslo Opera House to name but a few. This new range includes a wide selection of new top coat options offering a maintenance cycle up to 15 year. All of these coating systems have been fully tested in UK and European Test Houses.

## 150 minutes protection for steel with no need for stripping existing paint



**Steel Coating used in new Crossrail Station - Canary Wharf**



**Steel Coating used in Botany Bay Shopping Centre, Chorley**

### ORDERING REFERENCES:

<b>EP/FS/P</b>	Primer for internal coating	Red
<b>EP/FS/IN</b>	Intumescent fire protection coating	White
<b>EP/FS/TCW</b>	Protective top coat for internal use	Any BS/RAL Colour (water-based)
<b>EP/FS/TCE</b>	Protective top coat for external use	Any BS/RAL Colour (acrylic resin)

**PATENTED**

Always refer to the new Envirograf® coatings booklet when specifying. Coverage depends on the surface to which it is being applied. To ensure that you apply the correct loading of intumescent paint to the metal, contact the Technical Department for advice.

### DESCRIPTION

Envirograf® smooth-finish intumescent paints system for application by brush, roller, or spray.

### USE

Envirograf® steel protection coatings can be applied over existing paint after removal of any loose particles and washing down. Can also be applied to aluminium for fire protection. For areas of high humidity such as swimming pool areas or external areas, a chlorinated rubber coating can be applied (this can be clear or coloured, as shown above).

### PERFORMANCE

This product has been subjected to a series of tests in accordance with the procedures and criteria of BS476 Part 20 (1987), showing that it can offer protection to structural steel for up to 90 minutes, and it has been tested when applied over multiple layers of existing paint, achieving protection of 150 minutes. These coatings have also been tested to BS476 Part 22 (1987) on aluminium with Granada Windows (achieving 38 minutes of fire protection) and again on aluminium with Wessex Medical lifts (achieving 49 minutes of fire protection).





**Sealoplast - Repair for lath and plaster - Fire and acoustic**

It is often found that plaster or lath and plaster ceiling is missing above the suspended ceiling, or has holes in it. Envirograf® SOP Range for repairing lathe and plaster is a fire rated sponge faced with graphite coated intumescent cloth. Made in 3 thicknesses 10mm, 20mm & 30mm. 1220 mm wide sheets in 5 & 10 metre rolls.

**Ordering Information**

- SOP10 10mm acoustic sponge with graphite cloth - 1220mm wide
- SOP20 20mm acoustic sponge with graphite cloth - 1220mm wide
- SOP30 30mm acoustic sponge with graphite cloth - 1220mm wide

**Patch Paper**

Upgrading damaged holes in plasterboard ceilings & walls ( can also be used in lath and plaster ceiling )  
Patch paper consists of a 0.5 mm flexible fireproof paper with 2 coats of EP/CP.



Clean off any loose parts of the plaster and measure the hole.



Cut the patch paper to the shape of the created hole, allowing 60mm round the outside for overlap.

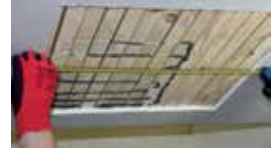


Generously spread the adhesive round the overlapping edges .



Adhere the paper to the plaster. Leave for 2 hours and apply 2 coats of EP/CP at 8m2 per litre per coat.

**Sealoplast**



Clean off any loose parts of the plaster and measure the hole.



Cut the sponge to size and shape of the created hole.



Generously spread the adhesive on the surface of the sponge.



Adhere the sponge to the lathes.



Assure a good contact and leave for 2 hours. You can then staple the material to the lathes if required



**Once dry apply EP/CP coating to all Ceiling**

## GIVING IN EXCESS OF ONE HOUR PROTECTION



### USE

Apply to existing lath-and-plaster ceilings and walls, to upgrade them to 60 minutes of fire protection. The plaster must be well adhered to the laths. All previous distemper and paper must be removed before application of the Envirograf® fire protection material. If the surface is porous, it is advisable to apply Envirograf® Product 93 (stabilising and bonding liquid) in order to seal the surface.

Decorative cornices can be painted with Envirograf® Product 105 (smooth-finish intumescent coating for lath-and-plaster and plasterboard). In the event of plaster being loose from the laths on a ceiling, Envirograf® Product 53 (under-floor fire barrier) can be utilised to provide fire protection.

### PERFORMANCE

This product has undergone several fire resistance tests employing the general procedures and criteria of BS476 Part 21 (1987), achieving 90 minutes of insulation and integrity.

### ENVIROGRAF OFFERS TWO PRODUCT OPTIONS FOR UPGRADING LATH-AND PLASTER CEILINGS :

**S/CEILING** cloth material impregnated with intumescent, supplied in 1220mm widths, length to the meterage required

**S/CP/CARD** white firecard, 920mm wide, length to the meterage required

**ALL DISTEMPER NEEDS TO BE REMOVED FIRST!**

### ORDERING REFERENCES:

**PATENTED**

<b>S/CEILING</b>	Fireproof Material
<b>S/CP/CARD</b>	Fireproof Material with bonded firecard
<b>CA/N</b>	Ceramic Adhesive
<b>FR</b>	Wallpaper Paste ( 1, 5 and 20 litres )

See Product 93 (Stabond) for bonding and sealing fluid

## METAL FIRE PROTECTION BOXES TO HOLD BUILDING PLANS FOR FIRE OFFICERS, TO COMPLY WITH UK RRO REQUIREMENTS



### METAL BOX

A metal box with intumescent fire protection glass cloth bag, to hold your building plans for the fire brigade and your RRO Report according to the 2006 UK requirements.

The box is fitted with a lock. Would suit a reception area or with a fitted alarm for external use to deter vandals.

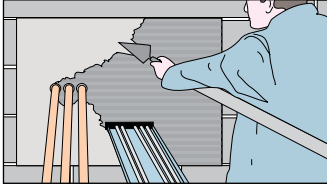
### ORDERING REFERENCES:

**PATENTED**

Ref / External Measurements	Height	Width	Depth
<b>EXTERNAL BUILDING PLAN CASE (incorporating inner document case)</b>			
<b>SPB/EXT*</b>	410mm	490mm	240mm
*Various lock and alarm combinations are available (see price list)			
<b>INTERNAL BUILDING PLAN CASE (incorporating inner document case)</b>			
<b>SPB/INT1</b>	306mm	308mm	150mm
<b>SPB/INT1/B</b>	306mm	308mm	150mm

**/B - option with Break Glass key holder**

[www.envirograf.com](http://www.envirograf.com)

**DESCRIPTION**

A white intumescent coating for application to RW6 rock fibre slabs and non-fibrous slabs (as applied to Envirograf® Products 4 and 5). Supplied in 1 litre, 2½ litres, and 5 litres (other quantities available).

**USE**

Apply the Envirograf® coating by brush or trowel to either high density RW6 rock fibre slabs or Envirograf® Product 41 (high density fireproof sponge) to provide extra fire protection.

**ORDERING REFERENCES:**

**CS/W** Intumescent Coating (White)

**PERFORMANCE**

Tested to BS476 Part 22 (1987), achieving an integrity of 4 hours. Also tested to European Standard EN 1363-1 achieving 238 minutes integrity and 153 minutes insulation.

**PATENTED****DESCRIPTION**

Easy to handle, non-asbestos welding pads 200mm x 300mm withstanding temperatures of up to 1200°C. For welders and plumbers when joining pipes with heat, protecting walls/wood.

**USE**

The welding pads are used behind blow lamps for flame protection to walls, pipes, and other fixtures. The welding blankets have fixing eyelets, so that they can be hung or fitted around areas that need protection from welding flames and splashes. Both the pads and the blankets are fibre-free, making them suitable for use in hospital sterile areas, etc.

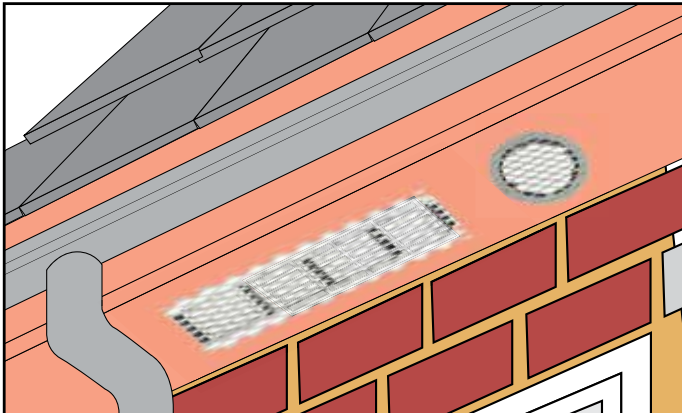
**ORDERING REFERENCES:**

**ES/WP1** Welding Pad 200mm x 300mm  
**ES/WC1** Welding Blanket 1m x 950mm  
**ES/WC2** Welding Blanket 2m x 950mm  
**ES/WC3** Welding Blanket 2m x 1850mm

**PATENTED**

Other sizes available to order

## ESSENTIAL FOR LOFT CONVERSIONS – STOPS FLAME PENETRATION



### ORDERING REFERENCES:

**ES/SV/C** Circular 82mm overall diameter for 68mm diameter hole  
**ES/SV/R** Rectangular 72mm x 215mm overall for 47mm x 215mm hole

**PATENTED**

Other sizes available to order

### DESCRIPTION

Intumescent metal ventilation grilles to fit new or to replace plastic ventilation grilles, designed to prevent external flames and hot gases from entering the roof space and spreading fire.

Product 89 came to life as a response to a tragic incident, in which a family of 4 was killed. During the accident the fire originating from the kitchen made its way through the open window, melted the plastic soffit vents and ignited the roof felt, which in turn engulfed the rest of the building in fire and smoke. Ever since, thousands of houses in Norway and Sweden have adopted Product 89 as a part of their fire protection systems.

### USE

Envirograf® soffit board ventilators are circular or rectangular grilles containing intumescent material that seals the vent openings in the event of a fire, to protect the roof space from flames and hot gases that may enter from broken or open windows etc below the soffit board.

Otherwise, flames could burn through plastic soffit vents and enter the roof space, catching the roof felt alight and spreading the fire to loft rooms in use as bedrooms or play rooms. This Envirograf® product is absolutely essential in loft conversions and for use over windows in the dining room, kitchen, and lounge areas.

### PERFORMANCE

This product underwent a fire resistance test employing the general principles and criteria of BS476 Part 22 (1987), achieving an integrity of 66 minutes.

### ALSO SUITABLE FOR GAS / BOILER ROOM VENTILATION





WINDOW PROTECTION FOR ESCAPE ROUTE



### DESCRIPTION

A fire/smoke protection curtain, complete with a control panel which can be either wired into an existing fire alarm system or smoke detector circuit or operate independently with a heat or smoke detector. A battery backup system can be supplied to operate the system in case of electrical failure. Industrial/domestic use, such as counters, conveyor belts, reception areas, etc. The frame is powder-coated white as standard, but it can be coloured. The curtain roller is motorised. The impregnated silicon curtain cloth can be kept clean by wiping with a damp cloth.

### USE

The Envirograf® Product 90 fire and smoke curtain can be fitted inside an opening or it can be surface-mounted in front of an opening. It will not obstruct the normal use of the opening, but the curtain will close in a fire. The curtain can also be used to lower onto a staircase or conveyor belt. The control unit can be wired into an existing fire alarm system or smoke detector circuit or it can operate independently with a heat or smoke detector.

### PERFORMANCE

The complete product and the curtain material were tested to BS476 Part 22 (1987), achieving 80 minutes of fire protection. An insulated version was tested and achieved 91 minutes integrity and insulation.

### ORDERING

**PATENTED**

This product is made to order.



OVER DOOR DROP CURTAIN

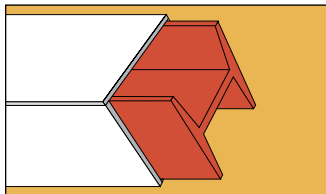


CONVEYOR BELT DROP CURTAIN



### DESCRIPTION

This is a non-fibrous lightweight 6mm thick white board measuring 1000x1200mm. It can be cut easily with a sharp knife, and it can be faced with decorative laminate or painted.



### USE

Fire protection of steelwork and metal ducting. Board is cut to size and adhered to the metal using Envirograf® Product 46

(IA Adhesive), which can also be used for filling the joints. There is virtually no waste as offcuts are adhered into the webs, as shown on the left.

### PERFORMANCE

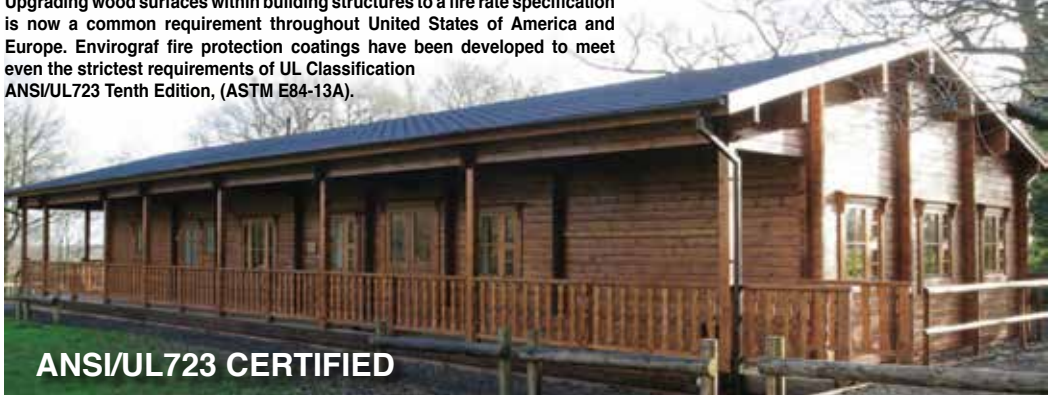
Tested to BS476 Part 22 (1987), achieving an integrity and insulation of 104 minutes.

### ORDERING REFERENCES:

**STB/91**
**PATENTED**



Upgrading wood surfaces within building structures to a fire rate specification is now a common requirement throughout United States of America and Europe. Envirograf fire protection coatings have been developed to meet even the strictest requirements of UL Classification ANSI/UL723 Tenth Edition, (ASTM E84-13A).



**ANSI/UL723 CERTIFIED**



**ES/VFR System**

Must have a top coat applied, whether white or clear. For internal use any type can be applied. For external use any top coat which is for external use, and for areas liable to high sunlight using a light stain is advisable.

ES/VFR 2 coats at 10m<sup>2</sup> per litre per coat. Each coat dries in approx. 30 minutes.

**QVFR System**

Has been developed for internal use only. Clear or white, dries slightly satin. If you require matt or gloss then you can apply a finish coat. QVFR is very hard wearing. 2 coats at 10m<sup>2</sup> per litre per coat. Dries in 40 minutes.



**NEW QVFR - NO TOP COAT REQUIRED FOR INTERNAL APPLICATIONS**

**USE**

Can be used on bamboo, chipboard, decorative laminates, furniture, plywood, MDF, melamine, timber, etc. ES/VFR can be applied first and then be coated over with a range of coatings.

**PERFORMANCE**

ES/VFR and QVFR coatings have had numerous tests on many surfaces and over coated surfaces to meet BS476 Part 6 (1989) Spread of Flame and BS476 Part 7 (1989) Spread of Flame, and this coating system now complies with Classification B/S1/d0 of European Standard EN13501 Parts EN13823 (2002) single burn test (SBI) and EN11925-2 (2002) ignitability. EN 13823:2014 achieving B/S1/d0 on OSB board.



**SERPENTINE PAVILION PROTECTED BY ENVIROGRAF® FLAME RETARDANT**

**ORDERING REFERENCES:**

**PATENTED**

Reference	Coating	Based on	Int/Ext	Finishes
QVFR/C	Clear protection	Water	Internal	S
QVFR/W	White protection	Water	Internal	S
ES/VFR/C	Clear protection	Water	Both	-
ES/VFR/W	White protection	Water	Both	-
ES/VFR/P	Primer	Water	Both	-
HW ACRYLIC	White acrylic top coat	Water	Both	M S

A range of top coats is available. Please see new data sheet for full details. Finishes: S=satin, M=matt )

**DESCRIPTION**

Bonding/sealing liquid for porous surfaces such as plaster ceilings/walls (to seal the surface over old flaky plaster or new plaster) and to seal wood when using Product 38 door upgrade.

**USE**

For sealing distempered, emulsioned, or porous ceilings/walls. Good for sealing prior to using Envirograf® Product 38 (TCA thixotropic contact adhesive as used in door upgrade kits), Product 92 (clear coating), Product 96 (textured coating), or Product 105 (EP/CP paint for plasterboard).

See data sheet for use with Product 84 (intumescent paper).

**ORDERING REFERENCES:**

Stabond

**PATENTED**

## 96 FIRE RESISTANT TEXTURED FINISH FOR WALLS AND CEILINGS

## FOR UPGRADING 9mm AND 12½mm PLASTERBOARD TO ONE HOUR OF FIRE PROTECTION



**FOR SMOOTH FINISH SEE PRODUCT 105**

**DESCRIPTION**

A white or coloured two-application, fire-resistant textured finish coating system for upgrading 9mm and 12½mm plasterboard and lath-and-plaster to one hour integrity and insulation, maintaining load bearing capacity.

**USE**

All ceiling/wall paper must be removed. This product can be applied over existing paint. If the plaster is porous, apply one coat of Envirograf® Product 93 (Stabond) bonding/sealing liquid first. Envirograf® Product 96 (AB textured coating) is applied in two separate applications. The first coat is similar to Envirograf® Product 105 (EP/CP) and is applied like emulsion paint at 8m<sup>2</sup> per litre. The second coat is a thicker coating that is applied by brush and then combed or stippled for a textured finish.

Both are water-based coatings. When dry, any external emulsion or undercoat and gloss paint can be applied. AB textured coating is flexible coating, allowing for movement on the floor above.

**PERFORMANCE**

Tested to BS476 Parts 20, 22, and 23 (1987), applied to plaster-coated 9mm thick plasterboard nailed to a timber-stud partition. The treated partition system achieved a fire resistance (insulation and integrity) of 71 minutes. Tested to BS476 Part 21 (1987), applied to 12½mm thick plasterboard beneath a loaded timber floor, achieving a fire resistance of 61 minutes (insulation, integrity, and load-bearing capacity). Also tested to BS476 Part 21 on a lath-and-plaster ceiling, achieving 63 minutes integrity and insulation.

**ORDERING REFERENCES:**

- AB** Textured Coating for 9mm and 12½mm Plasterboard (white)  
Coverage approximately 3m<sup>2</sup> per litre  
Other colours are available
- HW ACRYLIC** Acrylic Emulsion Coating (matt and satin finish)

**PATENTED**



### DESCRIPTION

A brown or white plastic door stop including intumescent fire seal and brush or rubber smoke seal, designed to upgrade normal hollow-core doors and to replace existing wooden door stops. Can be fitted with acoustic seals which also serve as draught and smoke seals.

### USE

Can be used for new installations, as a combined surface-mounted doorstop, brush smoke seal, and intumescent fire seal. Alternatively, the intumescent section can be routed into the door frame lining, with a rebate of 3mm deep x 50mm wide. The standard smoke seal supplied is a 5mm brush. Rubber seals may also be used, as indicated below (all of these seals offer draught and smoke protection). This product should be fitted to the most vulnerable doors (including non-fire-rated doors), such as dining room and kitchen.

The smoke seal helps to ensure a fire escape route free from smoke, and the intumescent seals the gap between the door and frame to inhibit the spread of fire.

### PERFORMANCE

This product was used in a number of fire resistance tests employing the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of over 68 minutes on a fire door. Another test to BS476 Part 22 (1987) on a standard door (i.e. not fire-rated) achieved an integrity of 18 minutes, offering valuable escape protection.

### ORDERING REFERENCES:

**PATENTED**

<b>DSU/S</b>	Single Door set comprising 2 x 2100mm and 1 x 1050mm pieces
<b>DSU/D</b>	Double Door set comprising 3 x 2100mm and 1 ES/25/HS pieces

State door stop colour and smoke seal required (see below)

# DOOR STOP FOR ACOUSTIC, DRAUGHT AND SMOKE PROTECTION









The smoke seal helps to ensure a fire escape route free from smoke.

### DESCRIPTION

A brown or white plastic door stop including a smoke seal to replace existing wooden door stops. Can be fitted with acoustic seals which also serve as draught and smoke seals.

### USE

Used as a surface-mounted door stop. The standard smoke seal supplied is a 5mm brush. Rubber seals may also be used, as indicated below (all of these seals offer acoustic, draught and smoke protection).

	 <b>HOLDER</b>	 <b>SEAL A</b>	 <b>SEAL B</b>	 <b>SEAL S</b>	 <b>SEAL T</b>	 <b>SEAL V</b>
<b>SEAL SIZE</b>	<b>6/9 MM</b>	<b>3/5/7/10MM</b>	<b>5/7/9MM</b>	<b>6/9MM</b>	<b>6MM</b>	<b>6MM</b>
<b>USE FOR:</b>	<b>SINGLE-ACTION DOORS</b>	<b>ALL DOORS</b>	<b>DOUBLE-ACTION DOORS</b>	<b>CUSHIONING</b>	<b>SINGLE-ACTION DOORS</b>	<b>SINGLE-ACTION DOORS</b>

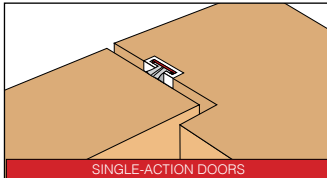
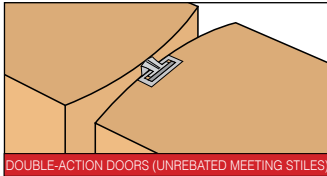
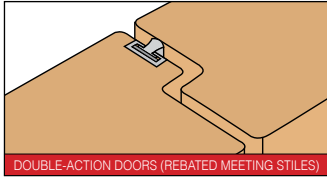
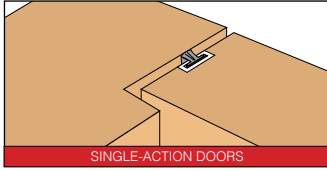
**IMPORTANT: 1-1½MM OF THE BRUSH OR RUBBER SEAL IS HELD WITHIN THE HOLDER. BRUSH WITH FIN IS ALWAYS ½MM HIGHER THAN REGULAR BRUSH. MAKE ALLOWANCE FOR THIS WHEN SPECIFYING.**

### ORDERING REFERENCES:

**PATENTED**

<b>SDSTOP</b>	Single Door set comprising 2 x 2100mm and 1 x 1050mm pieces
<b>DDSTOP</b>	Double Door set comprising 3 x 2100mm and 1 ES/25/HS pieces

State door stop colour and smoke seal required (see below)



### DESCRIPTION

Envirograf® Product 100 is available in two types of rebated seal (standard and new push-fit). These can be supplied with or without smoke seals and in a range of sizes and two lengths (1050mm and 2100mm). They are fitted with self-adhesive backing to adhere into the rebate. Smoke seals can be either brush or rubber. NB: as smoke can kill before fire, it is always best to fit intumescent seals with smoke seals.

### USE

Used for fitting to doors, door frames, and windows. Once fitted, the plastic facing of the seals can be painted, although the brush or rubber smoke seal must NOT be painted.

### PERFORMANCE

This product has been tested in accordance with BS476 Part 23 (1987). An integrity of up to 69 minutes was achieved. Product 100 has also been included in many successful tests with BS476 Parts 20 and 22 (1987), achieving an integrity of 40 and 68 minutes protection. Also tested to European Standard EN1634-1 (2000) for 68 minutes.

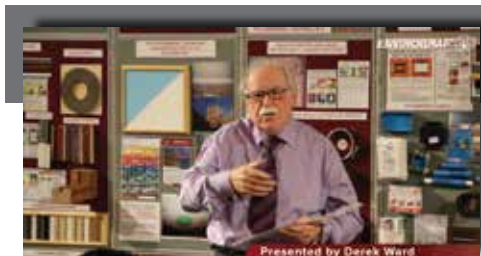
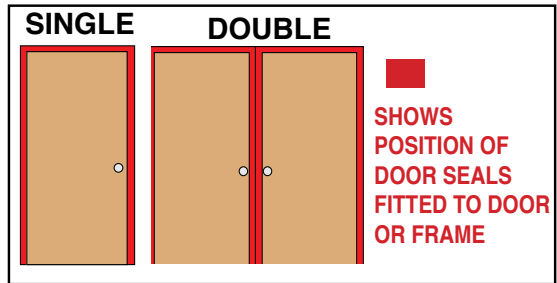
### ORDERING REFERENCES:

**PATENTED**

Ref	Fire Seal	Smoke	Seal Depth	Width	Protection
<b>ORIGINAL STYLE 1050mm &amp; 2100mm LENGTHS</b>					
IS/13	Intumescent	None	3mm	10mm	Up to 30 minutes
IS/13/S	Intumescent	Brush	3mm	10mm	Up to 30 minutes
IS/14	Intumescent	None	4mm	10mm	Up to 30 minutes
IS/14/S	Intumescent	Brush	4mm	10mm	Up to 30 minutes
IS/15	Intumescent	None	3mm	15mm	Up to 60 minutes
IS/15/S	Intumescent	Brush	3mm	15mm	Up to 60 minutes
IS/154	Intumescent	None	4mm	15mm	Up to 60 minutes
IS/154/S	Intumescent	Brush	4mm	15mm	Up to 60 minutes
IS/24	Intumescent	None	4mm	20mm	Up to 60 minutes
IS/24/S	Intumescent	Brush	4mm	20mm	Up to 60 minutes

Brush smoke seals, where fitted, are 5mm standard (black, brown, grey, or white)  
 Standard range holders are brown or white (other colours may be available – please ask)  
 NB: Approximately 1-1½mm of seal is contained inside the holder. Brush with fin is ½mm higher than brush with no fin.

### FITTING REQUIREMENTS FOR PRODUCT 100



### Certified CPD's

**We're always happy to share our knowledge of passive fire protection. Contact us if you would like to learn more about it.**

## Our new unique 'CLIP-IN' door seal

### Simple, rapid installation

The new push-fit seal simply clips in and out of the groove making adjustments at the door fitting stage easy and fast.

#### Rout groove 5mm deeper

By simply routing a groove 5mm deeper than required for the seal itself, the additional grooving if door edges need further planning is eliminated. When the door set correctly closes and is ready for use, the carpenter just clips the seal into the groove.

### Ease of use during redecoration

The seal can be easily removed, from the top or bottom of the door using a screw driver to release it, so that decoration can occur without damaging the seal.

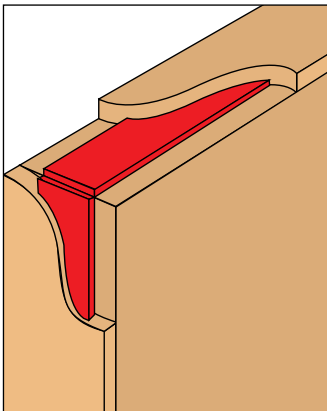
#### NEW – THE PUSH-FIT DOOR SEAL

Installing intumescent strip seals on fire doors can be a real problem! Fitting a door set in any situation is a time consuming job since ensuring a careful fit with hinges and locks fitted correctly requires care, skill and time. Fitting the intumescent seal is an added job. It requires a groove to be routed. The seal is then fixed with pins. Often, when the doors require adjustment to close correctly, the seal needs to be removed for the door edges to be planed down. The groove for the seal then requires re-routing, using up further valuable time. Envirograf® have now designed a unique fire door strip seal that overcomes all of these frustrating problems. The new push-fit seal simply clips in and out of the groove making adjustments at the door fitting stage easy and fast.

#### PERFORMANCE

In a fire this is a powerful fire seal. The intumescent is contained on the back edge facing the deeper groove. In the case of fire, the intumescent fills the groove and then powerfully pushes against the frame edge holding the door firmly in place, protecting the escape route from both fire and smoke.

## 102 INTUMESCENT MATERIAL TO FIT UNDER DOOR EDGING 102



### DESCRIPTION

Envirograf® self-adhesive 2mm thick intumescent material to fit under hardwood door edging as a fire protection seal (ES/UL). The material is protected from damage by the hardwood door edging and expands in a fire to seal the gaps between door and frame in a fire.

### USE

The strip is fitted to the underside of the hardwood lip on the edges of the door.

### PERFORMANCE

This product was included in a fire test conducted to the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of up to 60 minutes.

### ORDERING REFERENCES:

ES/UL/25	To suit doors 25 mm thick	30 minutes protection
ES/UL/30	To suit doors 44 mm thick	30 or 60 minutes protection
ES/UL/34	To suit doors 50 mm thick	60 minutes protection

**PATENTED**





**DESCRIPTION**

This is a water-based clear or white intumescent coating kit for upgrading raised-and-fielded doors to fire door status. Each kit contains ½ litre of primer, 1½ litres of intumescent coating, and ½ litre of top coat – enough to cover an area of 6m<sup>2</sup> (depending on the size of the door, this may be enough material to cover three to four sides of a door). Kits can be coloured to BS or RAL colours.

**USE**

Only the risk side needs to be coated on room doors and both sides on doors leading onto corridors or at the top of stairs. There is no need to remove any existing paints, varnish, or gold leaf. This product can be applied directly over all previous coatings after normal surface washing. Fire tests have been carried out on specific panels and doors. Before considering upgrading panelled door contact Technical Department for technical info.

**PERFORMANCE**

Doors must have a minimum 6mm thick fielded area and 28mm minimum thickness stiles and rails. Tested to BS476 Part 22 (1987), in which one door achieved an integrity in excess of 44 minutes and another door achieved an integrity in excess of 57 minutes.

**ORDERING REFERENCES:**

**PATENTED**

<b>ES/RFC/CM</b>	Clear matt finish kit
<b>ES/RFC/CS</b>	Clear satin finish kit
<b>ES/RFC/WM*</b>	White matt finish kit
<b>ES/RFC/WS*</b>	White satin finish kit
<b>ES/RFC/WG*</b>	White gloss finish kit

\*Can be coloured to BS and RAL colours  
Treatment labels are supplied, to be fitted to the door spine to declare to Building Control / Fire Officers that upgrade treatment has been performed.



# 105 FIRE-RESISTANT SMOOTH FINISH FOR UPGRADING 9MM-12½MM PLASTERBOARD AND LATH-AND-PLASTER CEILINGS TO ONE HOUR PROTECTION 105



## DESCRIPTION

A white or coloured aqueous dispersion coating, offering protection to plasterboard and lath-and-plaster ceilings of various thicknesses. It develops a microporous intumescent layer with a smooth decorative finish. When attacked by fire, the intumescent material protects the coated area's integrity and insulation for a period in excess of one hour. Envirograf® Product 42 (HW ACRYLIC acrylic emulsion coating) can be applied over the smooth coating.

## USE

Apply to 9mm or 12½mm thick plasterboard or lath-and-plaster ceilings in two coats at 8m<sup>2</sup> per litre per coat, which upgrades the substrates to give fire protection in excess of 60 minutes. For a smooth finish, apply by brush, roller, or spray. For a stippled finish, apply with a short-pile roller. For textured finish, see Envirograf® Product 96. This product can be painted over with any external emulsion or undercoat and gloss paint.

## PERFORMANCE

This product underwent a fire resistance test in accordance with BS476 Parts 20, 22, and 23 (1987), applied to plaster-coated 9mm thick plasterboard and nailed to a timber-stud partition. The treated partition system achieved a fire resistance (insulation and integrity) of 71 minutes. The product also underwent a fire resistance test in accordance with BS476 Part 21 (1987), applied to 12½mm thick plasterboard beneath a loaded timber floor. The timber floor system achieved a fire resistance of 61 minutes (insulation, integrity, and load-bearing capacity). Also tested to BS476 Part 21 load-bearing lath-and-plaster ceiling for 60 minutes (insulation, integrity, and load-bearing capacity). Lath & plaster test to EN 1364-2:1999 74 min. integrity and insulation.

## ORDERING REFERENCES:

**PATENTED**

**EP/CP** Smooth Coating for 9mm and 12½mm Plasterboard

**HW ACRYLIC** Acrylic Emulsion Coating (matt and satin finish)



**DESCRIPTION**

The Envirograf® curved ramp and seal system for door thresholds comprises two distinct high tensile plastic mouldings, to be used together or separately. Component DT is a curved ramp moulding containing a carpet pile threshold seal, and component DTE is a curved ramp moulding without the carpet pile threshold seal to meet the carpeted moulding on the other side of the door threshold (or to be used independently to bridge the different levels of non-carpeted and carpeted floors). The gently-curved mouldings are designed with wheelchair users in mind, enabling them to pass over a door threshold or from carpeted areas to non-carpeted areas with ease. Mouldings are available in black, brown, or grey, and the plastic-backed slot-in carpet pile threshold seal is available in black only. Mouldings are screwed into place, and application of flexible mastic sealant to the underside of the mouldings ensures a water-tight seal.

This an acoustic, draught, and weather seal made from fireproof material.

**USE**

When used in combination with other Envirograf® seals on the door, the Envirograf® DT/DTE seal set offers acoustic, draught, and weather protection in situations where a threshold seal is required on a flat surface, particularly where there is no weather bar. In situations where a draught and weather seal is needed for an exterior door, only one section is used in conjunction with an Envirograf® door seal. The seal is suitable for internal or external use in care homes, domestic homes, hospitals, offices, and public buildings, as well as industrial use in factories and warehouses, complying with Document M of UK Building Regulations for disabled people's entrances, with seals as below. The seals are not affected by sea air or water.

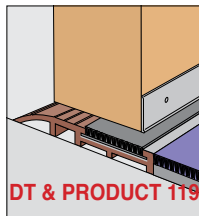
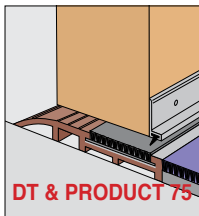
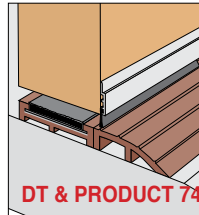
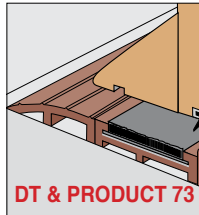
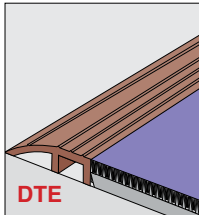
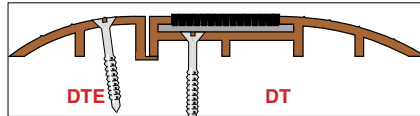
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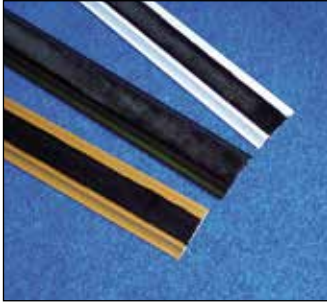
**PATENTED**

- DT** Single threshold section housing carpet seal
- DTE** Single extension piece

State colour of moulding required

**THE PLASTIC MATERIAL IS A FIREPROOF COMPOUND**





**DESCRIPTION**

Envirograf® Product 107 door thresholds are designed for flat thresholds with heavy traffic (such as bikes, fork-lift trucks, prams, trolleys, wheelchairs, etc). They are designed with wheelchair users in mind, enabling them to pass over a door threshold or from carpeted areas to non-carpeted areas with ease. Made from high tensile fireproof plastic mouldings, enabling them to be used in conjunction with fire doors. Mouldings are available in black, brown, or grey, with the plastic-backed slot-in carpet pile threshold seal is available in black only. The product is sufficiently durable to take heavy corridor and entrance traffic without impairing the effectiveness of the carpet pile seal, therefore maintaining good acoustic, draught, and weather sealing, particularly in conjunction with other Envirograf® seals such as Products 73, 74, 75, 119, and 120 on the door.

Mouldings are screwed into place, and

application of flexible mastic sealant to the underside of the moulding ensures a water-tight seal.

**USE**

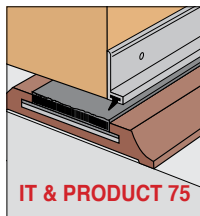
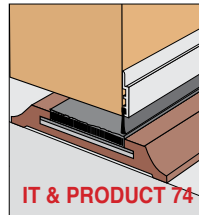
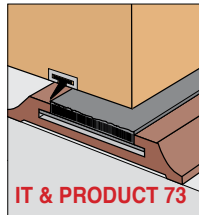
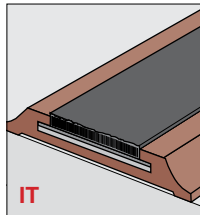
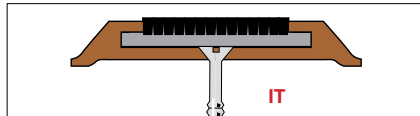
When used in combination with other Envirograf® seals on the door, the Envirograf® IT seal offers acoustic, draught, and weather protection in situations where a threshold seal is required on a flat surface, particularly where there is no weather bar. In situations where a draught and weather seal is needed for an exterior door, only one section is used in conjunction with an Envirograf® door seal. Suitable for internal or external use in care homes, domestic homes, hospitals, offices, and public buildings, as well as industrial use in factories and warehouses, complying with Document M of UK Building Regulations for disabled people's building entrances, with seals as below. The seals are not affected by sea air or water.

**ORDERING REFERENCES:**

**PATENTED**

**IT** Single threshold section housing carpet seal  
**State colour of moulding required**

**THE PLASTIC MATERIAL IS A FIREPROOF COMPOUND**





**DESCRIPTION**

This economical Envirograf® product is a brown or white durable plastic trim, designed to give hard-wearing physical protection to door edges (similar to that provided by Envirograf® Product 70 hardwood door edging) and fire and smoke protection by means of the recessed Envirograf® Product 100 intumescent fire/smoke seal 10x4mm (42-46mm doors) or 20x4mm (52-56mm doors) contained within the door edge trim. It could extend the life of the door to which it is fitted, thus avoiding an expensive replacement. The product is supplied in two sizes, with a flexible region along the length to enable it to be separated into two equal pieces to suit door thicknesses 42-46mm and 52-56mm. The door edge protective trim can be fitted rebated on new doors or it can be surface-mounted on old or damaged doors.




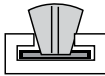

**USE**

Ideally suited to application in areas where there is a high risk of damage to door edges, such as airports, care homes, factories, hospitals, industrial buildings, sheltered housing, etc. This product can be rebated or surface-mounted on the door edge. The door edge protective trim simply slips over the door edge in one piece (or in two pieces for thicker doors: separate into two pieces by rocking along the central line until the parts separate). Peel off the backing paper of the self-adhesive strip on the inside edges of the trim. Slip the door trim piece(s) over the door edge and fix with panel pins through the grooved section (not through the smoke

seal). If fitting an Envirograf® Product 100 fire and smoke seal, remove the backing paper from the self-adhesive strip on the back of the seal holder, then press it into the rebate in the door edge protective trim.

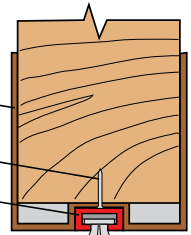
**PERFORMANCE**

The door edge trim has been tested to BS476 Part 23 (1987), achieving integrity up to 69 minutes. The associated Envirograf® Product 100 seal has also been tested to BS476 Parts 20 and 22 (1987), achieving an integrity of 46 minutes and 68 minutes. Also tested to the European Standard EN1634-1 (2000).

	<b>10x4 or 20x4</b>		
			
<b>HOLDER</b>	<b>SEAL B</b>	<b>SEAL S</b>	
<b>SEAL SIZE</b>	<b>5/7/10mm</b>	<b>5/7/9mm</b>	

**PRODUCT 108 FIXING DETAILS**

DOOR TRIM  
 PANEL PINS  
 FIRE AND SMOKE SEAL



**THIS PRODUCT CAN BE FULLY REBATED INTO THE DOOR EDGE**

**Important: 1-1½mm of the brush or rubber seal is held within the holder. Brush with fin is always ½mm higher than regular brush. Make allowance for this when specifying.**

**ORDERING REFERENCES:**

**PATENTED**

- DET44/N** For rebating into new doors 42-46mm thick
- DET54/N** For rebating into new doors 52-56mm thick
- DET44** For surface-mounting onto old/damaged doors 42-46mm thick
- DET54** For surface-mounting onto old/damaged doors 52-56mm thick

**State the colour of door edge protector moulding required**  
**State the colour of the seal holder and the seal type and size required**



**DESCRIPTION**

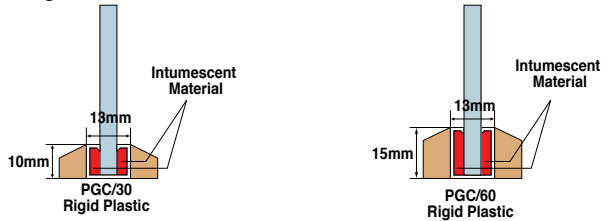
Envirograf® PGC is a rigid brown or white plastic glazing channel with intumescent fire protection available in heights of 10mm (30 minutes) and 15mm (60 minutes).

**USE**

Designed for areas where noise and vibration are common. The rubber channel absorbs sound and accommodates small movements more efficiently than standard glazing fixtures, and it offers fire protection. Use with the intumescent for non-insulated glass such as 6 mm wired, ceramic, or laminated glass; or without the intumescent on insulated glass.

**PERFORMANCE**

This product has been included in tests in accordance with the general principles and criteria of BS476 Part 22 (1987), achieving 40 minutes and 66 minutes of fire protection (10mm high and 22mm high respectively). EN 1364-1:2015 achieving 65 minutes integrity.



**ORDERING REFERENCES:**

**PATENTED**

<b>PGC/30</b>	10mm high rigid channel	<b>30 minutes of fire protection</b>
<b>PGC/60</b>	15mm high rigid channel	<b>60 minutes of fire protection</b>

**PGC** = rigid glazing channel to fit 5-7mm thick glass  
Hardwood/softwood beading can be supplied to house the channel

Ideal for Hospitals where door sets get knocked.

visit our website [www.envirograf.com](http://www.envirograf.com)



Type product number or name to quickly jump to the required product, where you can find:

- Installation videos
- Technical Data Sheets
- Online shop

FOR ALL TYPES OF PLASTIC PIPES, CABLES, CABLE TRAYS AND VENTILATION OUTLETS

**ONCE ATTACKED BY FIRE, EXPANDS INWARDS ONLY, CRUSHING PLASTIC AND COOLING METAL SERVICES**

**DESCRIPTION**

Envirograf® Product 110 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 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



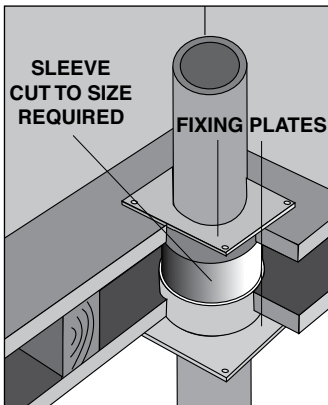
or wall. See also Product 7 (intumescent wraps) and Product 25 (cable protection system for cavity walls).

**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, 69 minutes in hollow walls. Also tested to EN1366-3 (2005), EN1363-1 (2000), and EN13501-2 (2004). EN1363-1 (1999) in plasterboard wall 68 minutes integrity.



**FOR CABLES, PIPES AND TRUNKING Intumescent**

Ref	Internal Dia	External Dia	Thickness
IWS 18	18mm	22mm	2mm
IWS 25	25mm	32mm	2mm
IWS 33	33mm	43mm	3mm
IWS 40	40mm	53mm	3mm
IWS 50	50mm	62mm	4mm
IWS 55	55mm	65mm	4mm
IWS 60	60mm	70mm	4mm
IWS 83	83mm	97mm	5mm
IWS 90	90mm	102mm	6mm
IWS100	100mm	116mm	6mm
IWS115	115mm	135mm	8mm
IWS127	127mm	147mm	10mm
IWS150	150mm	173mm	10mm
IWS165	165mm	187mm	10mm
IWS215	215mm	240mm	10mm

Other sizes made to order.

**FOR VENTILATION DUCTING**

Ref	size	Int. thickness
110V/15	110mm x 54mm	4mm
110V/26	204mm x 60mm	4mm
110V/29	220mm x 90mm	6mm
110V/22	234mm x 29mm	3mm
110V/32	308mm x 29mm	3mm
110V/67	692mm x 70mm	5mm

**FOR PLASTIC TRUNKING**

Ref	size	Int. thickness
110T/11	25mm x 25mm	2mm
110T/22	50mm x 50mm	4mm
110T/33	75mm x 75mm	5mm
110T/32	75mm x 50mm	4mm
110T/42	100mm x 50mm	4mm
110T/43	100mm x 75mm	5mm
110T/43	100mm x 100mm	8mm

**FIRE & THERMAL PROTECTION FOR CABLE BASKETS IN ALL SIZES**

Ref	Cable basket size	Internal		Length
		Width	Height	
CBC 60	50mm x 54mm	60mm	64mm	200mm
CBC 95	75mm x 54mm	95mm	64mm	200mm
CBC120	120mm x 54mm	120mm	64mm	200mm
CBC170	150mm x 54mm	170mm	64mm	200mm
CBC222	200mm x 54mm	222mm	64mm	200mm
CBC274	250mm x 54mm	274mm	64mm	200mm
CBC324	310mm x 54mm	324mm	64mm	200mm
CBC428	400mm x 54mm	428mm	64mm	200mm
CBC478	500mm x 54mm	478mm	64mm	200mm



THERMAL & ACOUSTIC SLEEVE 44dB Airborne 74dB Impact U Value = 1/1.034 = 0.967 W/m<sup>2</sup>k

**FIRE & THERMAL PROTECTION FOR PIPES ( including flue pipes )**

This product is made to order. Please specify the size you require.

- Simple installation
- Thermal & Acoustic properties
- Supports existing insulation
- Protects pipes from corrosion
- Offers a flush finish to the wall/floor surface
- Moisture resistant
- Can be cut to size to suit cavity/wall thickness



Fire and thermal protection for pipes

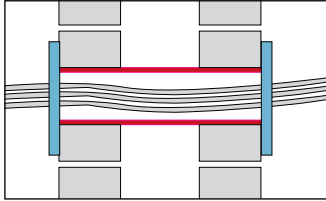


Fire stopping for flue pipes

# FIROBLOK



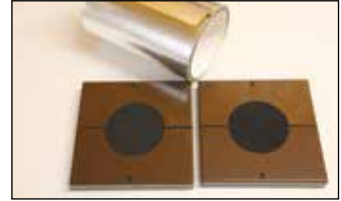
**FIROBLOK CONDUIT SLEEVE FITTED INTO A 20MM COUPLING**



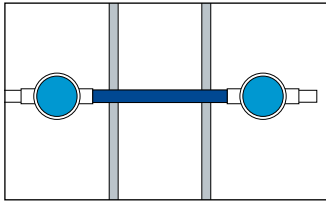
**CABLE PROTECTION IN HOLLOW WALLS INCLUDING SMOKE SEALS**

**DESCRIPTION**

Wherever electrical services and plumbing pipes (whether they are plastic or steel) pass through fire-rated walls or ceilings, they must be protected by an intumescent sleeve, collar, or wrap.



**FIROBLOK CONDUIT SLEEVE FITTED INTO A 20MM BESA BOX**



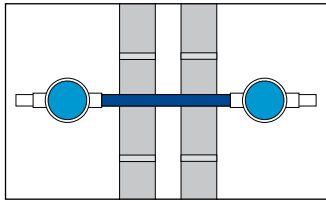
**FIROBLOK CONDUIT SLEEVE FITTED INTO A HOLLOW DRY WALL**

**USE**

Firoblok® electrical conduit sleeves are made in the same sizes as 20mm and 25mm conduit, so they fit into sockets or BESA boxes. Firoblok® sleeves are made to fit around all sizes of plastic trunking and cable trays. In a fire, they will tightly crush/seal around all the cables.



**FIROBLOK CONDUIT SLEEVE FITTED INTO A 25MM BESA BOX**



**FIROBLOK CONDUIT SLEEVE FITTED INTO A BLOCK CAVITY WALL**

**Firoblok®** sleeves are used for all sizes of PVC, UPVC, steel, and copper pipes from 15mm to 600mm. In a fire, Firoblok® sleeves completely seal all PVC pipes with a wall thickness up to 25mm and they have been tested for thick UPVC pipes for nuclear power stations. Firoblok® sleeves, when used on steel, cast iron, or copper pipes, cool the pipe down, and they act as an insulator between the sides of a firewall or between floors and ceilings. They are a very important product to prevent fire penetrating into adjacent rooms and floors.

**Firoblok®** sleeves can be fitted along the length of plastic or steel pipes, and on cables (such as armoured cables feeding hospitals) and pipes (such as chemical pipe) giving fire protection and insulation. The protected cables will not overheat.

**ORDERING REFERENCES:**

**PATENTED**

**PERFORMANCE**

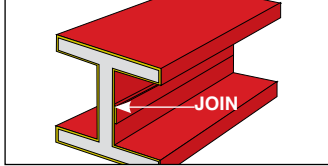
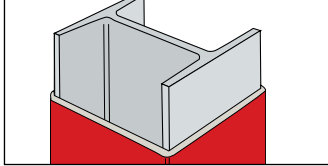
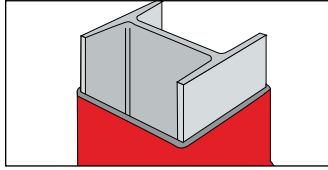
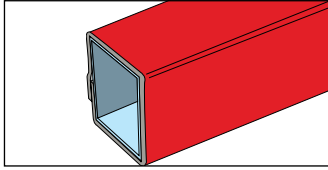
Reference	Description	Length	
110C/20	20mm Firoblok® conduit sleeve	300mm	Same size as the conduit
110C/25	25mm Firoblok® conduit sleeve	300mm	

Packs of 12 pieces are also available. Made for other size of conduits.

For sleeving going over the conduits:  
**110/E/C20**  
**110/E/C25**

Complies with 17th Edition IEE Wiring Regulations, Document B of UK Building Regulations, and Regulatory Reform Order 2005. Tested to BS476 PART 22 (1987) giving 69 minutes integrity/insulation in hollow plasterboard/lath-and-plaster walls; EN1366-1 (2000) achieving 150 minutes integrity and insulation; and EN1366-3 (2005) achieving 78 minutes integrity.

All Electrical Products to comply with revised the 17th Edition IEE Regulations, Document B of UK Building Regulations. **Important:** without gaskets, the wall is only rated 5 minutes protection.



**ORDERING REFERENCES:**

<b>CQT/6/ 50</b>	6mm thick x 50mm
<b>CQT/6/ 75</b>	6mm thick x 75mm
<b>CQT/6/100</b>	6mm thick x 100mm
<b>CQT/6/150</b>	6mm thick x 150mm
<b>CQT/6/1220</b>	6mm thick x 1220mm

**PLEASE STATE LENGTH  
REQUIRED WHEN ORDERING**

**PATENTED**

**PRICED PER METRE**

**DESCRIPTION**

A durable intumescent quilt, designed for fire protection around angled steel, RSJs, steel tubes, trunking, ventilation ducting, and other steel items. Must be overlapped by 50mm and secured by adhesive. **CQT** is 6mm thick and available in 50mm, 75mm, 100mm, 150mm and 1220mm widths.

**USE**

Wrap around the items using Envirograf® Product 46 (intumescent adhesive) for adhesion, and secure with galvanised wire over the 50mm overlapped ends to finish. The sheet material (CQS) must be overlapped 50mm at walls or joints.

**PERFORMANCE**

Tested on steel in accordance with the general principles and criteria of BS476 Part 20 (1987), achieving 87 minutes of integrity.

**HIGH-TEMP SILICONE TAPE SEAL FOR STOVES, BOILERS, ETC**

**DESCRIPTION**

Envirograf® SIL/T is a self-adhesive silicone tape suitable for sealing in high-temperature applications.

**USE**

This product can be used on brick, block, and plasterboard walls and chimney breasts, where the temperature is likely to

exceed 50°C, particularly around a hole-in-the-wall fire or stove. The area to be treated must be clean and dry.

**ORDERING REFERENCES:**

<b>SIL/T30</b>	Silicone Tape 30mm wide x 5m long roll (black or red)
<b>SIL/T75</b>	Silicone Tape 75mm wide x 5m long roll (black or red)

**PATENTED**

**PROTECTOR FOR ETCHED OR STAINED GLASS**



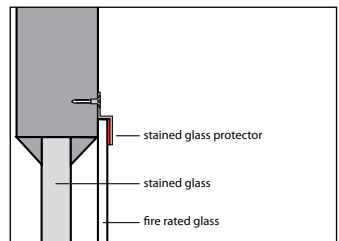
**DESCRIPTION**

A 2100mm long metal trim in standard finishes of brown or white (other colours available). The protector is complete with pre-fixed intumescent seals and is applied to the framed area on the inside of the room with the matching screws supplied.

**USE**

The Protector Rail will hold: Clear Georgian Wire Glass, Laminated Glass or Ceramic Fire Rated Glass in front of the Decorative glazed panel/s. Thereby giving a 30 or 60 minute protection depending on the rating of the Fire Glass used and leaving the Decorative glazed panel undisturbed and fully protected.

Supplied in 2100mm lengths. Can also be supplied in curved sections (e.g. arches). When fitted, the protector is unobtrusive and would not normally be noticed.



**ORDERING REFERENCES:**

**GP** State the colour finish required

**PATENTED**





### DESCRIPTION

The curtain is an impregnated glass cloth, sealed with an intumescent coating that will withstand temperatures of up to 1200°C, providing smoke protection and BS476 Class 0 and Class 1 protection. Supplied 1200mm wide. Envirograf® smoke curtain is a very robust, hard-wearing material. Envirograf® Product 117 can also be supplied as a rolled curtain unit supported by an electric motor. When activated, the curtain will drop and (if required) can be re-rolled via a switch.

### USE

For shopping malls and other large areas that need smoke protection and/or BS476 Class 0/Class 1 spread of flame protection. The curtain can be cut with a sharp knife or scissors, and adhesive is supplied so that a 25mm to 30mm overlap can be made, allowing the curtain to be made up to any size required. When fixing the curtain, use Envirograf® FB/C metal straps and intumescent plugs.

### ORDERING REFERENCES:

SC State width and length required  
Metal hangers and weights can be supplied

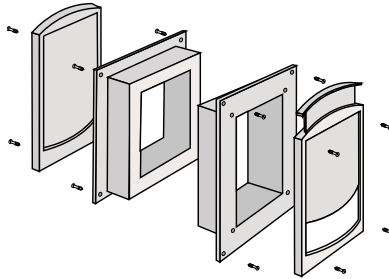
**PATENTED**

**Curtains shown are  
installed at Earl's Court  
( London Underground  
Station )**



**DESCRIPTION**

A metal frame that houses an Envirograf® Product 16 economy intumescent box, designed for standard cat and dog flaps (these are not supplied). Your standard door flap fits into our unit. Standard finishes are brown, grey, and white. The fitted intumescent and PVC-faced sponge is sufficiently smooth for a cat and dog to pass through. It will not seal or expand until the fire has reached 120°C at the door (approximately 4 minutes into the fire). The product can be made to fit a brick wall of any thickness.



**USE**

For fire-rated doors in apartments and houses. In a fire, the intumescent material would expand, filling the hole and maintaining the integrity of the fire door. This Envirograf® product is simple to fit.

**PERFORMANCE**

Tested to BS476 Part 22 (1987), EN 1366-3:2009 & EN 1634-1:2014 achieving 64 minutes integrity.

**ORDERING REFERENCES:**

Ref	To Suit Staywell Type	Staywell Aperture	FP Aperture	<b>PATENTED</b>
<b>FP 1</b>	Series 300 / 400 / 500	168mm x 175 mm	228mm x 235 mm	
<b>FP 2</b>	Series 600 (Small)	245mm x 150 mm	305mm x 210 mm	
<b>FP 3</b>	Series 600 (Medium)	348mm x 225 mm	408mm x 285 mm	
<b>FP 4</b>	Series 600 (Large)	451mm x 277 mm	521mm x 347 mm	
<b>FP 5</b>	Series 600 (X Large)	642mm x 366 mm	722mm x 446 mm	
<b>FP 6</b>	Series 700 (Small)	180mm x 155 mm	240mm x 215 mm	
<b>FP 7</b>	Series 700 (Medium)	265mm x 230 mm	325mm x 290 mm	
<b>FP 8</b>	Series 700 (Large)	354mm x 306 mm	424mm x 376 mm	
<b>FP 9</b>	Series 800	429mm x 291 mm	499mm x 361 mm	
<b>FP10</b>	Series 900	169mm x 169 mm	229mm x 229 mm	
<b>FP11</b>		251mm x 251 mm	311mm x 311 mm	
<b>FP12</b>		210mm x 227 mm	270mm x 287 mm	

To suit Staywell brand flaps. Others can be made to order.

**Fire rated opening for bats to go through**



**PLEASE NOTE:**

If fitting to a Fire Barrier Curtain we must be made aware when ordering.

Envirograf's easy to install fire curtain with bat opening are light in weight with a thermal link in the presence of fire at 80°C, 45 seconds from ignition of fire the curtain would drop creating the seal. should a bat be half way through at that time the hatch would still allow a bat to get through and escape.





**DESCRIPTION**

A PVC seal which can be used in conjunction with Envirograf® Products 106, 107, and 120 threshold seals. Available in black, brown, or grey.

**USE**

The seal is either screwed to both interior and exterior faces of the door (or the interior of the door if Product 120 is screwed to the exterior of the door) and it offers acoustic, draught, and weather protection to the flat threshold seal of Products 106 and 107.

**ORDERING REFERENCES:**

**PATENTED**

**ACS** Weather bar seal  
**State colour required – black, brown, or grey**



**DESCRIPTION**

A PVC seal which can be used in conjunction with Envirograf® Products 106, 107, and 119 threshold seals. The product can have a straight twin rubber blade to seal against strong wind and rain conditions. Available in black, brown, or grey.

**USE**

The seal is screwed to the exterior of the door face, and offers draught and weather protection to the flat threshold seal of Products 106 and 107.

**ORDERING REFERENCES:**

**PATENTED**

**TWB/A** Weather bar plus rubber angled seal (6mm or 9mm)  
**TWB/S** Weather bar plus rubber straight seal (5mm, 7mm, or 9mm)  
**TWB/B** Weather bar plus brush seal (7mm, 10mm, 12mm, or 15mm)

**State colour required – black, brown, or grey**



**DESCRIPTION**

For door frames where effective draught and smoke protection is required.

**APPLICATION**

Remove the backing from self-adhesive strip, then position the seal and fix. Finish fixing with panel pins, securing at each end and at 300mm intervals.

**ORDERING REFERENCES:**

**PATENTED**

**P** Strip - Lengths 1050mm and 2100mm

## 5 PRODUCTS - ONE SOLUTION

### PROTECT UNDER THE THATCH & FROM INSIDE THE ROOF



### HALF-HOUR PROTECTION FROM FIRE BELOW THE THATCH

#### ENVIROGRAF® RANGE INCLUDES 5 PRODUCTS TO PROTECT THATCH ROOFS:

FB30 or FB70 to protect from fire occurring in the building. The curtain blackens insulating & stopping the fire from attacking the thatch internally.

**FB30** For external application, we can supply different types of barriers.

**FB70** Giving 81 minutes fire protection as pictured in Cottenham, Cambridge. This curtain gives moisture & mild rain protection where installation is carried out. But will dry in about one hour.

**TH70F** A similar cloth to FB70 white graphite coated on one side & foil silver finish on opposite side giving thermal insulation properties & completely waterproof. This product is supplied with joint sealer.

**TH/S/60** Similar cloth to FB70 but with a silicone coating that gives complete water proofing with a 50mm overlap.

All curtains have distinct advantages: fire protection, robust and light & easy to fix. Can be adhered using Envirograf® IA Adhesive.

Other products to give further fire protection.

**STB/91** A 6mm coated board that can be adhered using IA adhesive round chimney breasts up to the height of the thatch, or can be fitted round chimneys in existing thatched roofs where brick courses have opened liable to allow fire & heat to get to the thatch.

Envirograf® make a metal cutter to push down between the thatch & the side of the chimney to make the 6mm gap. You then slide the board down the cut area making a fire barrier. Run a bead of Envirograf® fire proof silicone over top edge of board push thatch back up to the brick work & push back flashing the board (STB/91) will give up to 1200°C fire protection.



UNTIL NOW, PROPERTIES WITH THATCHED ROOFS HAVE BEEN NOTORIOUSLY DIFFICULT TO PROTECT FROM ACCIDENTAL AND MALICIOUS FIRES. HOWEVER, THE NEW ENVIROGRAF® FIRE BARRIER CURTAINS HAVE IMPORTANT BENEFITS FOR OWNERS AND OCCUPANTS OF BUSINESS AND DOMESTIC PROPERTIES WITH THATCHED ROOFS.

ENVIROGRAF® PRODUCT 56 (FB30) FIRE BARRIER CURTAIN IS FITTED IN THE LOFT SPACE (REQUIRING NO DISTURBANCE TO EXISTING THATCHED ROOFS) TO PROTECT THE THATCH FROM FIRE IN THE PROPERTY BELOW.  
INDEPENDENTLY-TESTED TO ACHIEVE 36 MINUTES INTEGRITY.  
SUPPLIED 1220mm WIDE.  
BRITISH STANDARD TESTED :  
BARRIER CURTAINS ARE TESTED IN ACCORDANCE WITH BS476 PART 22 (1987).



# ENVIROGRAF® DESIGNED SOLUTIONS

In a fire at Peterborough greyhound stadium took 6 hours to put out the fire, Envirograf FB Curtain stopped the fire reaching half the stadium therefore saving half.



Restoring the past and protecting the future is a top priority for the owner of this old and previously dilapidated thatched cottage in Cottenham, Cambridge. Attention to detail during refurbishment, repointing, and rethatching was a crucial factor in this project, but the need for fire protection to protect the family was just as important.

Fire protection is often ignored or overlooked by homeowners, who spend most of their funds on the aesthetics of their properties – at the expense of safety. As insurance companies are now looking ever closer at vulnerable properties like thatched cottages, the need for basic fire protection becomes more of a necessity for homeowners.

The building contractor, Northover Construction, used a yellow Envirograf® FB70 fire barrier curtain over the roof trusses of this cottage. If the thatch is ignited accidentally or maliciously, this curtain ensures that the rest of the property is protected. Also, if a fire started in the rooms below the roof, then the thatch is also protected. The curtain has been independently tested for 81 minutes protection to BS476 Part 22 (1987).

This inexpensive, but very effective, fire protection curtain is just part of a vast range of Envirograf® passive fire prevention products. Other items to protect from fire in the home include carpets, electric wiring, fabrics, and wood.







INSTALLATION AT KING'S CROSS UNDERGROUND STATION, LONDON, ENGLAND

**DESCRIPTION**

A fire barrier curtain for use where insulation is not an important criterion. Available in 1200mm widths.

**USE**

For loft and suspended ceiling separation. All joints must overlap by 50mm and be adhered using Envirograf® Product 57 fireproof adhesive. Service penetration can be passed through. See data sheet for fixing applications.

**PERFORMANCE**

This product has been subjected to a fire test in accordance with BS476 Part 22 (1987) achieving an integrity of 39 minutes and insulation of 3 minutes. Although the insulation failed at 3 minutes, the radiant heat did not reach through to ignite anything on the other side.

**ORDERING REFERENCES:**

<b>VB3012</b>	Barrier curtain for roof voids 1200mm wide
---------------	--

**PATENTED**



**DESCRIPTION**

Envirograf® covers for framed works of art and other valuable objects are **designed to protect them from the effects of smoke and fire, and the consequent handling and water damage caused during fire-fighting**, giving time for withdrawal to a safe place.

**USE**

The Envirograf® art covers are easy to fit by slipping the top retaining flap over the top of the picture frame and then fastening with elastic straps at the two lower corners. The covers can be labelled to suit your referencing purposes.

**PERFORMANCE**

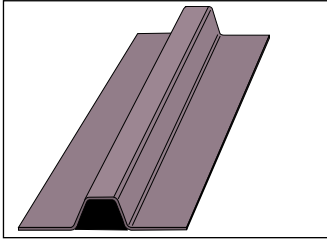
This product gives approximately 20 minutes of fire protection, allowing time to extinguish the fire and strategic withdrawal of the works of art in order of their value.

**ORDERING REFERENCES:**

<b>ARTCOVER</b>	Please contact the technical department before ordering
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**PATENTED**

FOR USE UNDER ROOFING TILES AND SLATES



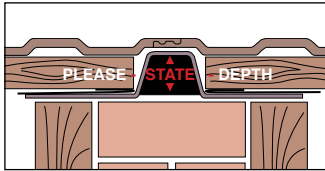
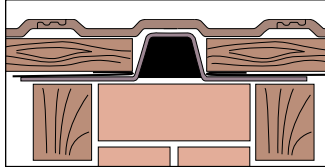
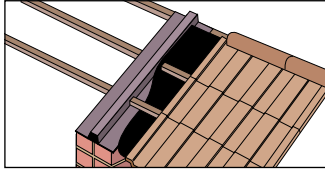
The membrane is supplied as a ready-to-install unit

DESCRIPTION

A foil-clad intumescent membrane section, made from a non-porous material, to form a fire break between two roofs of adjoining properties. Gives full fire protection from one roof to the next. Unaffected by moisture. Easily fitted with clout nails to roof trusses. This product is reinforced with wire mesh in order to support itself when hanging over a wall.

PERFORMANCE

This product has been subjected to a fire test in accordance with BS476 Part 20/22 (1987) achieving an integrity of 72 minutes.



The membrane fits directly above the firewall structure. Roofing felt is fitted over the blanket section and roofing battens butt to the raised seal section. This system is waterproof and maintains the waterproof integrity of the roof system after installation

The raised seal section of the membrane is designed to fit directly below all types of roofing profiles. Roofing battens are cut to butt to the membrane on each side

Tile joints can be made directly above the raised section of the membrane seal, or away from this area

ORDERING REFERENCES:

PATENTED

FBM State the width required and the height between the top side of the wall and the underside of slates or tiles when ordering

FOR USE UNDER ROOFING TILES AND SLATES, TO ISOLATE A PROPERTY FROM ITS NEIGHBOURS FOR SEMI-DETACHED AND TERRACED HOUSES



UNPROTECTED

ORDERING REFERENCES:



BEFORE THE FIRE TEST

PATENTED

DESCRIPTION

An intumescent-coated glass-cloth 1220mm wide and fireproof sponge barrier 1000mm wide, designed to form a fire break between two roofs of adjoining properties. Unaffected by moisture. Installed internally within the loft space.

USE

Ideal for use in terraced and semi-detached houses, or areas with large spans of roof space. This product is economical and it can be fitted quickly and easily by one or two people, working inside the roof space. Adhesive, fixing battens, FB70 barrier cloth, and fire-proof sponge are supplied for easy fixing.

PERFORMANCE

Recent tests undertaken on this product have indicated that unprotected roofs collapse in 39 minutes, whereas the FB70 fire protection barrier curtain has been tested to 81 minutes integrity, holding back the fire from the adjoining roofs, thus giving valuable time to allow the fire department to arrive on site.

IRB State length required



OPEN FOR VIEWING

**DESCRIPTION**

The Envirograf® personal door viewer has integral fire resistance and a cutout size of only 229mm high and 368mm wide. It comprises an internal sliding shutter plate with observation slots that can be moved sideways to align with observation slots on the external frame. The door viewer is made from strong zintec sheet metal (20 SWG or 0.92mm thick) finished in black, bronze, brown, or white powder coating (other colours are available to order). The unique glass plate allows for discreet observation and is supplied with 6mm thick armoured glass. The armoured glass is unbreakable and gives extra security to domestic apartments and houses, detention rooms in police stations, mental institutes, prisons, etc. Complete fire protection is offered whether the viewer shutter is in the open or closed position. Available in 30 or 60 minute ratings.

**USE**

The viewer offers a greater panoramic view than is available through spy hole viewers, and it has the advantage of being able to be kept in the open position without compromising the integrity of the door in a fire. It is ideal for monitoring patients in hospitals, viewing occupants in conference rooms, meeting rooms, prisons, banks and other financial institutions, domestic residences, etc.

**ORDERING REFERENCES:**

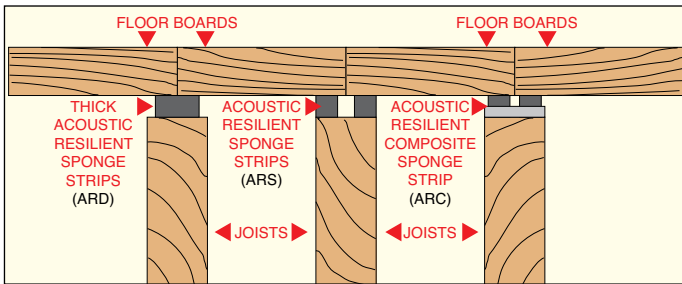
**PATENTED**

- DV30** DV + Beading set for 44mm doors - 30min fire rating - softwood
- DV60** DV + Beading set for 44mm doors - 60min fire rating - hardwood
- DV60** DV + Beading set for 54mm doors - 60min fire rating - hardwood

Other viewers can be made to order to suit doors of other thicknesses  
The product can be fitted with a locking device – state if required

**PERFORMANCE**

Tested to BS476 Part 22 (1987) for 66 minutes.



**DESCRIPTION**

Envirograf® acoustic sponge strips are for impact acoustic protection between floors, fitted between floor boards and the top of joists. Black acoustic sponge (ARS) 9mm thick x 10mm wide is supplied in 10m

rolls, with a self-adhesive backing strip for quick and easy application. Also available as a (ARD) 50mm wide and 10mm thick acoustic resilience strip with high sound resistance performance in 10 metre rolls.

A composite strip (ARC) is also available, comprising grey acoustic sponge 10mm thick x 50mm wide x 2.5m onto which two parallel strips of 6mm high black acoustic sponge are adhered, with a self-adhesive backing on grey sponge to facilitate quick and easy installation.

**USE**

Impact acoustic protection between floor boards and joists has been a considerable problem in the construction industry. The industry-suggested 25mm mineral fibre strip offering 60 to 100kg/m³ has been a way of dealing with the sound transmission problem. However, the new Envirograf® ARS strips have only 9mm uncompressed thickness and are fitted with self-adhesive backing. When used in parallel on both of the top edges of joists, they offer a vast improvement in density of 180kg/m³. The 50mm wide ARD adds an improved sound resistance performance.

**ORDERING REFERENCES:**

**PATENTED**

- ARS** Black anti-vibration sponge supplied in a roll of 10m
- ARC** Composite grey/black acoustic strips 2.5m long
- ARD** 10 mm x 50mm thick in 10metre rolls

# ENVIROFRAX NON-INTUMESCENT GLAZING TAPE FOR STEEL GLAZING SYSTEMS



### DESCRIPTION

Envirofrax® white glazing tape is non-intumescent, fireproof, anti-vibration, and suitable for fire-rated glass in steel doors, windows, and partitions where intumescent properties are not required. It is 3mm thick, available in three widths, and supplied in 15m long rolls with self-adhesive backing. Can be coloured if required.

### ORDERING REFERENCES:

<b>GT15</b>	15mm wide	3mm thick	15m roll
<b>GT20</b>	20mm wide	3mm thick	15m roll
<b>GT25</b>	25mm wide	3mm thick	15m roll

**PATENTED**

### PERFORMANCE

Tested to BS476 Part22 (1987) for 60 minutes.

# AVG/F ACOUSTIC/FIREPROOF VENTILATION GRILLE



### DESCRIPTION

The Envirograf® AVG/F fireproof ventilation grille consists of two parts (one for each side of the opening) and the internal cavity of both sections is filled with micro-acoustic material, with intumescent strips on the two long sides of the risk side opening to provide fire resistance properties. The grille is 25mm deep and in two sizes (200x200mm and 400x200mm). Various finishes are available. The ventilation area (m<sup>2</sup>) is about 0.4 x (slot length in metres).

### USE

The grille can be used on partition walls and doors, to prevent fire passing from one room to another. To accommodate the grille, the ventilation aperture must be at least 10mm larger than the height between the upper and lower opposing slot limits (the slots should be vertically opposite each other when fitted).

### PERFORMANCE

Tested to European Standards and approved in accordance with the general principles of NEN6069, offering up to 60 minutes of fire protection plus sound absorption.

### ORDERING REFERENCES:

**AVG/F** State size: 200x200mm or 400x200mm

**PATENTED**

**OTHER SIZES MADE TO ORDER**

# AVG ACOUSTIC VENTILATION GRILLE



### DESCRIPTION

The new Envirograf® AVG acoustic vent grille contains micro-acoustic material to reduce the passage of sound from one room to another. It is available in a range of sizes and finishes (including anodised or natural aluminium). It is made from extruded aluminium profiles and consists of two sections with a 35mm wide edge. Both sections have U-shaped profiles containing micro-acoustic material offering sound absorption properties, and the inside edges of the grille are covered with acoustic foam. The grilles can be produced in lengths up to

1500mm. Owing to the fixed profile system, the profile/gap interval must be a multiple of 85mm up to a maximum 935mm (from 1 to 11 vanes). The area of ventilation available is about 29% of the total grille plate area.

### USE

The grille can be easily mounted with screws onto a door or wall.

### PERFORMANCE

Maximum sound absorption at a minimal air-resistance (20 Pa) is achieved at an air speed no greater than 1.9m/s, calculated on the open passage of the grille, with measurement of the sound insulation according to world standard ISO140-3 (1995).

### ORDERING REFERENCES:

**AVG** State size and finish required

**PATENTED**



**DESCRIPTION**

A multi-purpose high-tack spray adhesive, suitable for bonding and laminating cardboard, fabrics, fibrous materials such as Envirograf® Products 56 & 57 fire barriers, foam products, hessian, insulation materials, etc to themselves and to metal, masonry, wood, etc.

**ORDERING REFERENCES:**

**PATENTED**

**HI-TAK** 500ml aerosol can

# ENVIROGRIP™

**FIRE RESISTANT DRY LINING ADHESIVE**

**90 MINUTES FIRE PROTECTION**

**ACOUSTIC PROPERTIES**

**AND BETTER GRIP**

**HOLDS PLASTERBOARD TO ALL TYPES OF BRICK, BLOCK, CONCRETE & TIMBER**

IDEAL FOR APPLYING CERAMIC TILES TO WALLS, BRICK, BLOCK, CONCRETE, PLASTERBOARD, CHIPBOARD AND WOOD-RELATED PRODUCTS. CAN BE USED IN SHOWERS AND DAMP AREAS.

MAINTAINS THE INTEGRITY OF THE BOARD AND THE SUBSTRATE. IT IS APPLIED TO, BECAUSE NO NAIL OR SCREW HOLES ARE NEEDED.

- 1

**APPLY AND LEAVE FOR 3 MINUTES**
- 2

**PRESS BOARD TO WALL OR TIMBER STUDDING. ENVIROGRIP® ALLOWS FOR MOVEMENT OF BOARD ON CONTACT. CAN BE PULLED OFF IF REQUIRED, RE-POSITIONED AND RE-ADHERED.**
- 3

**CAN BE PLASTERED AFTER 2 HOURS**

INTUMESCENT SYSTEMS LTD  
ENVIROGRAF HOUSE, BARFRESTONE,  
DOWER, KENT, CT16 7JG  
PHONE: 01304 842555 – FAX: 01304 842666  
EMAIL: SALES@ENVIROGRAF.COM





### USE

This product is designed to produce a strong, durable bond for the manufacture of internal partition walls, modules, doors, and partitions; and for laminating all types of wood joints and wood-related products, such as MDF, chipboard, plywood, etc. It was also designed and developed to bond sponge and mineral wool to inorganic boards and magnesium oxide/cement boards; and to give a strong, durable bond for the assembly of fire doors and standard doors, partitioning, and any timber assembly used as a fire-rated product. Once cured, the bond will withstand high impact and impart stiffness to the bonded material. The fire retardant properties enable manufacturers to produce systems that can meet two hours fire protection specification.

### DESCRIPTION

**Firebond Ultra Adhesive (FUA)** is a fire retardant, high performance laminating adhesive, specially developed for the bonding of mineral wool insulation to inorganic board materials, including magnesium oxide/cement boards, and laminated boards. All types of wood joists and wood rebated products MDF chipboard, plywood etc.

### ORDERING REFERENCES:

FUA/0.5	½ kg
FUA/1	1 kg
FUA/2.5	2½ kg
FUA/5	5 kg
FUA/20	20 kg

### Drying and Curing Times:

Initial bond:	10 to 20 minutes
Tack life:	10 minutes
Full cure:	within 24 hours

### PATENTED

Firebond Ultra Adhesive (FUA) is thixotropic, which facilitates easy application, and it is designed to minimise absorption into porous substrates.

The product can be applied by an extrusion nozzle or bead head by a pump system for fast production rates. It is available in containers of ½kg, 1kg, 2½kg, 5kg, and 20kg.

**Firebond Ultra Adhesive (FUA)** should be applied to the board material at a coating rate of 100g/m<sup>2</sup> [10m<sup>2</sup>/kg] to 250g/m<sup>2</sup> [4m<sup>2</sup>/kg] depending on the porosity of the substrate. Mineral wool should be consolidated into the adhesive within 5 to 10 minutes. The panel should be constructed immediately and placed under pressure to consolidate the bond, thus ensuring pressure is applied evenly across the panel. Firebond Ultra Adhesive (FUA) can be applied to wood joints, used for applying Envirograf® intumescent paper, material, card, and veneers to wood, plywood etc. Also used to adhere veneers to MDF, plywood, etc, giving a bond which is fire-resistant.

## Consultation – Site Meetings – Solutions – Lasting Protection



**We're at your service, feel free to call and discuss your needs with our technical support team for unrivalled solutions to your project.**

**Technical Team:**

**01304 842 555**



**REPELLIT**  
 A SIMPLE AND FAST TO APPLY WATERPROOF COATING THAT IS THE PERFECT ANSWER FOR PROBLEMS OF FLOOD WATER SEEPAGE THROUGH BRICKWORK OR MASONRY.

- Stops rain penetration
- Improves flood resistance
- Increases thermal efficiency in order to reduce carbon footprint
- Maintenance cycle from 20-30 years

**REPELLIT** is a powerful one-coat system that can be applied by brush or roller offering a deeper protective water barrier than other thinner masonry coatings on the market.

**FLOOD PROTECTION**

Water seepage from a flood through porous brickwork can be both devastating and costly for the occupants and insurance companies. A coating of REPELLIT will penetrate deeply into the substrate to give an extremely robust clear water-resistant barrier that will last for many years.

**THERMAL PROTECTION**

Brickwork, concrete, stone and mortars are poor insulators when wet and can seriously decrease the thermal efficiency of your home or business. REPELLIT will offer a thermal skin that will allow the substrate to breathe and assist in the reduction of your carbon footprint.

Repellit covers areas including small cracks of up to 0.3mm at the rate of 5m<sup>2</sup> per kg. Larger cracks should be filled-in and allowed to dry before applying REPELLIT, which penetrates deeply into the masonry. REPELLIT is fast acting and creates a water resistant barrier within a few hours.

Repellit can also be used to protect brickwork below ground level - from the buildings foundations upwards, offering protection to the whole fabric of the building structure.

REPELLIT is so powerful that once completely dry (usually after two months from application) a beading effect created by rain will become visible, protecting the masonry.



**DESCRIPTION**

TFFC is a unique fire coating designed for protecting timber framed buildings during the construction phase. TFCC offers between 30 - 60 minutes fire rating dependant upon the thickness of the timbers. The coating dries offering a robust weather proof finish ideal for all open construction site conditions.



**USE**

TFCC can be supplied in both white or coloured finishes. Simply apply by brush, roller or spray at 250 microns Wet Film Thickness. TFCC dries in one hour. TFCC should be applied in dry conditions.

**PERFORMANCE**

TFCC has been tested in a full rig simulating a complete side of a typical house in softwood, shiplap timber measuring between 19mm to 12mm and offered 60 minutes fire protection to the EN European Test EN1364-1-1999.

TFCC was also tested to a BS 476 Part 20 on a load bearing floor including open joists, successfully completing a one hour fire rating.

**ORDERING REFERENCES:**

TFCC - 1 litre, 2½ litres, 5 litres, 20 litres

**PATENTED**

## **EN/F is a unique sealant offering 2 hour fire protection for PVC, steel pipes and cables up to 66mm in diameter, in block and plaster boards.**



Our new EN/F Kit consists of three 310ml tubes of specially formulated intumescent sealant. Two of which (EN/F1) are a dark grey, powerful, intumescent graphite compound (which does not affect the pipes and cables) that expands in a fire sealing the service hole. The EN/F2 tube is a white intumescent sealant for use as a decorator's finish, which can be over painted when fully cured.

The kit was tested numerous times in house and at the end of last year at Efectis Holland. Their test rig consisted of: a hollow plasterboard, and block wall, with cables and plastic pipes with the diameter up to 66mm.

Where the plasterboard wall had service openings through we pressed in newspaper to stop the sealant from dropping down the back.

The test was a success, with the EN/F giving over 2-hours fire integrity and from 110 down to 60 minutes insulation. After 2 hours when the EN/F had met the test criteria we cut back the plasterboard to discover that the newspaper wasn't even burnt, just slightly discoloured, after which the test was successfully concluded.

EN/F kit is ideal for electricians, plumbers, work departments and maintenance professionals to carry in their vans or store in their workshops, providing a quick and convenient ability to seal any service openings they work on. The sealing consists of two stages:

- 1) Special formulated graphite mastic
- 2) White intumescent mastic to face off ready for decorations

The kit can be used for aluminum, copper, plastic and steel pipes up to 66mm in diameter, as well as cables (including: armoured, MICC and flexible type cables) up to 66mm in diameter.

It can be used in both plasterboard stud partitioning and solid substrate surfaces, like brick, block and concrete walls and ceilings.

The EN/F1 and EN/F2 are water-based materials, which become water resistant once cured.

## **Tested for 2 hours fire protection and insulation in plasterboard hollow walls and brick, block walls**

**Tested to EN 1366-3 (2009) and EN 13501-2:2007+A1:2009 for 120 min. integrity and 110 min. insulation.**



EN/F SYSTEM TESTED AT EFACTIS



COMPLETION OF TEST AT 2 HOURS



EN/F SYSTEM TESTED AT EFACTIS



COMPLETION OF TEST AT 2 HOURS

### **ORDERING REFERENCES:**



EN/F - kit of three 310ml tubes ( two dark grey, one white finishing )



# Envirograf® Gas Flue Inspection Hatch



On Buildings that were built after 2000 where gas flues are passing through plaster board ducting through rooms to vent on outside walls. Gas and Building Regulations now require fire rated access panels in order to view the joints and the fixing of pipes. Envirograf® have made a new Inspection Hatch with internal locking device, insulated panel door, Intumescent Seals and smoke and gas seals, easily opening by pressing the door and will release. You can take the door out giving complete viewing for inside the ducting. To return the cover to the shut position drop into a slot and push cover to the shut position where the cover will then hold. The hatch can be fitted to walls and ceilings, either horizontally or vertically.

**Can be made to any size. All fixings internally.**  
**The unit has 1-2 hour fire protection according to BS476 Part 22.**

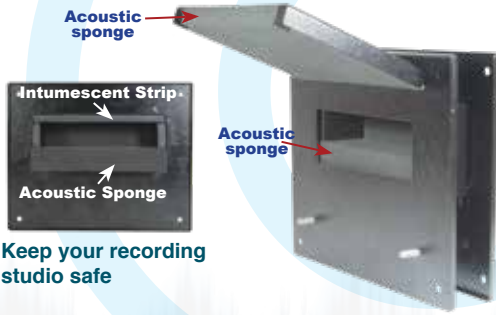
**ORDERING REFERENCES:**

( PLEASE NOTE THAT ALL SIZES RELATES TO SHUTTER DOOR)

NON-INSULATED VERSION		INSULATED VERSION	
ISL/GFH/30/19	300mm wide x 190mm high	ISL/IGFH/30/19	300mm wide x 190mm high
ISL/GFH/40/19	400mm wide x 190mm high	ISL/IGFH/40/19	400mm wide x 190mm high
ISL/GFH/30/23	300mm wide x 230mm high	ISL/IGFH/30/23	300mm wide x 230mm high
ISL/GFH/20/20	200mm wide x 200mm high	ISL/IGFH/20/20	200mm wide x 200mm high
ISL/GFH/30/30	300mm wide x 300mm high	ISL/IGFH/30/30	300mm wide x 300mm high

Standard colour White, most RAL colours available. The unit can be overpainted to match your existing paintwork.

visit our website for detailed Data Sheet



Keep your recording studio safe

When it comes to recording studios or home theatres, the first thing that comes to your mind is that they need to be soundproof, which is true.

**But should they be fireproof as well?**

When you think about the cost involved in the equipment of those studios, it seems reasonable to take any necessary precautions to prevent them from damage, and that includes fire damage as well. Not only that, but if you look at IEE Regulations you will see that any hole that is made in fire resisting wall or ceiling, should be made good to the same fire resistance as the element being passed through.

Envirograf® came up with the solution of allowing you to take full control of your cable management, while still providing required fire and sound resistance.

**FIRE TEST PERFORMANCE**

Tested in accordance with NEN 6069 up to 60 min

Plus sound absorption

**ACOUSTIC PERFORMANCE**

ISO140-3 (1995)

Airborne sound insulation test rated in accordance with BS EN ISO 717-1:1997  $R_w (C;Ctr) = 43 (-3;-8) \text{ dB}$

Impact sound insulation test rated in accordance with BS EN ISO 717-2:1997  $L_{n,w} (Ci) = 74(-1) \text{ dB}$

COMPLIES WITH REQUIREMENTS OF 'ROBUST DETAILS'

**ORDERING REFERENCES:**

Ref.	External Size	Hole For Cable
CPT/1	250mm x 200mm	150mm x 45mm
CPT/2	400mm x 200mm	300mm x 45mm
CPT/3	250mm x 250mm	150mm x 95mm
CPT/4	400mm x 250mm	300mm x 95mm

**NEW SVG grille**



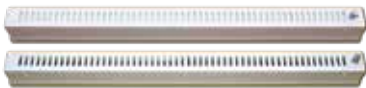
SVG Grille made to fit into the head of UPVC frames. For areas such as kitchens, bathrooms, etc.

All grilles are made from 1.2mm zintec metal and powder coated. Standard colour white or brown, but can be made to other colours.

All intumescent is multigraf multidirectional & fills all voids completely sealing the unit.

**All grilles tested to BS476 Part22 1987.**

**The SVG grilles have been tested to BS476 Part22 1987 for 38 minutes.**



**ORDERING REFERENCES: TO FIT OPENING**

SVG900	900mm wide x 75mm high x 60mm deep
SVG360	360mm wide x 100mm high x 100mm deep
Other sizes made to order.	

**NEW HMG/C and HMG/W grilles**



A unique intumescent grille hit & miss type opening. When open or closed the multi directional intumescent seals up the opening giving **1 hour fire protection. All grilles tested to BS476 Part22 1987.**

HMG designed to fit into head reveals on metal cased windows (HMG/C). Also to fit into windows such as on flats on escape corridors, bathroom and kitchen windows (HMG/W). Can be made to fit into UPVC window frames. Cut into doors where gas boilers are fitted. Many high rise modular flats have been built with cavities left open to ventilate rooms with vents in ceilings or reveals in windows. This is not only a smoke and fire hazard, but usually the grilles are not fire rated. This happened in London so a hit and miss intumescent grille ( HMG ) was made, that, should the grille be closed or left open in a fire it would seal up **giving 1 hour fire protection.**

- HMG/C Suitable for any ceiling ventilation in any room.
- HMG/W Ideal for bathroom and kitchen windows.

**ORDERING REFERENCES:**

HMG/1	110mm high x 280mm wide
HMG/2	140mm high x 280mm wide

Add /C or /W when ordering to specify product type.





Envirograf® White or Coloured coating applied to uPVC window frames & doors, 2 coats of 6m<sup>2</sup> per litre per coat with a top coat of Firocoat at 10-12m<sup>2</sup> per litre will upgrade uPVC to over 30 minutes fire protection.

**White System:** UP30/W

Top Coat: **Firocoat WB** (water-based - Internal use only )

**Firocoat SB** (spirit-based - external use only )



**NEW Ceiling Barrier for over suspended ceiling tiles giving 60 minutes fire protection, acoustic protection impact & airborne, thermal insulation**

- ✓ Made to fit over all tile styles.
- ✓ Can be supplied to accommodate downlights or air conditioning units.
- ✓ Made from a 60 minutes fire rated cloth adhered to a 40mm Class 0 & 1 sponge ( as used with our underfloor fire barrier ).

**Tested to BS476 Parts 20, 21, 22, 23 (1987)**

- 1 hour fire resistant
- Thickness 40mm, sound resistant, tested to BS EN ISO 140 Part 4 for airborne sound reduction mean result Dntw 65 dB.
- Thermal conductivity U value 0.27W/m<sup>2</sup>K
- Easy and quick to apply, no special clothing or gloves required. Non fibrous, can be used in sterile areas, Hospitals, computer rooms, etc.

**CB1** 600 x 600 weight 0.6kg  
**CB2** 600 x 1200 weight 1.2 kg

**ORDERING REFERENCES:**

**CB1** 600mm x 600 mm  
**CB2** 600mm x 1200 mm

If downlighters are installed, this product can be ordered in conjunction with Product 32 Acoustic Downlighter Cover ( It's vital to state the position of the downlights, as we will accommodate this product onto the barrier during the manufacturing process for ease of installation ).

If air conditioning units are installed, this product can be used in conjunction with Product 31 Air Conditioning Units Covers ( please also state their position ).

Ceiling Barrier can be easily fitted onto existing suspended ceilings by simply removing the tiles one by one and laying the board on top of them, ensuring a snug fit between the tees.

When downlights or air conditioning units are present, order a tile in conjunction with downlighter cover (Product 32) or air conditioning unit cover (Product 31). They will be supplied as complete units for easy installation ). Make sure to state the position of these covers during ordering.

Designed to save Firefighters



FCSS is suitable for protecting plastic conduit over doorways.

### Fireproof Cable Support System ( FCSS )

Over the last couple of years, a number of cases have been reported, where fire fighter's lives were lost due to getting entangled among the loosely hanging wires and cables. This was caused by the plastic trunking around cables and conduits melting, leaving the exposed wires to hang free.

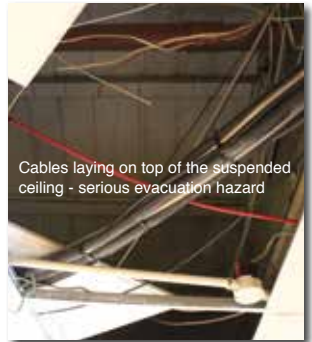
Codes of practice BS 5839-1 and BS 7671 recommend the use of fire resistant cable fixing systems that would hold the cables out of the way, allowing secure evacuation for staff and residents, as well as providing a safer working environment for

firefighters conducting search and rescue operations within the premises.

To fulfill these recommendations, as well as reducing hazards posed by the hanging cables, we have developed our Fireproof Cable Support System; which will hold the cables in place, allowing safer evacuation and re-entry by fire fighters, long after items like plastic trunking, tubing and armoured cables have melted.

### Cable support for use over suspended ceilings

FCSS-B is a solution for cables fed over suspended ceilings that is another danger for Fire Officers & people evacuating from a building. A Class 0 ceiling will collapse in 10 minutes and cables that have just been laid over the ceiling will fall and hang down. This must stop. Envirograf® cable supports can be fixed to the support wires and rods to hanging cables over both for new work & most important with existing ceilings. Management must look into this for both safety of Staff and Fire Officers.



Cables laying on top of the suspended ceiling - serious evacuation hazard



Important note: FCSS-B is suitable to all but aluminium ceiling supports, due to its lack of heat resistance (and low melting temperatures). If you're using aluminium supports, we recommend you change them for standard wire or steel before using our product.



**PATENT PENDING**

- 1 Hour fire protection
- No Bathroom Steam
- Mould & Damp Reduction
- Works in Conjunction with Extractors
- Increased & Improved Ventilation
- Toilets, Kitchens, Laundry Rooms
- Easy to install
- Gas meter cupboards

Introducing the new, innovative door and cupboard vent by Envirograf®, a simple yet effective ventilation system which provides a solution to poorly ventilated areas which rely on a single extractor fan due to not having a window present. The new vent can be utilised in various areas with high levels of steam and condensation such as hotel bathrooms which fill with steam from the shower, kitchen and utility rooms with washing machines and tumble dryers and more recently to comply with building regulations these vents can be inserted into under stair or service cupboards which house gas meters.

Standard ventilation units struggle to cope with the large volumes of steam and condensation and can take time to clear this, the Envirograf® vent works in conjunction by allowing fresh air into the room at a low level allowing the fan to rid the steam more effectively whilst also offering 1 hour fire protection.

### PERFORMANCE

Tested to EN 1366-3:2009 and EN 1634-1:2014



**Bathroom Installation**



**Laundry Room Installation**

### ORDERING REFERENCES:

The vents are available in two standard sizes but as always, other sizes and colours can be made to suit clients' needs. Available in standard white finish or brown.

**Circular Vent Grille No.1** Overall outside face 70mm ~ Door hole diameter 55mm ~ Suit door thickness from 35mm to 56mm

**Circular Vent Grille No.2** Overall outside face 90mm ~ Door hole diameter 75/76mm ~ Suit door thickness from 35mm to 56mm

**Circular Vent Grille No.3** Vents for thinner doors can be made. Door thickness 28/45mm

# Head Office

ENVIROGRAF HOUSE, BARFRESTONE, DOVER, KENT CT15 7JG, UK

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email: [sales@envirograf.com](mailto:sales@envirograf.com) url: [www.envirograf.com](http://www.envirograf.com)

We have the widest range of Passive Fire Protection products



Speaker Covers



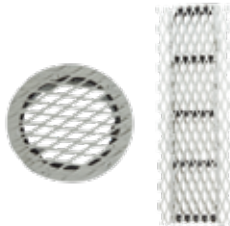
Electrical Protection



Cavity Barriers



Intumescent Paints



Ventilation Grilles



Door Protection

**Regional office / Supplier**

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