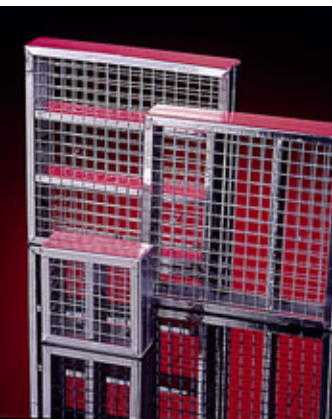


ENVIROGRAF® PRODUCT GUIDE



**PASSIVE FIRE PREVENTION PRODUCTS
PLUS ACOUSTIC, DRAUGHT, AND WEATHER SEALS**



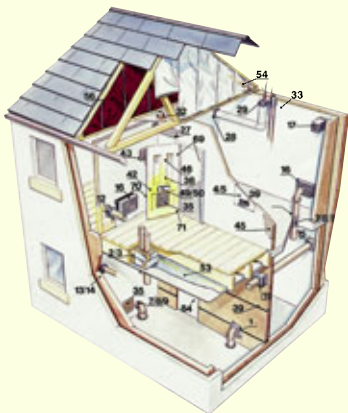
**WORLD LEADERS IN
PASSIVE FIRE PREVENTION**



For the latest news and information, visit www.envirograf.com



Envirograf®

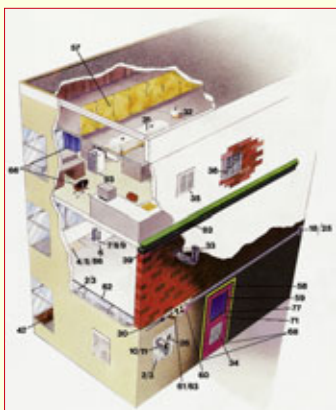


The Envirograf® brand was established in 1983 and it quickly evolved to become a leading force in fire containment technology. Its

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.

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



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.

FIRE RESISTANCE COATINGS STANDARDS

There are two relevant British Standards categories:

CLASS 0 – this is the best result of the combination of tests to BS476 Parts 6 and 7

CLASS 1 – this is the best result of a BS476 Part 7 test

These test standards are BS476 Part 6 (fire propagation) and BS476 Part 7 (surface spread of flame – this evaluates the likely rate of flame spread across the surface of a material).

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. 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

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.

INTUMESCENT FIRE AND SMOKE STOP PILLOWS



DESCRIPTION

A true intumescent pillow that can be supplied in two types. Each pillow is made from a hard-wearing fireproof glass cloth, filled with a fireproof sponge and intumescent. Type P/S is a soft pliable pillow that enables awkward areas to be filled, e.g. around cables, pipes and services, etc. Type P is a much more solid pillow, which is still pliable and flexible, enabling it to fill around services, but it can be fitted like a brick. 20 standard sizes plus made-to-order.

USE

Pillows are used for packing into gaps around pipes, cables, and over cable trays. They can be fitted to any size of opening, and give permanent or temporary 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 re-insertion.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 181 minutes integrity (compressible type 240 minutes). Tested at VNE to European Standard EN1363-1 (2000), achieving 2 hours fire protection.

ORDERING REFERENCES :

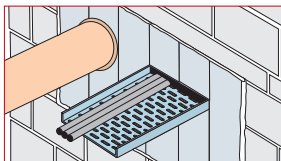
Ref	Size	Ref	Size
P1	40 x 150 x 150mm	P5	80 x 127 x 250mm
P2	40 x 225 x 225mm	P6	80 x 300 x 300mm
P3	40 x 300 x 300mm	P7	80 x 225 x 225mm
P4	40 x 127 x 250mm		

PATENTED

20 sizes in price list plus special orders

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

INTUMESCENT FIRE-STOP BLOCKS



DESCRIPTION

A non-inflammable, compressible, foil-clad mineral fibre block with intumescent properties, 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.

USE

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

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving an integrity of 138 minutes. Also tested at VNE to European Standard EN1363-1 (2000).

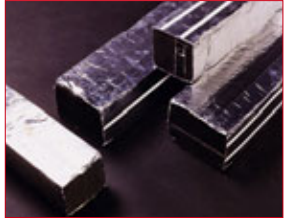
ORDERING REFERENCES :

Ref	Depth x Width	Ref	Depth x Width
IB1	50mm x 150mm	IB2	100mm x 150mm
IB1A	50mm x 100mm	IB2A	100mm x 100mm
IB1B	50mm x 50mm	IB2B	100mm x 50mm

PATENTED

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

INTUMESCENT NON-FIBROUS FIRE-STOP BLOCKS



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).

USE

Suitable for use in ceilings, floors, or walls in computer rooms, sterile areas, and other 'clean' areas.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving integrity of 138 minutes. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

Ref	Depth x Width	Ref	Depth x Width
SIB1	50mm x 150mm	SIB2	100mm x 150mm
SIB1A	50mm x 100mm	SIB2A	100mm x 100mm
SIB1B	50mm x 50mm	SIB2B	100mm x 50mm

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

PATENTED

INTUMESCENT-COATED SLABS



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 and floors. In large floor openings they should be supported with wire mesh. 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 Firoblok sleeves (Product 110).

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving integrity of 240 minutes. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

Ref	Dimensions
IS 60	60mm x 600mm x 1200mm

(1 hour - 4 hours fire rating)

PATENTED

INTUMESCENT-COATED NON-FIBROUS SLABS



DESCRIPTION

A high density fire-stop sponge with either white intumescent coating on both sides or black impregnated sponge that 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.

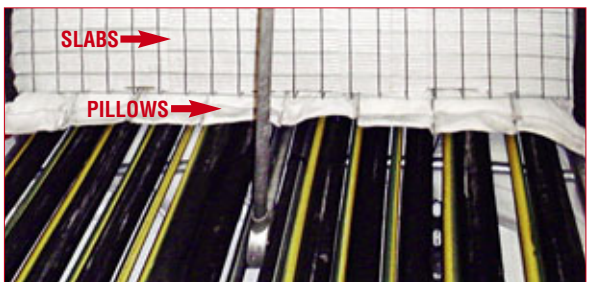
PERFORMANCE

Tested to BS476 Part 22 (1987), achieving integrity of 138 minutes. Also tested at VNE to European Standard EN1363-1 (2000).

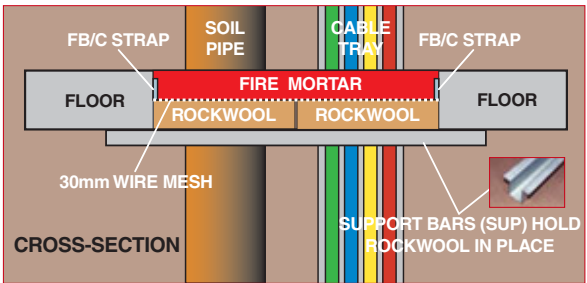
ORDERING REFERENCES :

Ref	Dimensions (mm)
WHITE COATING	
NF50/ 500	50 x 500 x 1000
NF50/ 750	50 x 750 x 1000
NF50/1000	50 x 1000 x 1000
BLACK IMPREGNATED	
BNF50/ 500	50 x 500 x 1000
BNF50/ 750	50 x 750 x 1000
BNF50/1000	50 x 1000 x 1000

PATENTED



FIRE MORTAR

**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). A new two-bag FM/A mix comprises one FM25 bag and one 6.25kg bag of pumice aggregate additive to be mixed uniformly together before adding water – this has greater volume than the standard FM25 bag yet retains structural integrity.

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 240 minutes period and 240 minutes insulation. For non-load-bearing areas, 25mm thickness will give 240 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 :

FM25	25kg
FM25/A	Fire Mortar/Aggregate 31.25kg (FM25 & 6.25kg additive)
FB/C1	25x1250mm steel straps*
FB/C2	25x2500mm steel straps*
	*with fixing holes at 300mm centres
SUP	Support Bars (folded zintec metal strips 18SWG)

PATENTED



SUP

SPECIAL DELIVERY CHARGES APPLY: PLEASE SEE PRICE LIST

INTUMESCENT WRAPS



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 treated 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 Part 22 (1987). It has been tested on sealing penetrations of various pipes passing through different types of floors and walls. Integrity results of up to 249 minutes were achieved. Also tested at VNE to European Standard EN1363-1 (2000)

ORDERING REFERENCES:

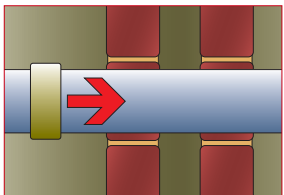
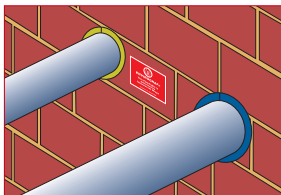
Reference	External Pipe Diameter	Depth of Wrap	Rating
EW#	18mm to 600mm	30mm	1-3 hours
(# = external pipe/cable size)		50mm	1-4 hours

Diameters over 215mm have varying depths of 100-200mm
(See price list for full range)

Ordering example:

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

A label is provided for application to the protected service so that authorities can see the service is protected.



NEW INTUMESCENT WRAP IN 10m ROLL FORM

DESCRIPTION

This continuous wrap on a roll is ideal for fire protection of multiple pipes and cable services. Cut to size 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.

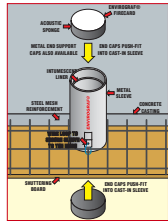
PERFORMANCE

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

ORDERING REFERENCES:

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

CAST-IN-CONCRETE ACOUSTIC / SMOKE / FIRE PROTECTION SLEEVE



DESCRIPTION

A circular 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 200mm 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 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 and BS476 Part 31/1. Also tested at VNE to European Standard EN1363-1 (2000). Acoustic testing to BS EN ISO 717-1 (1999).

ORDERING REFERENCES :

CCS 83 To suit pipes up to 76mm CCS195 To suit pipes up to 166mm
CCS138 To suit pipes up to 116mm CCS250 To suit pipes up to 200mm

Standard sleeve length 150mm. Other lengths and sizes made to order

Circular, square, or rectangular shapes are also available to order.

PATENTED

INTUMESCENT COLLAR



WPCS COLLAR



WPCS COLLAR CAN BE USED FOR CABLES



NEW ISPC COLLAR

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.

PERFORMANCE

The WPCS unit has been tested to BS476 Parts 20 & 22 (1987), giving up to 4 hours of fire protection. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

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

PATENTED

INTUMESCENT FAN COVERS



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

Contains a front MG grille, giving up to 73 minutes integrity to BS476 Parts 20 & 22 (1987). Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES:

FCW Wall-mounted

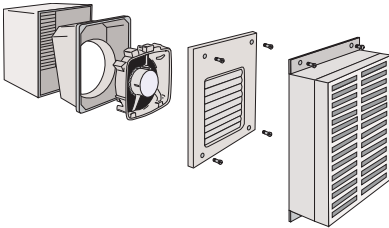
FCG Glass-mounted

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

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

Can also be supplied with smoke shutters with 24V electro-magnet with automatic re-set solenoid. Fan cover required under Building Regulations and 17th Edition of IEE Regulations



See also Product 33 Firoblok® sleeves for air conditioning/ventilation outlet protection (p 20).

**MEMBER OF
THE FIRE
PROTECTION
ASSOCIATION**



MULTI-PURPOSE BOX

**DESCRIPTION**

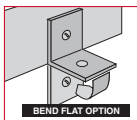
Envirograf® multi-purpose boxes comprise a box section containing intumescent material and a fireproof sponge smoke seal. One side of the metal cover can slide off, to allow fitting over existing services and in tight corners. Fixing brackets can be turned so that the unit can be fitted to a wall or 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.

USE

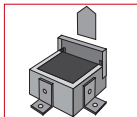
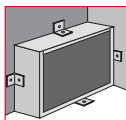
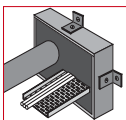
The Envirograf® multi-purpose box is the most versatile of its kind available and has been specifically designed for most installation requirements where services pass through fire barrier ceilings, floors, and walls. It can be surface-mounted or recessed.

PERFORMANCE

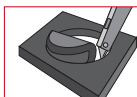
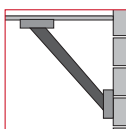
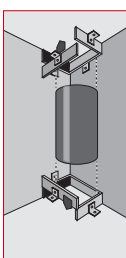
The multi-purpose box was tested to BS476 Parts 20 and 22 (1987), achieving up to 4 hours of fire protection. Also tested at VNE to European Standard EN1363-1 (2000).

**SPECIAL FEATURES:**

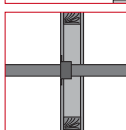
A detachable section allows the unit to be used in tight corners



Special fire-resistant sponge smoke seal, easily cut to allow services through



The sponge smoke seal simply slides into flange section from the front

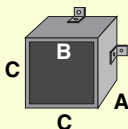


Adjustable brackets allowing multiple fixing options

ORDERING REFERENCES :

REF	BOX SIZES (OTHER SIZES MADE TO ORDER)	DEPTH(A)	INSIDE(B)	OUTSIDE(C)	RATING
EB 45/ 50		50mm	45mm	67mm	2h
EB 55/ 50		50mm	55mm	76mm	2h
EB 72/ 50		50mm	72mm	93mm	2h
EB 83/ 50		50mm	83mm	105mm	2h
EB115/ 50		50mm	115mm	138mm	2h
EB135/ 50		50mm	135mm	155mm	2h
EB166/ 50		50mm	166mm	196mm	2h
EB215/ 50		50mm	215mm	255mm	2h
EB166/100		100mm	166mm	196mm	4h
EB215/100		100mm	215mm	255mm	4h
EB265/100		100mm	265mm	315mm	4h
EB315/100		100mm	315mm	365mm	4h

PATENTED



INTUMESCENT PIPE COVERS



1



2



3

DESCRIPTION

Metal saddle units made from powder-coated 18SWG zintec and filled with 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

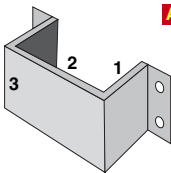
Tested to BS476 Parts 20 & 22 (1987), achieving 2 hours protection and 4 hours protection. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES:

PATENTED

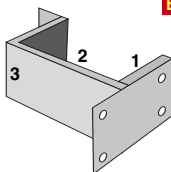
Ref (2 hrs)	Ref (4 hrs)	Internal	External
PC 50/2	PC 50/4	50mm	55mm
PC 65/2	PC 65/4	65mm	72mm
PC 75/2	PC 75/4	75mm	83mm
PC100/2	PC100/4	100mm	110mm
PC127/2	PC127/4	127mm	130mm
PC150/2	PC150/4	150mm	160mm
PC175/2	PC175/4	175mm	180mm
PC200/2	PC200/4	200mm	210mm
PC225/2	PC225/4	225mm	235mm
PC250/2	PC250/4	250mm	260mm
PC300/2	PC300/4	300mm	310mm

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 (1 and 2) and the depth (3) as depicted in the illustrations A & B below left.



A

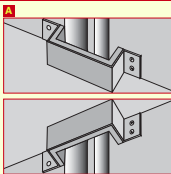
'U' Bracket



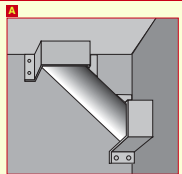
B

Corner Bracket

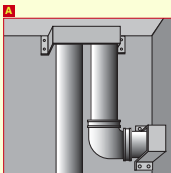
Application



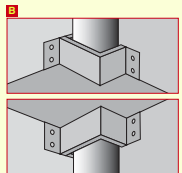
'U' Brackets



'U' Brackets with angled service

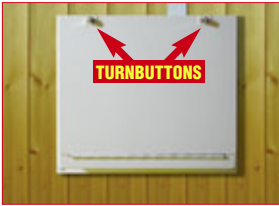


'U' Brackets with multiple service penetrations



Corner Brackets

ELECTRICAL CONSUMER UNIT / FUSEBOX FIRE PROTECTION SYSTEM



DESCRIPTION

The Envirograf® electrical cover unit (ECU) consumer unit/fusebox cover is designed to protect consumer units, fuseboxes, and switch boxes along escape routes such as staircases or corridors in homes of multiple occupation (HMOs), apartment blocks, and corridors in hotels, offices, factories, etc. These covers protect escape routes if the electrics overheat. They have an intumescent lining which expands in a fire, safely sealing off the unit and stopping air from entering the cover, thus stifling any fire. Made in standard sizes, but special sizes can be quickly made to order (state height, width, and depth of the required cover, allowing 30mm minimum clearance all around for connections etc). Access doors to the covers can be hinged to open to the side or to drop downwards (please state your preference when ordering). The access doors are fastened by metal turnbuttons (see the photographs above).

USE

Envirograf® electrical cover units are easy to fit over electrical units and they can be cut to accommodate cables, conduits, or trunking entering the units.

PERFORMANCE

Tested to BS476 Part 22 (1987) and EN1364-1 (1999).

ORDERING REFERENCES :

ECU Electrical cover unit (see price list for more details)

PATENTED



CYANOACRYLATE ADHESIVE

DESCRIPTION

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

USE

This glue can be used to bond metals, plastics, wood, etc. Some surfaces require cleaning with a special activation agent prior to application of the adhesive.

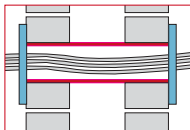
ORDERING REFERENCES :

Activator/Cleaner 200ml
Cyanoacrylate Adhesive 50g

PATENTED

INTUMESCENT PROTECTION SLEEVE SYSTEM FOR CABLES

All Electrical Products to 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 size to suit the floor or wall. In case of fire, this will intumesce and fill the hole, preventing the spread of fire.

(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. (See also Product 110).

USE

Fire barrier for use in walls and floors, where cables can be easily installed or removed.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 130 minutes integrity in solid walls, and 67 minutes in hollow plasterboard walls. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

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

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

PATENTED

INTUMESCENT PADS

All Electrical Products to 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 steel and PVC trunking. For PVC trunking through hollow partitions, see Products 28 or 110 (IWS/H).

USE

The pads are adhered inside Steel, PVC, and uPVC electrical trunking where it passes through fire barrier walls or floors, enabling access at all times to the cables. In a fire, the pads expand to fill the trunking space and prevent the passage of fire and smoke.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving an integrity of 181 minutes. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

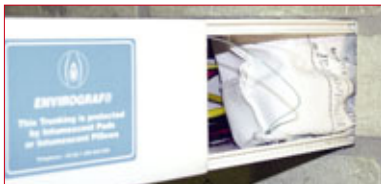
Ref	mm
IP21	25 x 50
IP22	50 x 50
IP33	75 x 75

See price list for full range, up to 375mm trunking.

PATENTED

INTUMESCENT TRUNKING PILLOWS

All Electrical Products to 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 22 (1987), achieving up to 4 hours integrity. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

PATENTED

TP33 To fit 75mm x 75mm trunking

TP34 To fit 75mm x 100mm trunking

See price list for trunking pillows up to 300x150mm (others made to order)

TRUNKING WRAPS

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



DESCRIPTION

An intumescent trunking wrap, to fit around PVC trunking of all sizes.

USE

Use wherever PVC electrical trunking passes through a block, brick, or concrete fire barrier 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

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, and 67 minutes in hollow walls. Also tested at VNE to European Standard EN1363-1 (2000).

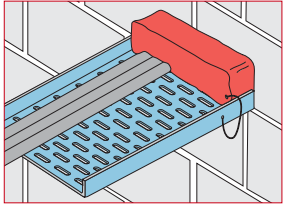
ORDERING REFERENCES :

PATENTED

TW State the size of trunking and the thickness of the wall

INTUMESCENT CABLE TRAY PILLOW

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



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.

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 22 (1987), achieving an integrity of 181 minutes. Also tested at Cidemco to European Standard EN13501-2 (2004).

ORDERING REFERENCES:

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

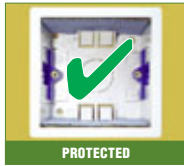
PATENTED

MEMBER OF
THE FIRE
PROTECTION
ASSOCIATION



INTUMESCENT FIRE PROTECTION GASKETS

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.



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.

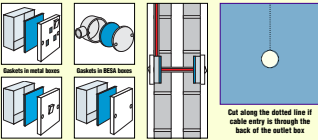
USE

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**.

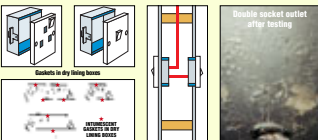
PERFORMANCE

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 EN1365-2 (1999), NEN6069 (2005), and EN1364-1 (1999) for 84 minutes.

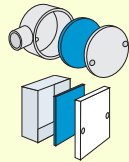
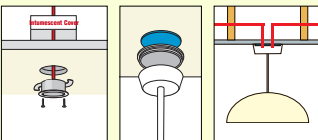
A: SOLUTIONS FOR BLOCK AND BRICK WALLS



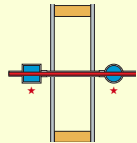
B: SOLUTIONS FOR PLASTERBOARD (DRY LINING) WALLS



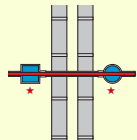
C: SOLUTIONS FOR PLASTERBOARD CEILINGS



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.



★ INTUMESCENT GASKETS IN ABS BOXES



ORDERING REFERENCES :

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

PATENTED

PROTECTED BOX



30 CONTINUED

FIRE-RATED ACOUSTIC SWITCH & SOCKET BOXES & CEILING ROSE COVERS GIVING TEST APPROVAL FOR 2 HOURS FIRE PROTECTION & 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) & EN1365-2 (1999).

**FOR DRY LINING BOXES (FITTED INTUMESCENT GASKETS)
SINGLE (NABC/A1) - DOUBLE (NABC/A2) - TWIN (NABC/A3)**



**FOR METAL BOXES (WITH LOOSE INTUMESCENT GASKETS)
SINGLE (NABC/M1) - DOUBLE (NABC/M2) - TWIN (NABC/M3)**



**FOR CEILING ROSE BOXES
REF: MTC/A**

Two types of Envirograf® acoustic and fire-rated box covers are available – one for dry lining boxes and the other for metal boxes.

MULTIPLE BENEFITS

- Very easy to fit
- Well-supported in the plasterboard
- Cable entry through the back, bottom or sides
- No adhesive required
- Suitable for metal & plastic boxes
- In a 64dB studwork partition, the combined effect was 63dB
- Replaces plasterboard boxes, putty material and leaves the whole box free for cables, such as a socket box with 3 x 2.5mm² twin-and-earth cables

For use where socket and switch boxes and ceiling rose boxes are recessed into the plasterboard or lath-and-plaster walls or ceilings in domestic, public, and commercial buildings, to comply with Document E Acoustic and Document B Building Regulations. Acoustic and fire protection is essential and a requirement.

New timber-framed buildings and walls in mobile homes: all units can either be retro-fit or new build.

Acoustic boxes: with fire seals for dry lining boxes, the acoustic cover has the intumescent gasket in the back of the cover so, as the plastic box and cables melt, the intumescent gasket expands, filling the area up to the plasterboard.

Metal boxes: Envirograf® acoustic and fire-rated covers have a 2mm intumescent pad with adhesive tape, to fit inside the back of the metal box. This does not stop cables from coming through at any point, including the back, leaving all the box clear to connect the sockets and switches.

Envirograf® covers are made for single, double, twin, and triple boxes and for larger multiple recessed switch boxes.

When acoustic covers are not required, use Envirograf® intumescent gaskets inside boxes (made to suit all sizes of box).

ORDERING REFERENCES :

PATENTED

All items below are to suit boxes up to 55mm depth. Others made to order.

ACOUSTIC COVERS WITH FITTED GASKETS FOR PLASTIC BOXES

- NABC/A1** Acoustic cover with fitted intumescent gasket for single dry lining box
NABC/A2 Acoustic cover with fitted intumescent gasket for double dry lining box
NABC/A3 Acoustic cover with fitted intumescent gasket for twin dry lining box

ACOUSTIC COVERS WITH LOOSE GASKETS FOR METAL BOXES

- NABC/M1** Acoustic cover with loose intumescent gasket for single metal box
NABC/M2 Acoustic cover with loose intumescent gasket for double metal box
NABC/M3 Acoustic cover with loose intumescent gasket for twin metal box

TENTS FOR LIGHT FITTINGS AND AIR CONDITIONING UNITS

All Electrical Products to comply with the 17th Edition of the IEE Regulations and Document B of UK Building Regulations. Acoustic covers to comply with the requirements of 'Robust Details'

Standard Version (FT)



Acoustic Version (FT/AC)



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).

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.

PERFORMANCE

This product underwent a number of fire resistance tests employing the general procedures and criteria of BS476 Part 22 and Part 23 Clause 5 (1987), achieving 88 minutes integrity. Acoustic version tested to comply with Document 'E'. Also tested to NEN 6072 (1997).

ORDERING REFERENCES:

PATENTED

LIGHTING COVERS

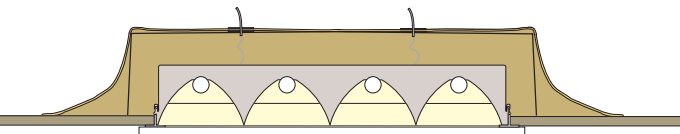
Ref	Dimensions			
FT1	350mm	x	300mm	x 150mm
FT2	650mm	x	600mm	x 150mm
FT21	650mm	x	300mm	x 150mm *
FT4	1250mm	x	600mm	x 150mm
FT41	1250mm	x	300mm	x 150mm
FT5	1550mm	x	600mm	x 150mm
FT51	1550mm	x	300mm	x 150mm *
FT6	1850mm	x	600mm	x 150mm
FT61	1850mm	x	300mm	x 150mm
FT7	2150mm	x	600mm	x 150mm *
FT8	2450mm	x	600mm	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	850mm	x	850mm	x 240mm
AIR5	850mm	x	850mm	x 280mm

Acoustic versions of all the above can be made to order

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



INTUMESCENT DOWNLIGHTER COVERS AND CAGES

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



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

ORDERING REFERENCES :

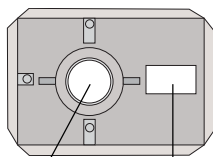
Standard Reference	Standard Light Fitting			Light Fitting & Transformer Combined Reference	Length	Width	Height
	Length	Width	Height				
DLC0	150mm	150mm	120mm	DSLVA	300mm	100mm	120mm
DLC1	130mm	130mm	70mm	DSLVB	300mm	180mm	140mm
DLC2	130mm	130mm	100mm	DSLVC	300mm	220mm	140mm
DLC3	130mm	130mm	140mm	DSLVD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

PATENTED

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.

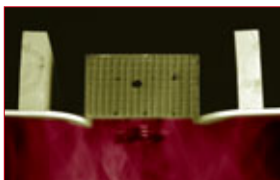
Envirograf® DSLV Covers are made to measure for use where transformers or chokes are connected to the light fitting.



Light Fitting

Transformer

Tested to BS476 Parts 22, 23, and 23 Clause 5 (1987). Integrity 88 minutes.

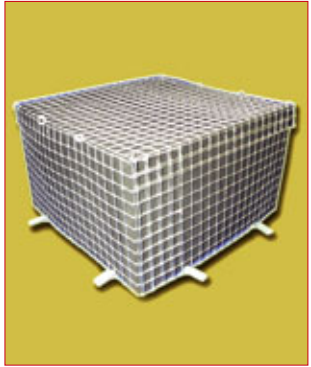


Where the cover can be fitted over a suspended ceiling in roof areas or where floorboards are already lifted, use the Envirograf® Fire Cage. There are two types: one for light fittings (FC) and the other for light fittings with transformers (FC/R). A new acoustic type is available – see next page for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

32 CONTINUED

ACOUSTIC DOWNLIGHTER COVERS AND CAGES

All Electrical Products to comply with the revised 17th Edition of the IEE Regulations and Document B of UK Building Regulations. Acoustic covers to comply with the requirements of 'Robust Details'



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 new covers allow light fittings to operate without overheating, whilst maintaining the fire rating integrity of the ceiling to which they are fitted, thus enabling 30 minutes or 60 minutes of fire rating to be maintained. (See Product 31 for tents for fluorescent and other light fittings).

USE

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

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 NEN 6069 (1997).

ORDERING REFERENCES :

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



NEW! This Envirograf® downlighter converter allows you to convert from high power to low power consumption and provide fire protection for the light fitting, all in one easy-to-fit product. Please request the data sheet on this very effective new product. See also page 93.

PATENTED

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

Standard Light Fitting				Light Fitting & Transformer Combined			
Case Type Reference	Length	Width	Height	Reference	Length	Width	Height
FC 1/AC	190mm	190mm	140mm	FC 1R/AC	365mm	190mm	140mm
FC 2/AC	190mm	190mm	190mm	FC 2R/AC	365mm	190mm	190mm
FC 3/AC	240mm	240mm	140mm	FC 3R/AC	415mm	240mm	140mm
FC 4/AC	240mm	240mm	190mm	FC 4R/AC	415mm	240mm	190mm
FC 5/AC	300mm	300mm	140mm	FC 5R/AC	475mm	300mm	140mm
FC 6/AC	300mm	300mm	190mm	FC 6R/AC	475mm	300mm	190mm
FC 7/AC	300mm	300mm	250mm	FC 7R/AC	475mm	300mm	250mm
FC 8/AC	340mm	340mm	140mm	FC 8R/AC	515mm	340mm	140mm
FC 9/AC	340mm	340mm	250mm	FC 9R/AC	515mm	340mm	250mm
FC10/AC	390mm	390mm	195mm	FC10R/AC	565mm	390mm	195mm

ACOUSTIC AND LOFT COVERS FOR USE OVER RECESSED LIGHT FITTINGS



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. Some people have no idea how quickly fire can travel or how quickly the temperature can rise.

Tests carried out by Building Research shows the ferocity of fire in a lounge (see the picture sequence below). Envirograf® acoustic loft covers are made in many sizes to suit all recessed light fittings.



INTUMESCENT TOILET/BATHROOM VENTILATION OUTLET PROTECTION



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 internal linings are non-clogging and leave 90% free ventilation area. **The range now includes superb new Firoblok® external protection sleeves for PVC ventilation outlets.**

USE

- (A) Internal intumescent liner for PVC or steel ventilation pipes in a wall
- (B) Length of grey PVC 110mm outside diameter pipe with internal intumescent liner
- (C) Length of steel tube fitted with an internal intumescent liner, for cavity walls
- (D) Intumescent-lined metal collar for use in suspended or plasterboard ceilings and ductings, supplied with fixing brackets, screws, and washers
- (F) Firoblok® externally-fitted intumescent protection for PVC ventilation outlets

PERFORMANCE

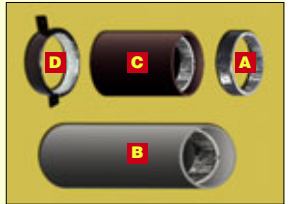
Products were rigorously tested BS476 Parts 20 and 22 (1987), achieving an integrity of 120 minutes. The new Firoblok® products were tested to BS476 Part 21 (1987), achieving an integrity of 90 minutes.

ORDERING REFERENCES :

PATENTED

Internal intumescent liner (See A):

Ref	(Pipe ID* mm)	Rating
LV 50/1	50	1 hour
LV 75/1	75	1 hour
LV 98/1	98	1 hour
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



Length of grey PVC 110mm OD* pipe with internal intumescent liner (See B):

Ref	Pipe Length (mm)	Rating
LV225/P	225	1 hour
LV300/P	300	1 hour
LV450/P	450	1 hour

Metal sleeve with internal intumescent liner for cavity walls (See C):

Ref	(Pipe ID* mm)	Rating
LVM100/1	100	1 hour

Metal sleeve with fixing brackets and internal intumescent liner, for suspended or plasterboard ceilings, supplied with fixing screws (See D):

Ref	(Pipe ID* mm)	Rating
LVML 98/1	98	1 hour
LVML100/1	100	1 hour
LVML150/1	150	1 hour

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

Ref	(Service OD* mm)	Hole (mm)	Rating
EC 80	80	88	1½ hours
EC100	100	105	1½ hours
EC125	125	130	1½ hours
EC150	150	155	1½ hours

*ID=internal diameter & OD=outside diameter (Other sizes made to order, including square/oblong sections)

NEW AUTOMATIC CLOSURE GRILLE NOW AVAILABLE!



DESCRIPTION

Envirograf® intumescent ventilation grilles are specially designed for 100mm, 150mm, 200mm, and 300mm plastic or metal ducting apertures. They can be wired into a 24V fire alarm system, to close the grille's shutter when the power is turned off. Alternatively, a 240V to 24V transformer can be supplied, for wiring into a smoke detector system. If a 24V system is not available, a memory spring closure option is available, which is activated when the shutter temperature reaches 80°C.

USE

This product range is designed to be used on rectangular or circular, plastic or metal ventilation ducting. The grilles contain intumescent strips fixed to the inner grille plate and these seal up in a fire to maintain the integrity of the fire-rated ceiling, floor, or wall compromised by the ducting.

PERFORMANCE

This product range has been tested and achieved 60 minutes fire protection.

ORDERING REFERENCES :

PATENTED

FOR CIRCULAR DUCTING

LVC/AUTO/100	100mm
LVC/AUTO/150	150mm
LVC/AUTO/200	200mm
LVC/AUTO/250	250mm
LVC/AUTO/300	300mm

CIRCULAR MEMORY SPRING OPTION

LVC/MEM/100	100mm
LVC/MEM/150	150mm
LVC/MEM/200	200mm
LVC/MEM/250	250mm
LVC/MEM/300	300mm

FOR RECTANGULAR DUCTING

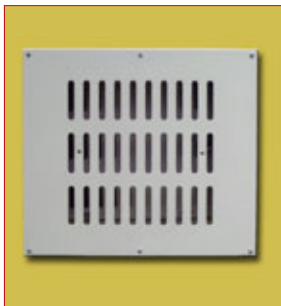
ACG/AUTO/100	100mm
ACG/AUTO/150	150mm
ACG/AUTO/200	200mm
ACG/AUTO/250	250mm
ACG/AUTO/300	300mm

RECTANGULAR MEMORY SPRING OPTION

ACG/MEM/100	100mm
ACG/MEM/150	150mm
ACG/MEM/200	200mm
ACG/MEM/250	250mm
ACG/MEM/300	300mm



INTUMESCENT FIRE AND SMOKE GRILLES



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).

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.

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.

ORDERING REFERENCES :

PATENTED

Ref	Internal Hole Size Height x Width	External Size Height x Width
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
NTJ6	390 x 430mm	450 x 490mm
NTJ7	390 x 505mm	450 x 565mm
NTJ8	290 x 580mm	350 x 640mm

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

Add suffix /A for auto reset grille

Add suffix /MS for memory spring grille

Add suffix /TL for thermal break grille

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 volt power failure

MG AND MGL INTUMESCENT GRILLES



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 6cm² and each louvre gives 3.2cm² free ventilation area. Can be used internally, externally, and on ceilings.

PERFORMANCE

Tested to BS476 Parts 20 and 22 (1987), achieving 66 minutes on one side only; and BS476 Part 22 (1987), achieving an integrity of 73 minutes. Also tested to EN1363-1 (2000).

ORDERING REFERENCES :

PATENTED

MG & MGL: Available in 12 standard sizes (other sizes made to order)

MG/S or MGL/S for standard doors/walls requiring protection to risk side only

MG/D or MGL/D for doors or walls requiring protection on both sides

INTUMESCENT BLOCK GRILLES



ORIGINAL BG GRILLE



NEW-STYLE BG GRILLE

DESCRIPTION

A slim block-type intumescent grille, giving an excellent 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.

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. Also tested at VNE to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

PATENTED

BG Original Style – Sizes from 50mm up to 500mm (plus specials)

NBG New Style – Sizes from 100mm to 300mm

INTUMESCENT MATERIAL AND PANELLED DOOR UPGRADE KITS



DESCRIPTION

Intumescent cloth with thin white fireproof card face (1mm thick), for upgrading flat panelled doors to fire-rated doors. Also available with veneer or birch/Gaboon plywood. Intumescent cloth can be supplied independently for use by door manufacturers. It can be used between 4mm plywood panels if new doors are being made, giving 30 minutes of fire protection. Fit the paper between 12mm plywood panels for 60 minutes of fire protection. The product is applied with Envirograf® thixotropic contact adhesive (TCA). After fitting, the intumescent cloth/plywood or intumescent cloth/veneer may be appropriately painted or varnished.

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 or thicker. 60 minutes of fire protection can also be achieved. This intumescent paper has been fully tested to BS476 Part 22 (1987) on newly-manufactured and old doors, at UKAS-approved test centres. Also tested at VNE to European Standard EN1363-1 (2000).

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/FC900	For painting over 900mm wide (supplied by the metre)
ES/MP/FC3/2	For painting over 1000mm wide x 1220mm long
ES/MP/FC3/3	For painting over 1220mm wide x 2000mm long
ES/MP/GP	Gaboon ply facing
ES/MPV	Veneered finish (please ask for details of available finishes)
ES/MP/PLY	Birch facing
Door upgrade kits available:	
ES/MP/DK2C	White finish
ES/MP/DK20	Clear varnish on Oak veneer
ES/MP/DK2P	Clear varnish on Pine veneer
ES/MP/DK3	Clear varnish on Gaboon plywood
TCA	Thixotropic Contact Adhesive for adhering plywood to doors.
See price list for full details.	

INTUMESCENT EXPANSION JOINTS

DESCRIPTION

Envirograf® intumescent expansion joints are made from compressible fireproof sponge strips with foil-clad intumescent material on one or two sides. They are unaffected by water or chemicals and are 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 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. Also tested at VNE to European Standard EN13504-2 (2004).



ORDERING REFERENCES :

E Ten standard sizes available (others made to order)



INTUMESCENT-COATED FIREPROOF SPONGE

DESCRIPTION

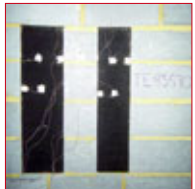
Fireproof sponge impregnated and coated with intumescent material. Very flexible, but stable in small or large apertures. Unaffected by water or chemicals. Supplied in sheets or strips from 10mm to 100mm thick. Can be cut to size.

USE

For small or large expansion/movement joints, under raised computer floors, between glass screen walls (rainscreens, with or without ventilation) and concrete floors, and between metal cladding and concrete.

PERFORMANCE

Tested to BS476 Part 22 (1987) achieving 138 minutes integrity. Also tested at VNE to European Standard EN1363-1 (2000).



ORDERING REFERENCES :

FCS1/30 – 30mm thick for 1 hour rating

FCS2/40 – 40mm thick for 2 hours rating (See price list for full range)



FIREPROOF SPONGE AND PROFILE SPONGE

DESCRIPTION

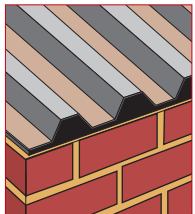
A fireproof sponge that emits no toxic fumes and is incombustible. Supplied in standard strips and sheets (see price list). Other sizes made to order. Product 41 can be supplied cut to match steel cladding profiles.

USE

The fireproof sponge can be used under roofing sheets, between walls and floors, or as packing around small openings (such as spaces around windows and door frames in timber buildings) and it can be faced with Envirograf® 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 138 minutes.



ORDERING REFERENCES :

F – Fireproof Sponge MPF – Profile Sponge (See price list for details)



INTUMESCENT PAINT AND VARNISHES FOR WOOD ETC

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. A UV protection product is 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 50 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.

ORDERING REFERENCES :

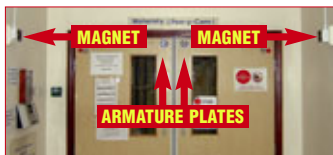
PATENTED

Please refer to our new data sheet before specifying coatings.

- HWAP/WB** Clear adhesion primer supplied in 1 litre, 2½ litres, or 5 litres (for use over existing paint or varnish at 12m² per litre per coat)
- HW01F** White coating supplied in 1 litre, 2½ litres, or 5 litres (for new timber or over HW primer: internal use only)
- AEC** Acrylic Emulsion Coating (semi-gloss only, use over HW01F)
- HW02E** Clear coating supplied in 1 litre, 2½ litres, or 5 litres (for new timber or over HW Primer: internal or external use)

A range of top coats is available. Please see new data sheet for full details.

MAGNETIC TIMED DOOR HOLDER (ACCEPTED BY FIRE BRIGADES AND BUILDING CONTROL OFFICERS)



DESCRIPTION

An electro-magnetic timed door holder operating independently of existing fire alarm system, with a master unit for mains voltage in and 24V out, with electro-magnet and armature plate. Units are available for single doors, double doors, or up to 4 doors.

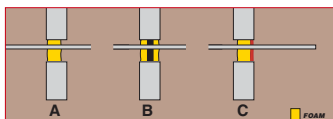
USE

Designed to hold open a single/double doors for up to 57 seconds, cutting down on draughts, noise, and loss of heat, as well as preventing buckling and distortion of doors, a common problem with permanent door holders. The 24V electro-magnet releases the door to be shut by the door closer as usual. Ideal for hospitals, residential homes, offices, computer suites, hotels, and warehouses. Can be supplied for operation by blind people. Holds the door open until the person has passed through the opened doorway. No wiring to existing fire alarm system as agreed by the fire brigade, because duration of door opening is under one minute.

ORDERING REFERENCES :

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

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 virtually 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, Envirograf® solvent cleaner (PVE/A/S) is essential to clean tubes and nozzles for re-use and for cleaning up any spillage in the application area.

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.

ORDERING REFERENCES :

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

46**ACRYLIC THIXOTROPIC ADHESIVE****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, etc. Applied at 4m² per litre. Can also be used with Envirograf® Products 38 (intumescent cloth), 39, 40, & 41 (fireproof sponge products).

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.

**ORDERING REFERENCES :**

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

PATENTED**47****BOARD SEALANT & ADHESIVE****DESCRIPTION**

An intumescent acoustic board sealant and adhesive available in 310ml tubes.

USE

Used to fix fire protection board and quilt materials (Envirograf® Products 91 and 111) to concrete and steelwork without the use of screws or nails.

PERFORMANCE

Tested to BS476 Part 20 (1987), achieving 183 minutes integrity.

ORDERING REFERENCES :

FPA/WT Supplied in 310ml tubes

PATENTED**48****BUILDFIX MULTI-PURPOSE FLEXIBLE BUILDING ADHESIVE****DESCRIPTION**

A multi-purpose adhesive that remains flexible and **does not** become brittle. It will bond: brick, ceramics (including tiles), cloth, glass, plaster/plasterboard, plastics, polystyrene, and timber. Solvent-free, easy to clean, can be prepared and painted over, low odour, white in colour. When dry on the surface, it remains flexible internally, to cope with life's everyday impacts.

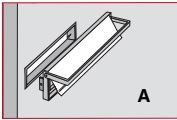
"You'll never get a fixing there!"

BUILDFIX CAN!

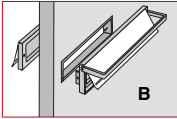
Difficult-to-reach areas, thin section walls, bad uneven surfaces, brittle surfaces, hard surfaces, concealed areas, and tight corners.



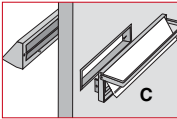
INTUMESCENT LETTER FLAP SYSTEM



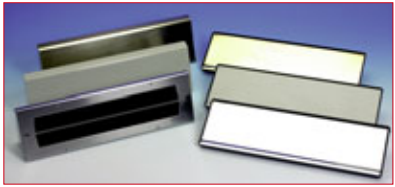
A



B



C



These units are designed to fit three aperture sizes:-
(1) 50x267mm, (2) 69x290mm, and (3) 100x350mm
(see data sheet for full details)

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

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. A security hood or lockable letter plate (LLP – 50mm W x 267mm H) can be supplied as internal alternatives to fit to the door.

USE

The hole size to cut for the L1-L4 types is 50x267mm, and overall size is 75x315mm

The hole size to cut for the L6-L8 types is 69x290mm, and overall size is 100x335mm

The hole size to cut for the L9-L12 types is 100x350mm, and overall size is 120x390mm

All letter box systems are supplied with fixing screws.

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.

ORDERING REFERENCES:

Kit A = Front frame and flap + intumescent liner

Kit B = Front frame and flap + intumescent liner + rear frame and flap

Kit C = Front frame and flap + intumescent liner + rear security hood

Finish	Ref	Ref	Ref
Brown	L1/A	L1/B	L1/C
White	L2/A	L2/B	L2/C
Stainless	L3/A	L3/B	L3/C
Brass	L4/A	L4/B	L4/C

BS and RAL colours are made to order at extra cost

Finish	Ref	Ref	Ref
Coloured*	L6/A	L6/B	L6/C
Stainless	L7/A	L7/B	L7/C
Brass	L8/A	L8/B	L8/C

* Coloured: black, brown, fawn, or white. BS and RAL colours are made to order at extra cost

Finish	Ref	Ref	Ref
Brown	L9/A	L9/B	L9/C
White	L10/A	L10/B	L10/C
Stainless	L11/A	L11/B	L11/C
Brass	L12/A	L12/B	L12/C

BS and RAL colours are made to order at extra cost

INTERNAL SMOKE FLAP comprising 10mm deep metal surround with a metal flap, housing a smoke and draught seal to suit aperture size 50x267mm, available in the following standard finishes:

Ref	Finish
SM/S	Black, brown, or white
SM/S	Stainless Steel
SM/S	Brass

LOCKABLE INTERNAL LETTER FLAP similar to the internal smoke flap above, except that the flap has a twist-action catch fitted to help keep out undesirable materials such as fireworks, junk mail, etc. Items LLP3 & LLP4 are lockable internal letter flaps with key holder.

Ref	Finish
LLP1	Black, brown, or white
LLP1	Black, brown, or white
LLP3	Black, brown, or white With key holder
LLP4	Black, brown, or white With key holder

INTUMESCENT LINER FOR MAIL APERTURES



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.

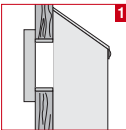
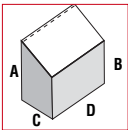
PERFORMANCE

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) (Special sizes made to order)

INTUMESCENT METAL FIRE BOX AND FLEXIBLE FIRE BAG



DESCRIPTION

Burning paper and liquids put through mail apertures in doors and walls can have devastating consequences, especially if premises are occupied. Nocturnal arson attacks on homes can be particularly worrying for domestic residents. The Envirograf® rigid firebox or flexible firebag protects mail slots, so homes and business can have the confidence that their premises are guarded against damaging and disruptive arson attacks. 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), achieving integrity of 39 minutes.

ORDERING REFERENCES :

Ref	A	B	C	D	Aperture
FB1	360mm	300mm	170mm	375mm	70mm x 275mm
FB2	360mm	300mm	90mm	375mm	70mm x 275mm
FB3	360mm	300mm	200mm	400mm	70mm x 275mm
FB4	675mm	600mm	300mm	600mm	70mm x 275mm

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, but can be supplied with a recessed lock at extra cost. Other sizes made to order.

FLEX1	335mm	335mm	130mm	420mm	70mm x 315mm
FLEX2	335mm	335mm	130mm	420mm	55mm x 330mm
FLEX3	260mm	260mm	95mm	400mm	55mm x 290mm
FLEX4V	560mm	560mm	130mm	360mm	70mm x 315mm
FLEX5V	530mm	530mm	100mm	350mm	55mm x 290mm

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.

UNDER-FLOOR FIRE BARRIER AND ACOUSTIC BARRIER

Acoustic products accepted by **Robust Details**



DESCRIPTION

This under-floor fire barrier (UF60) is made of graphite-impregnated cloth, covered with a reinforced Kraft paper and sealed. A wire mesh reinforced version is available (UF104). It is supplied 5mm thick x 1800mm long and in standard widths of 400mm, 450mm, and 500mm, to suit joist openings 300mm, 350mm, and 400mm respectively. Other sizes made to order. Acoustic sponge slabs (UFS) 40mm thick x 2½m long can be cut to size to fit over the fire barrier, enabling you to meet the requirements of UK Building Regulations Document E (H in Scotland) for airborne and impact sound acoustic protection and to provide a 'U' value to the ceiling/floor. UF can be used under load-bearing or non-load-bearing floors.

USE

Use under floorboards laid directly over decorative lath-and-plaster ceilings. As the barrier is wider than the gap between the joists, it allows 50mm either side to be bent upwards and fastened to the joists with 30mm clout nails and the provided metal plates. The barrier must also overlap adjacent pieces by 50mm. The barrier is lightweight and easy to fit – just lift three floorboards at 1800mm intervals. The 40mm thick UFS acoustic sponge meets the requirements of Document E of UK Building Regulations with Envirograf® Products 84, 96, and 105.

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.

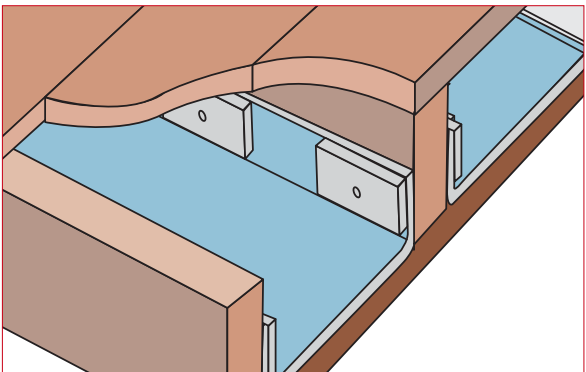
ORDERING REFERENCES :

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

PATENTED



INSULATED FIRE BARRIER CURTAIN

NEW ENVIROGRAF® INSULATION CURTAIN SHOWED SUPERB PERFORMANCE IN A RECENT TEST



IFB1 ACHIEVED 77 MINUTES INTEGRITY AND 77 MINUTES INSULATION

DESCRIPTION

IFB1: an insulated fire barrier giving up to 77 minutes integrity and insulation. Easily fixed with FB/C metal straps. Overlap by 50mm and adhere together with Envirograf® Product 46 (IA) intumescent adhesive. 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 insulation.

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 insulation) to BS476 Part 22 (1987).

ORDERING REFERENCES:

PATENTED

IFB1 Insulated Fire Barrier rated 77 minutes integrity/insulation

IFB2 Insulated Fire Barrier rated 87 minutes integrity/insulation

IFB1/S Acoustic Sponge version of IFB1

IFB2/S Acoustic Sponge version of IFB2

State width and length required for the above

FB/C1 25mm x 1250mm steel fixing straps for concrete, steel, or timber

FB/C2 25mm x 2500mm steel fixing straps for concrete, steel, or timber (drilled with fixing holes 300mm apart)

FB/D Wire for fixing fire barrier around ducting

TEMPERATURE INSIDE FURNACE WAS OVER 1000°C BUT CLOTH SURFACE WAS ABOUT 160°C OUTSIDE



FRAME TEMPERATURE TOUCHABLE BY HAND

CAVITY WALL BARRIER AND VENTILATED CAVITY WALL BARRIER



DESCRIPTION

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

USE

There are six types of Envirograf® cavity wall barrier:-

- Non-ventilated wall barrier (**WB**) is made from impregnated cloth and galvanised wire mesh and is ideal for fixing to cavity walls before fixing door/window frames (see illustrations 5 & 6 opposite). It can be pressed into a V-shape to be self-supporting in the cavity (see illustration 12 opposite). The WB range of barriers can be fitted with a sponge as a cold bridge.
- Ventilated wall barrier (**VWB**) is made from intumescent material adhered to impregnated cloth with reinforced kraft paper and galvanised wire mesh inside. It can have the following vent patterns: pattern **A** has one row of small vents, pattern **B** has two rows of small vents, pattern **C** has three rows of small vents, pattern **D** has three rows of medium vents, and pattern **E** has three rows of large vents. See vent diagram below.
- In response to requests for a non-ventilated wall barrier like **WB** but with a facility to let moisture out and keep smoke out of the cavity, this can be achieved with the **VWBG** barrier consisting of the standard **WB** barrier but with rubber grommets and plastic tubes coming out of the seal, through the brick/block joints to the outside (see illustration 10 opposite). All the above barriers can be made to any width and 950mm or 1900mm standard lengths.
- Non-ventilated wall barrier sponge (**WBS**). Compress the fireproof sponge into cavity. Can be adhered with Envirograf® Product 46 intumescent adhesive (IA).
- Ventilated wall barrier sponge (**VWBS**). Compress the fireproof sponge into cavity. It can have the following vent patterns: pattern **A** has one row of small vents, pattern **B** has two rows of small vents, and pattern **F** has one row of large vents. See vent diagram below. Can be adhered with Envirograf® Product 46 intumescent adhesive (IA).
- Non-ventilated waterproof Thermal Cavity Barrier (**TCB**) offers both fire protection and effective thermal protection around window and door apertures.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving up to 104 minutes integrity and 100 minutes insulation. Also tested to BS476 Part 22 (1987) achieving 132 minutes. Tested to BE EN1363-1.

ORDERING REFERENCES:

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

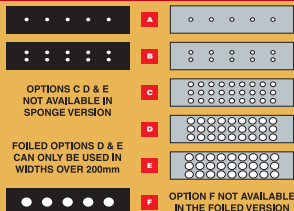
Standard foil barrier widths: 75mm, 120mm, 150mm, 200mm, and 250mm.

Standard sponge barrier widths: 80mm, 135mm, 165mm, 210mm, and 265mm.

See price list for full range. State gap width when ordering. Other sizes made to order.



VENTILATION HOLE PATTERNS



SPONGE

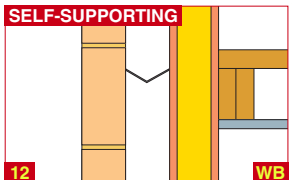
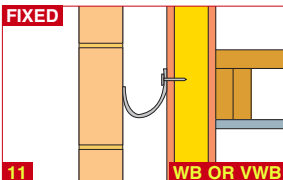
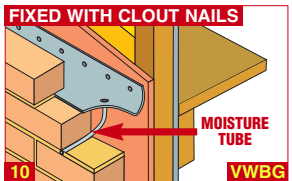
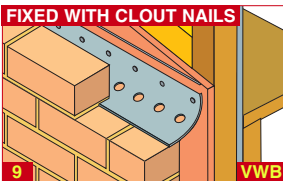
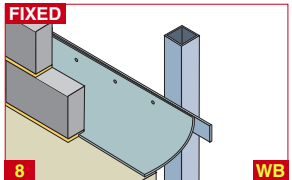
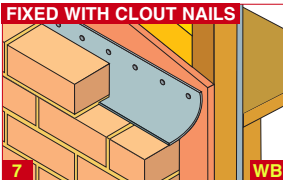
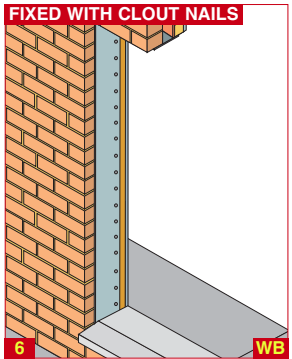
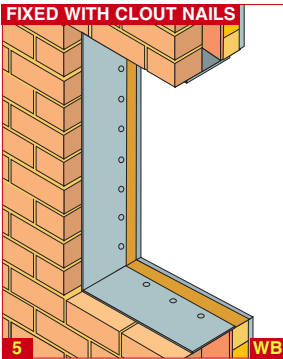
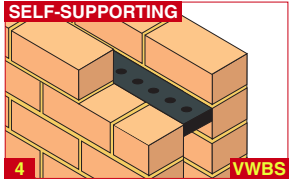
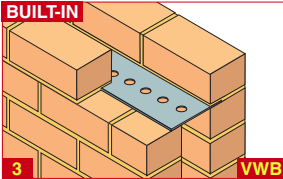
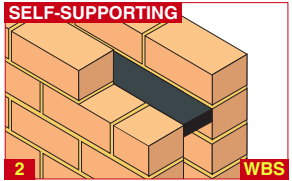
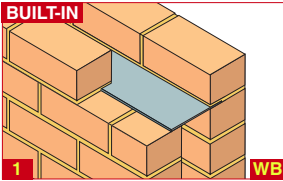
STANDARD SPONGE WIDTHS:
80mm, 135mm, 165mm,
210mm, 265mm

FOILED

STANDARD FOIL WIDTHS:
75mm, 120mm, 150mm,
200mm, 250mm

55 CONTINUED

CAVITY WALL BARRIER AND VENTILATED CAVITY WALL BARRIER



FB30 FIRE BARRIER CURTAIN



DESCRIPTION

FB30 is a 1mm thick x 1220mm wide reinforced glass cloth impregnated with red Envirograf® intumescent coating, made up to 40m long. A very robust material which can be used for drop curtains up to 10m. An acoustic version (FB30AC) is available to meet the airborne and impact sound reduction requirements of Document E of UK Building Regulations. FB30AC 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 or FB/C2). The straps can be cut with metal snips. Joints should be overlapped by 50mm and adhered with the supplied Envirograf® adhesive. FB30 can be wrapped around steel, trunking, or wood as a fire barrier. If more insulation 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 36 minutes integrity and 15 minutes insulation. Tested over Class 0 suspended ceiling horizontally, achieving 22 minutes insulation to BS476 Part 22 (1987). Tested to BS476 Parts 6 & 7 (1987) achieving Class 0/1. Tested to BS476 Part 23 (1987) over light fittings, achieving 46 minutes integrity.

ORDERING REFERENCES :

PATENTED

FB30	Standard	1220mm width
FB30/AC	Acoustic	1220mm width

Fire barrier curtain fixings are as follows:-

FB/C1	25x1250mm steel straps*
FB/C2	25x2500mm steel straps*

*with fixing holes at 300mm centres

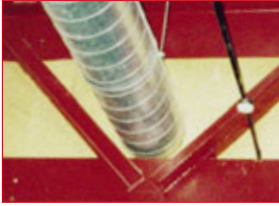
FB/CLIP	Suspended ceiling clip (T-bar clips fixed every 500mm)
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FPA	Overlap joint adhesive (the curtain is supplied with a small quantity of fire-proof adhesive for joints)
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ST50	Jointing tape for strength
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(See Product 137 Hi-Tak 500ml aerosol jointing spray)

FB70 FIRE BARRIER CURTAIN



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 insulation 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 or FB/C2). 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 above right allows protected bats to fly through).

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 81 minutes integrity and 22 minutes insulation.

ORDERING REFERENCES :

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

Fire barrier curtain fixings are as follows:-

FB/C1 (25x1250mm steel straps*) **FB/C2 (25x2500mm steel straps*)**

*with fixing holes at 300mm centres

FB/CLIP **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**



The waterproof barrier shown below or the standard FB30/FB70 barriers can be used inside or outside thatched roofs (under the thatch). They are strong enough to walk on.



NEW WATERPROOF FIRE BARRIER CURTAIN FOR THATCHED ROOFS

DESCRIPTION

Properties with thatched roofs are extremely vulnerable to fires from above or below the thatch, and efficient, long-lasting protection is essential for the safety of the household or business. This exciting new product has three distinct advantages: robust fire defence, a waterproof foil covering to protect against rain penetration, and increased thermal insulation properties complying with current new UK heat loss regulations.

USE

This waterproof fire barrier is placed under the thatch before new or replacement thatching and is very easy and quick to fit. (See Product 56 for FB30 non-waterproof 30 minutes fire barrier for application internally in the loft space). Both fire barriers have no loose fibres. **Use Product 66 (3-2-1 fire retardant spray) under the eaves for additional protection.** Ask for further information about a range of Envirograf® products to protect thatched roofs from fire.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving 70 minutes integrity and 18 minutes insulation.

ORDERING REFERENCES :

TH70F **Foiled Barrier** **1000mm width**

Fixing components as for FB70 above



58

INTUMESCENT ACRYLIC MASTIC

DESCRIPTION

A halon-free, intumescent mastic with good adhesion to all materials. Available in standard colours brown, grey, 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 Part 22 (1987). Integrity ratings of up to 249 minutes were achieved. Also tested to European Standard EN1363-1 (2000), achieving 126 minutes.

ORDERING REFERENCES :

AM 310ml tube

State colour required

An acoustic acrylic mastic is now available

**59**

INTUMESCENT PUTTY

DESCRIPTION

Envirograf® intumescent putty, light grey 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.

USE

Used for filling small holes and joints up to 50mm wide. It will expand by 20% in a fire.

PERFORMANCE

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

ORDERING REFERENCES :

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

PATENTED

62

SILICONE SEALANT

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 and gas-tight seal. For example, in steel, brick and blockwork, concrete, ceiling, walls and partitions. Supplied in 310ml tubes, available in clear and white. 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.**

PERFORMANCE

Tested to BS476 Part 22 (1987) when used for sealing around a number of penetrations and expansion joints. Integrity ratings of up to 240 minutes were achieved.

ORDERING REFERENCES :

SIL 310ml tube standard (state colour)

SIL/F 310ml tube food-safe (white only)



INTUMESCENT CEMENT FILLER



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 and 1 litre, 2½ litre, and 5 litre containers.

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 :

CFT	310ml tube
CF1	1 litre container
CF2	2½ litre container
CF5	5 litre container

WOOD FILLER

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.

ORDERING REFERENCES :

WF	250ml
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MASTIC GUN SKELETON FRAME

DESCRIPTION

Mastic gun skeleton frame with trigger (as illustrated top right).

USE

For use with Envirograf® 310ml tubed materials such as cement filler, mastic, and stopper, as well as other standard mastic tubes. Can be used with plastic tubes for foiled 'sausage-pack' products.

ORDERING REFERENCES :

SG1	Mastic gun skeleton frame
------------	----------------------------------

3-2-1 STANDARD AND WASHABLE

**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, etc. 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 affected 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 it**). 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 :

3-2-1 For dry clean items

3-2-1 W For bed linen and other fabrics that require regular washing

PATENTED

3-2-1 SPECIAL

**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 :

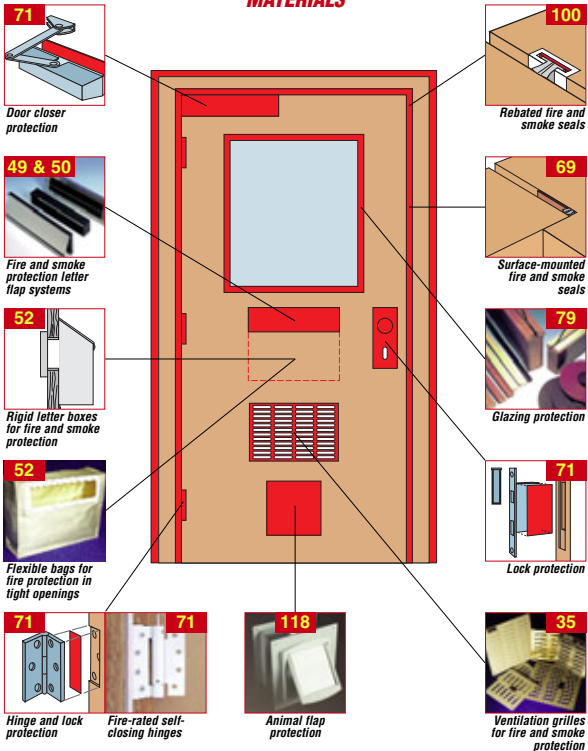
3-2-1 S For artificial flowers and synthetic materials

PATENTED

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.

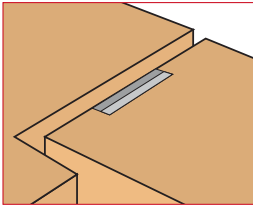
The fitting of a fire door is more complex than it seems. For example, a fire door must have intumescent material around either the door edge or the frame. Smoke seals should be fitted, and the door furniture should be installed with fire protection in mind.

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.

REBATED INTUMESCENT FIRE SEALS



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.

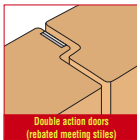
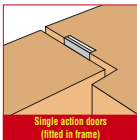
ORDERING REFERENCES:

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

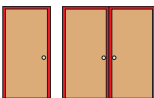


Also used for sliding doors and windows

Fitting Requirements for Product 68

Single

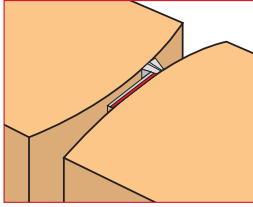
Double



■ Shows position of door seals fitted to door or frame

See also Envirograf® Products 69, 76, and 100

SURFACE-MOUNTED INTUMESCENT FIRE & FIRE/SMOKE SEALS



DESCRIPTION

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

USE

This product can be 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.

PERFORMANCE

In a test on an old door with a head gap between 7mm and 11mm, the seal just expanded and remained in place for the whole test. Tested to BS476 Part 22 (1987), achieving an integrity of up to 66 minutes with an 11mm gap at the head of the door. The intumescent strips included have also been successfully tested to BS476 Part 23 (1987).

ORDERING REFERENCES:

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

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

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

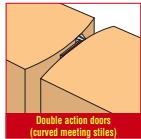
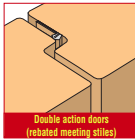
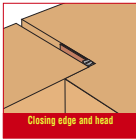
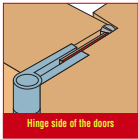
Single 1050mm fire/smoke seal strips can be supplied as follows:

ES/25/HS for head and closing stile – 2½mm thick x 30mm wide x 5mm brush
ES/30/PS for hinge side – 1mm thick x 30mm wide x 3mm brush

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

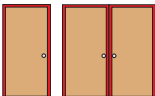
NS/25/HS for head and closing stile – 2½mm thick x 30mm wide x 5mm brush
NS/30/PS for hinge side – 1mm thick x 30mm wide x 3mm brush.

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



Fitting Requirements for Product 69

Single Double



■ Shows position of door seals fitted to door or frame

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/DDS/P for double door sets

REPLACEMENT HARDWOOD DOOR EDGING

**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).

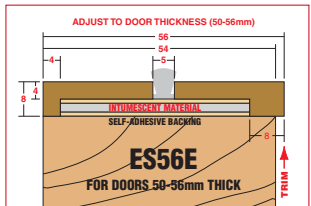
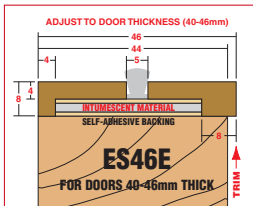
ORDERING REFERENCES :

PATENTED

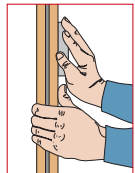
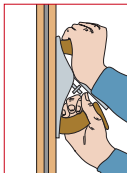
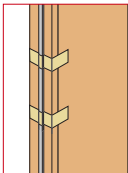
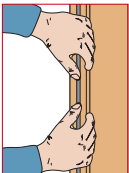
ES46E 46mm wide for door thicknesses 40-46mm (trim excess)

ES56E 56mm wide for door thicknesses 50-56mm (trim excess)

State colour and size of brush smoke seal required

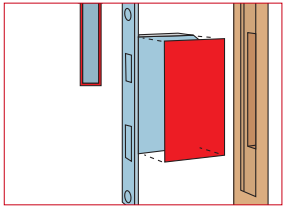
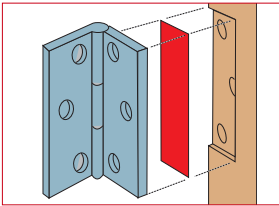


HOW TO FIT: Remove the existing door edge with a sharp knife, chisel, or saw, then rub down the edge with glass paper. If necessary (depending on the gap between door and frame) some planing may be required to allow for the replacement door edge. Replacement door edge fits flush one side (other side 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.



HINGE, LOCK AND DOOR CLOSER PROTECTION

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.

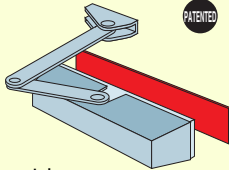
ORDERING REFERENCES :

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.

Intuplug® – intumescent plugs are available for hinge screws).

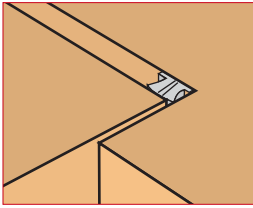


NEW CE-APPROVED SELF-CLOSING HINGE (SET OF 3)



This self-closing hinge set (Ref **SCH**, available in brass finish, brown, chrome finish, stainless steel, and white) means there is no longer a need for unsightly surface door closers: ideal for use in conservation areas! 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.

SURFACE-MOUNTED BRUSH SMOKE SEALS

**DESCRIPTION**

Surface-mounted black, brown, grey, or white brush smoke seals, either with fin or without fin, with or without self-adhesive backing. 1050mm lengths or supplied in roll form.

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. 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).

ORDERING REFERENCES :

ES/SS 3	3mm brush
ES/SS 5	5mm brush
ES/SS 7	7mm brush
ES/SS10	10mm brush

PATENTED

All of these brush seals have 4½mm polypropylene backing

Add suffix /S for a single door set, and /D for a double door set

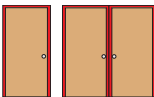
Add suffix /R if you require a length in a roll (specify number of metres)

Add suffix /N if you do not require the self-adhesive backing tape

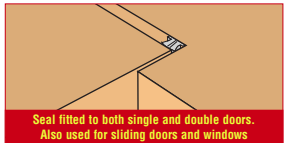
State the colour of brush required. See price list for full range

Fitting Requirements for Product 72

Single Double



■ Shows position of door seals fitted to door or frame

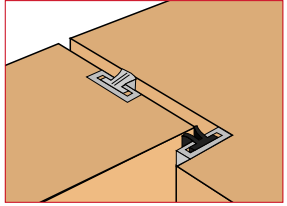
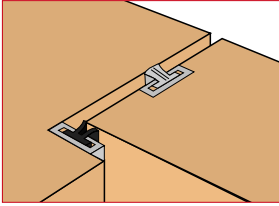


Seal fitted to both single and double doors.
Also used for sliding doors and windows

MEMBER OF
THE FIRE
PROTECTION
ASSOCIATION



REBATED ACOUSTIC, DRAUGHT, SMOKE, AND WEATHER SEALS



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.

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

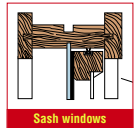
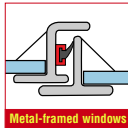
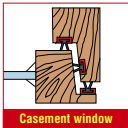
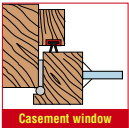
If plastic, state holder colour. If using brush seal, state its colour

Ordering example:

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

						
	Holder	Seal A	Seal B	Seal S	Seal T	Seal V
Seal Size		6/9mm	3/5/7/10mm	5/7/9mm	6/9mm	6mm
Use For:		Single-action Doors and Casement Windows	Doors and Windows	Single/Double Doors with Double Threshold	Acoustic Cushioning	Single-action Doors closing on Door Stop

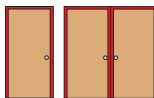
Important: 1-1½mm of the brush or rubber seal is held within the holder. Brush with fin is always ½mm higher than regular brush. Make allowance for this when specifying.



Also used for sliding doors and sliding windows

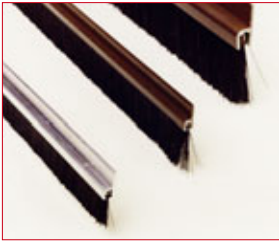
Fitting Requirements for Product 73

Single Double



Shows position of door seals fitted to door or frame

ACOUSTIC, DRAUGHT, SMOKE, AND WEATHER THRESHOLD SEALS



DESCRIPTION

A 7mm deep x 12mm high x 2m long aluminium holder (ES/TB) in a self-coloured finish or painted, or a plastic self-coloured holder (ES/TB/P), fitted with a fixed brush seal. The brush can be supplied in fixed depths of 19mm, 25mm, 32mm, 50mm, 75mm, or 100mm. Another version is a 2.1m long white plastic holder (ES/ATB) that permits three press-fit adjustments of the position of the brush seal, and the holder is supplied with either 25mm or 50mm brush depth.

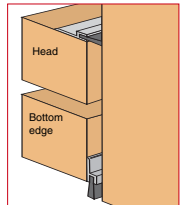
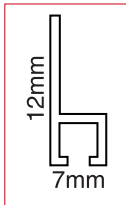
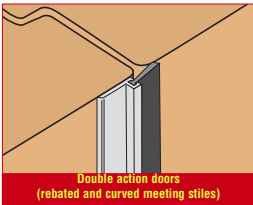
USE

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

PATENTED



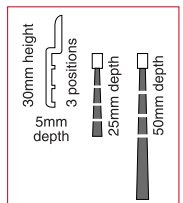
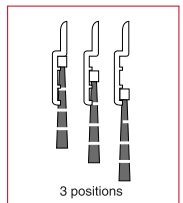
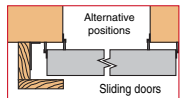
ADJUSTABLE BRUSH SEAL

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

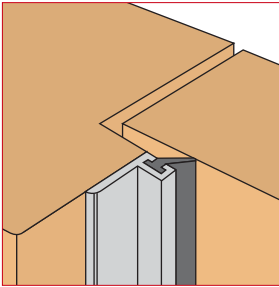


Adjustable plastic surface-mounted threshold brush seal for use with sliding doors and windows, and for use with Envirograf® Products 106 and 107. Suitable also for sealing over tiled floors and linoleum or vinyl floor coverings. Brush lengths adjustable by moving position in holder, based on 25mm or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

ORDERING REFERENCE: ES/ATB



SURFACE-MOUNTED ACOUSTIC, DRAUGHT, SMOKE, WEATHER SEALS



DESCRIPTION

A 2100mm long aluminium or plastic holder (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.

ORDERING REFERENCES :

PATENTED

ES/SH Aluminium surface-mounted holder (self-colour)


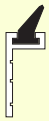
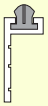
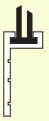
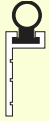

ES/SP Plastic surface-mounted holder (black, brown, or white)

- /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:

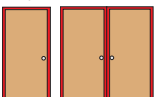
Envirograf® Seals Surface Plastic holder (black) + Brush seal 5mm (grey) ES/SP(black)/B5(grey)

					
Holder	Seal A	Seal B	Seal S	Seal T	Seal V
Seal Size	6/9mm	5/7/10mm	5/7/9mm	6/9mm	6mm
Use For:	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

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.

Fitting Requirements for Product 75

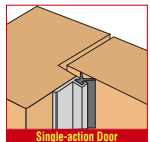
Single Double



■ Shows position of door seals fitted to door or frame



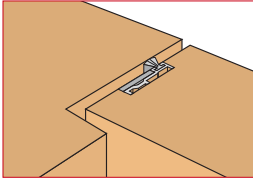
Double-action Doors and Sash Windows



Single-action Door

Also used for sliding doors and windows

REBATED INTUMESCENT FIRE AND SMOKE SEALS WITH ALUMINIUM HOLDER



DESCRIPTION

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

ES/SM30: 30 minutes fire-rated version, comprising an 7mm deep x 9mm wide x 2200mm long aluminium holder with a choice of brush or straight rubber seal. The brush smoke seals are available in black, brown, grey, or white and 5mm, 7mm, or 10mm high. The straight rubber seal is 4mm or 7mm high.

ES/SM60: 60 minutes fire-rated version comprising a 6mm deep x 20mm wide x 2200mm long aluminium holder with intumescent facing in aluminium with grey brush, black with black brush, brown with brown brush, red with grey brush, or white with white brush colours. Brush and rubber seal sizes as above.

ES/SM60/P: A plastic holder with intumescent material, 7mm deep x 20mm wide x 2200mm long in aluminium, black, brown, red, and white colours. For fitting into the rebate opposite **ES/SM60**, providing increased protection and sealing efficiency.

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).

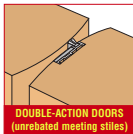
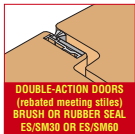
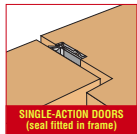
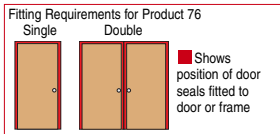
ORDERING REFERENCES :

PATENTED

- ES/SM30/B** Aluminium holder 7x9x2200mm with brush seal
ES/SM30/S Aluminium holder 7x9x2200mm with straight rubber seal
ES/SM60/B Aluminium holder 6x20x2200mm with brush seal
ES/SM60/S Aluminium holder 6x20x2200mm with straight rubber seal
ES/SM60/P Plastic holder 7x20x2200mm opposite ES/SM60 seals **ONLY**
 State holder colour/finish and brush colour if necessary
 For single- and double-action doors, the straight rubber seal is preferred

			
ES/SM60/B 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)

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 windows. Plastic coloured hinge plugs filled with intumescent are available

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.

INTUMESCENT GLAZING STRIPS



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 65 minutes (20mm wide hardwood) was achieved.

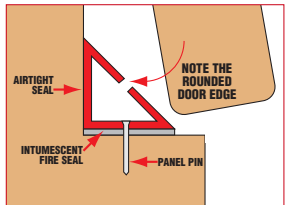
ORDERING REFERENCES :

Ref	Width	Protection
G 8/10	8mm	Half hour
G10/10	10mm	Half hour
G15/10	15mm	Half hour
G20/10	20mm	One hour
G23/10	23mm	One hour

State the colour finish required

PATENTED

ENVIROSTRIP



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.

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, 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.

PERFORMANCE

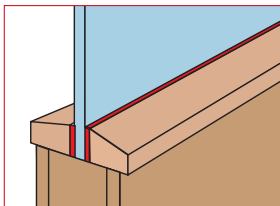
ENVIROSTRIP/F, with intumescent material fitted, was tested to BS476 Part 22 (1987) and achieved an integrity of 30 minutes. It also has acoustic properties for airborne sound.

ORDERING REFERENCES :

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

PATENTED

GLAZING BEAD SYSTEM FOR FIRE DOORS AND SCREENS



DESCRIPTION

A complete glazing system consisting of 2100mm long wooden beads (with bolection moulding if required) treated with Envirograf® clear intumescent coating. Circular glazing beads are also available. 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).

ORDERING REFERENCES :

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
Circular				
C4/30/G10	10mm	400mm diam	hard	30 minutes
C5/30/G10	10mm	500mm diam	hard	30 minutes
C4/60/G25	25mm	400mm diam	hard	60 minutes
C5/60/G25	25mm	500mm diam	hard	60 minutes

PATENTED

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

FIRE PROTECTION COATING FOR PVC ELECTRICAL CABLES FOR INTERNAL AND EXTERNAL USE

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 1m² 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. Also tested to the European standard EN1363-1 (2000), achieving 2 hours of fire protection.

ORDERING REFERENCES :

EP/C

The illustration on the right shows this product reacting during exposure to flame



PATENTED

FIRE PROTECTION COATING FOR GLASS FIBRE AND PVC



DESCRIPTION

A virtually odourless clear or white coating with coverage of approximately 4m² 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 :

EP/GC State finish (clear or white)

PATENTED

MEMBER OF
THE FIRE
PROTECTION
ASSOCIATION



DOUBLE-SIDED SELF-ADHESIVE TAPE

DESCRIPTION

This Envirograf® 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 :

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

PATENTED

INTUMESCENT COATING FOR STEEL AND ALUMINIUM PROTECTION



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).

ORDERING REFERENCES :

PATENTED

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

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.



FIREPROOF PAPER FOR UPGRADING LATH/PLASTER CEILINGS/WALLS GIVING IN EXCESS OF ONE HOUR FIRE PROTECTION



DESCRIPTION

This is a 1000mm wide fire protection material (S/CEILING), applied in the same manner as wallpaper, but using Envirograf® adhesive type CA/N. Also available with bonded firecard 920mm wide (S/CP/CARD).

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, and any cracks can be filled with Envirograf® Product 61 (intumescent stopper). 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.

ORDERING REFERENCES :

S/CEILING Fireproof Material
S/CP/CARD Fireproof Material with bonded firecard
CA/N Ceramic Adhesive
See Product 93 (Stabond) for bonding and sealing fluid

PATENTED

FLEXIBLE FIRE PROTECTION BAGS FOR DOCUMENTS ETC AND METAL FIRE PROTECTION BOXES TO HOLD BUILDING PLANS FOR FIRE OFFICERS, TO COMPLY WITH UK RRO REQUIREMENTS



FLEXIBLE BAG

A flexible glass cloth bag impregnated with Envirograf® fire protection coating, made in many sizes to suit paper documents and folders. The bag can be placed inside a standard filing cabinet. Protects documents for up to 40 minutes in a fire (up to 60 minutes if the bag is placed in a filing cabinet). Bags can also be used for computer disks and video tape.



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 :

Ref / External Measurements	Height	Width	Depth
Document Case			
ES/DC 30	240mm	380mm	30mm
ES/DC 60	240mm	380mm	60mm
ES/DC110	240mm	380mm	110mm

Video Cassette Case

ES/VC1	225mm	130mm	40mm
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Computer Disk Case

ES/CD1	90mm	425mm	110mm
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External Building Plan Case (incorporating inner document case)

SPB/EXT*	410mm	490mm	240mm
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*Various lock and alarm combinations are available (see price list)

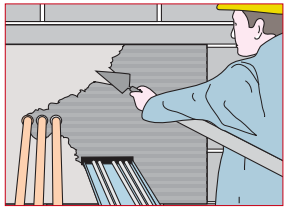
Internal Building Plan Case (incorporating inner document case)

SPB/INT1	306mm	308mm	150mm
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PATENTED



FIREPROOF COATINGS FOR SLABS



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.

PERFORMANCE

Tested to BS476 Part 22 (1987), achieving an integrity of 4 hours. Also tested to European Standard EN1363-1 (2000).

ORDERING REFERENCES :

CS/W Intumescent Coating (White)



WELDING BLANKETS AND PADS



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 :

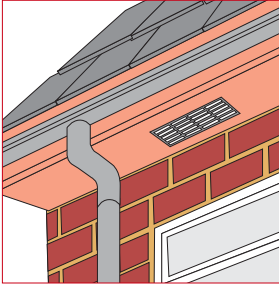
ES/WP1 Welding Pad 200mm x 300mm
 ES/WC1 Welding Blanket 1m x 950mm
 ES/WC2 Welding Blanket 2m x 950mm
 ES/WC3 Welding Blanket 2m x 1850mm

Other sizes available to order



SOFFIT BOARD INTUMESCENT VENTILATORS

Essential for Loft Conversions – Stops Flame Penetration



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.

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.

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
 Other sizes available to order

PATENTED

MEMBER OF
THE FIRE
PROTECTION
ASSOCIATION



FIRE AND SMOKE DROP CURTAIN (AUTO/MANUAL RESET)



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

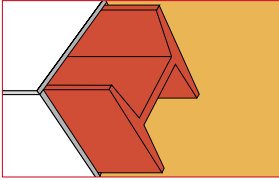
The complete product and the curtain material were tested to BS476 Part 22 (1987), achieving 80 minutes of fire protection. An insulated version was tested and achieved 91 minutes integrity and insulation.

ORDERING

This product is made to order.



BOARD FOR PROTECTION OF STEEL

**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 47 (board adhesive/sealant), which can also be used for filling the joints. There is virtually no waste as offcuts are adhered into the webs, as shown above.

PERFORMANCE

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

ORDERING REFERENCES :

STB/91

PATENTED

FIRE RETARDANT COATING FOR TIMBER

**DESCRIPTION**

A water-based clear or white coating for internal/external application by brush, roller or spray. Achieved Class 0/Class 1 protection with two applications at 12-15m² per litre. Coverage on the first coat may vary according to the density and type of timber. UV protection is available.

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. If using QVFR externally, a top coat is required to seal the flame retardant layer. See separate coatings booklet for more details and colour charts.

PERFORMANCE

VFR 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.**

ORDERING REFERENCES :

PATENTED

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

A range of top coats is available. Please see new data sheet for full details. Finishes: S=satin, SG=semi-gloss)

STABOND STABILISING BONDING/SEALING LIQUID

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

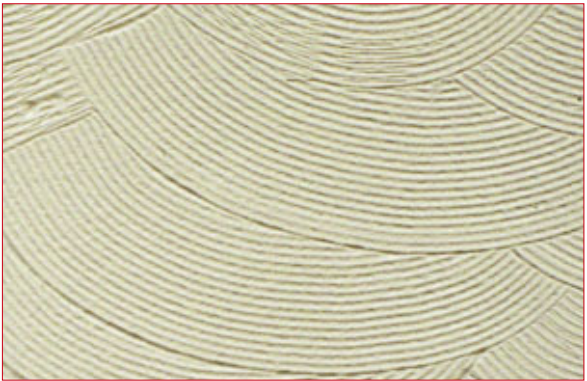
For sealing distempered, emulsified, or porous ceilings/walls. Good for sealing prior to using Envirograf® Product 38 (TCA thixotropic contact adhesive as used in door upgrade kits), Product 92 (clear coating), Product 96 (textured coating), or Product 105 (EP/CP paint for plasterboard). See data sheet for use with Product 84 (intumescent paper).

ORDERING REFERENCES :

Stabond



FIRE-RESISTANT TEXTURED FINISH FOR UPGRADING 9mm AND 12½mm PLASTERBOARD TO ONE HOUR OF FIRE PROTECTION



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 8m² 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 3m² per litre
Other colours are available
- AEC Acrylic Emulsion Coating (semi-gloss top coat ONLY)**



INTUMESCENT DOOR STOP FOR FIRE AND SMOKE PROTECTION

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

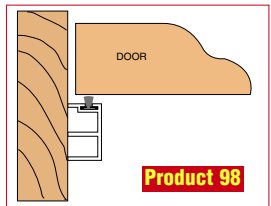
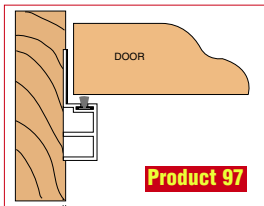
This product was used in a number of fire resistance tests employing the general procedures and criteria of BS476 Part 22 (1987), achieving an integrity of over 68 minutes on a fire door. Another test to BS476 Part 22 (1987) on a standard door (i.e. not fire-rated) achieved an integrity of 18 minutes, offering valuable escape protection.

ORDERING REFERENCES:

DSU/S Single Door set comprising 2 x 2100mm and 1 x 1050mm pieces

DSU/D 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

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). The smoke seal helps to ensure a fire escape route free from smoke.

ORDERING REFERENCES:

SDSTOP Single Door set comprising 2 x 2100mm and 1 x 1050mm pieces

DDSTOP Double Door set comprising 3 x 2100mm and 1 ES/25/HS pieces

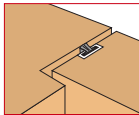
State door stop colour and smoke seal required (see below)



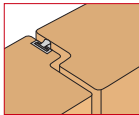
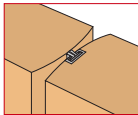
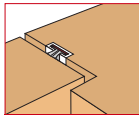
Type:	Seal A	Seal B	Seal S	Seal T	Seal V
Seal Size:	6/9mm	3/5/7/10mm	5/7/9mm	6/9mm	6mm
Use For:	Single-action Doors	All Doors	Double-Action Doors	Cushioning	Single-action Doors

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.

REBATED INTUMESCENT FIRE & FIRE/SMOKE SEALS IN TWO TYPES



Single action doors

Double action doors
(rebated meeting stiles)Double action doors
(unrebated meeting stiles)

Single action doors (frame)

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.

Save time with the new push-fit type of seal, designed with ease of maintenance in mind. Decorators can remove seals for decorating and replace them when finished. Joiners can remove the seals from tightly-fitting doors to plane the door edge and cut the rebate deeper. Rebating examples: both the 10x4mm 30 minutes seal and the 15x4mm 60 minutes seal can have a rebate up to 6mm deep. Although the seal is a push-fit type, it cannot be pulled out except from the top or bottom. Adhesive is not needed. Intumescent seals are supplied with a plain front and fire and smoke seals can have brush or rubber 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 :

Ref	Fire Seal	Smoke Seal	Depth	Width	Protection
ORIGINAL STYLE 1050mm & 2100mm LENGTHS					
IS/12	Intumescent	None	4mm	12mm	Up to 30 minutes
IS/12/S	Intumescent	Brush	4mm	12mm	Up to 30 minutes
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/14/AS	Intumescent	Angled Rubber	4mm	10mm	Up to 30 minutes
IS/14/SS	Intumescent	Straight Rubber	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/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
IS/24/AS	Intumescent	Angled Rubber	4mm	20mm	Up to 60 minutes
IS/24/SS	Intumescent	Straight Rubber	4mm	20mm	Up to 60 minutes
★ ★ ★ NEW PUSH-FIT STYLE 2100mm LENGTHS ★ ★ ★					
CIS14/30	Intumescent	None	5mm	10mm	Up to 30 minutes
CIS14/B30	Intumescent	Brush Seal	5mm	10mm	Up to 30 minutes
CIS14/S30	Intumescent	Straight Rubber	5mm	10mm	Up to 30 minutes
CIS15/60	Intumescent	None	5mm	15mm	Up to 60 minutes
CIS15/B60	Intumescent	Brush Seal	5mm	15mm	Up to 60 minutes
CIS15/S60	Intumescent	Straight Rubber	5mm	15mm	Up to 60 minutes

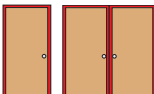
Brush smoke seals, where fitted, are 5mm standard (black, brown, grey, or white)

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

Single Double



■ Shows position of door seals fitted to door or frame

The new push-fit seal is not easy to take out, except by pulling at the top or bottom (for maintenance). Ideal for use when repainting a door or planing a door edge. Rebate 5-6mm deep.



FIRE PROTECTION CABINETS



Architect's Plan Cabinet
at Liverpool City Council



Unit for two filing cabinets with shelf above
at News International, London

DESCRIPTION

Envirograf® filing cabinet fire protection covers are units into which existing cabinets may be fitted, to give up to one hour of fire protection to the contents of the cabinets (audio tapes, computer diskettes, documents, drawings, etc). Access to the inner cabinet is by front or top openings that may be locked by padlock on the hasp and staple arrangements fitted, or other locks may be fitted to order. There are also smaller versions that are designed to contain highly inflammable items such as fireworks and lighter fuel, enabling shop-keepers to comply with regulations on fire safety in shop premises. Cabinets can be made with shelves etc.

USE

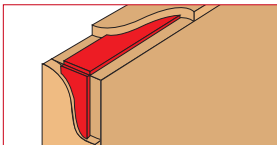
Can be used for protection of valuable or highly inflammable materials that are currently stored in cabinets not specifically designed to offer any fire protection to their contents. This can be required by insurance policies and legislation. Tested to BS476 Part 22 (1987).

ORDERING REFERENCES :

This product is made to order

PATENTED

INTUMESCENT MATERIAL TO FIT UNDER DOOR EDGING



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. Also supplied with hardwood door edging (ES/DE/UL) to suit door edges 42-44mm and 52-54mm.

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
ES/DE/UL/30	To suit doors 42-44 mm thick	30 or 60 minutes protection
ES/DE/UL/34	To suit doors 52-54 mm thick	60 minutes protection

PATENTED

INTUMESCENT COATING TO UPGRADE RAISED-AND-FIELDED DOORS AND PANELLED DOORS WITH FLAT PANELS TO FIRE-RATED DOORS



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 6m² (depending on the size of the door, this may be enough material to cover three to four sides of single doors). 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. Ask an Envirograf® Representative to call and view the relevant door before ordering or application of product, in order to ensure that the treatment is appropriate for the type of door, especially oak.

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.

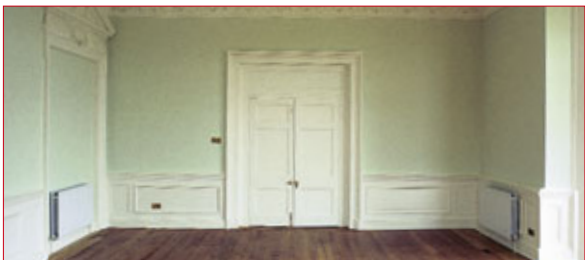
ORDERING REFERENCES :

PATENTED

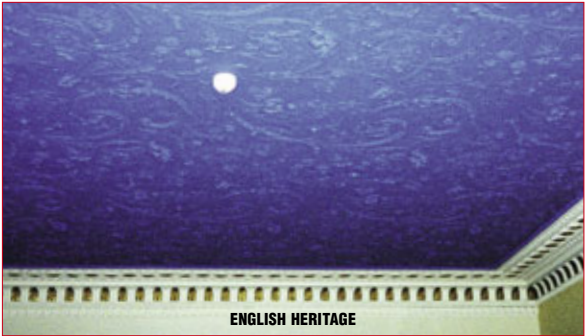
ES/RFC/CM	Clear matt finish kit
ES/RFC/CS	Clear satin finish kit
ES/RFC/WM*	White matt finish kit
ES/RFC/WS*	White satin finish kit
ES/RFC/WG*	White gloss finish kit

*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.



**FIRE-RESISTANT SMOOTH FINISH FOR UPGRADING
9mm - 12½mm PLASTERBOARD AND LATH-AND-PLASTER CEILINGS
TO ONE HOUR OF FIRE PROTECTION**



D E S C R I P T I O N

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 92 (ES/AEC acrylic emulsion coating) can be applied over the smooth coating.

U S E

Apply to 9mm or 12½mm thick plasterboard or lath-and-plaster ceilings in two coats at 8m² 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.

P E R F O R M A N C E

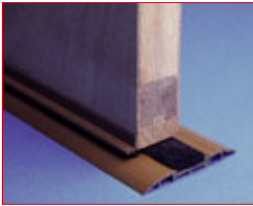
This product underwent a fire resistance test in accordance with BS476 Parts 20, 22, and 23 (1987), applied to plaster-coated 9mm thick plasterboard and nailed to a timber-stud partition. The treated partition system achieved a fire resistance (insulation and integrity) of 71 minutes. The product also 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).

O R D E R I N G R E F E R E N C E S :

EP/CP Smooth Coating for 9mm and 12½mm Plasterboard
AEC Acrylic Emulsion Coating (semi-gloss top coat ONLY)

PATENTED

THRESHOLD RAMPS / DOOR WEATHER SEALS FOR WHEELCHAIRS



DESCRIPTION

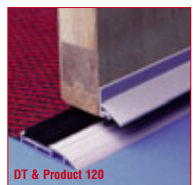
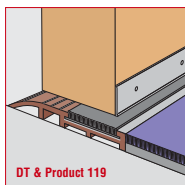
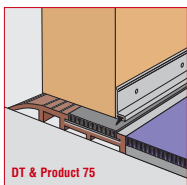
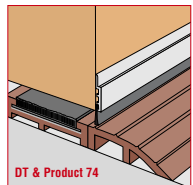
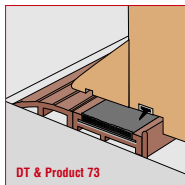
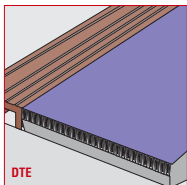
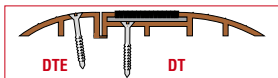
The Envirograf® curved ramp and seal system for door thresholds comprises two distinct high tensile plastic mouldings, to be used together or separately. Component DT is a curved ramp moulding containing a carpet pile threshold seal, and component DTE is a curved ramp moulding without the carpet pile 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.

ORDERING REFERENCES :

- DT** Single threshold section housing carpet seal
DTE Single extension piece
 State colour of moulding required



DOMESTIC & INDUSTRIAL THRESHOLD DOOR SEALS



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.

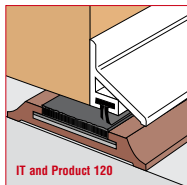
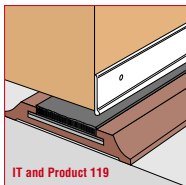
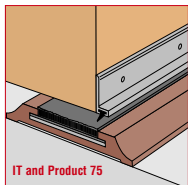
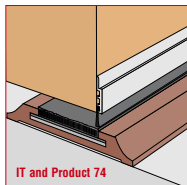
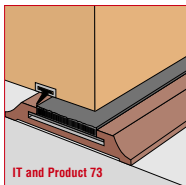
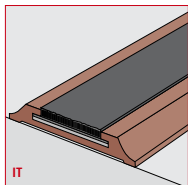
USE

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.

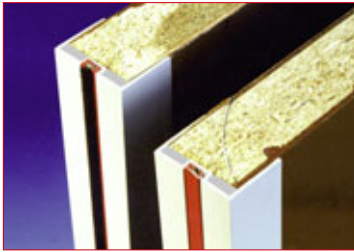
ORDERING REFERENCES :



IT Single threshold section housing carpet seal
State colour of moulding required



DOOR EDGE PROTECTIVE TRIM



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).

ORDERING REFERENCES :

PATENTED

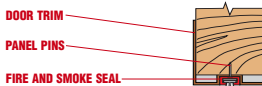
- DET44/N** For rebating into new doors 42-46mm thick
DET54/N For rebating into new doors 52-56mm thick
DET44 For surface-mounting onto old/damaged doors 42-46mm thick
DET54 For surface-mounting onto old/damaged doors 52-56mm thick

State the colour of door edge protector moulding required

State the colour of the seal holder and the seal type and size required

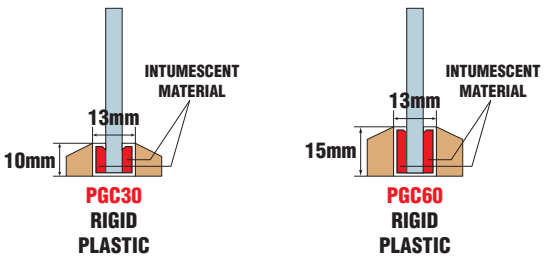
10x4 or 20x4mm				IMPORTANT: 1-1½mm of the brush or rubber seal is held within the holder. Brush with fin is always ½mm higher than without. Make allowances when specifying. The fire/smoke seal holder sizes are 10x4mm or 20x4mm to fit into the door protector.
Holder	Seal B	Seal S		
Seal Size	5/7/10mm	5/7/9mm		

PRODUCT 108 FIXING DETAILS



This product can be fully rebated into the door edge

INTUMESCENT GLAZING CHANNELS

**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).

ORDERING REFERENCES :

PGC30	10mm high	30 minutes of fire protection
PGC60	15mm high	60 minutes of fire protection
PGC = rigid glazing channel to fit 5-7mm thick glass		

Hardwood/softwood beading can be supplied to house the channel



FIROBLOK® INTUMESCENT SLEEVES FOR 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 the surrounding ceiling, floor, or wall. In the case of a fire, the intumescent material will expand, sealing the gap between the cable or pipe and its surrounding ceiling or wall. See also Product 7 (intumescent wraps) and Product 25 (cable protection system for cavity walls).

USE

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

PERFORMANCE

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

ORDERING REFERENCES:

FOR CABLES/PIPES/TRUNKING

Reference	Int Diam	Ext Diam
IWS 25	25mm	35mm
IWS 33	33mm	45mm
IWS 40	40mm	55mm
IWS 50	50mm	65mm
IWS 60	60mm	80mm
IWS 90	90mm	115mm
IWS100	100mm	115mm
IWS150	150mm	165mm
IWS215	215mm	265mm

See price list for full range.

Types 110V and 110T listed opposite are available in 100mm, 150mm, 200mm, and 500mm lengths

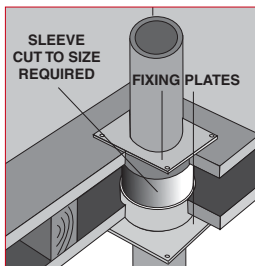
FOR VENTILATION DUCTING

Reference	Size
110V/15	110mm x 54mm
110V/26	204mm x 60mm
110V/29	220mm x 90mm
110V/22	234mm x 29mm
110V/32	308mm x 29mm
110V/67	692mm x 70mm

FOR PLASTIC TRUNKING

Reference	Size
110T/11	25mm x 25mm
110T/22	33mm x 50mm
110T/33	40mm x 75mm
110T/32	50mm x 50mm
110T/42	100mm x 50mm
110T/43	100mm x 75mm
110T/44	100mm x 115mm

PATENTED



NEW FIROBLOK SLEEVES FOR DUCTING, TRUNKING, AND CEILING FANS

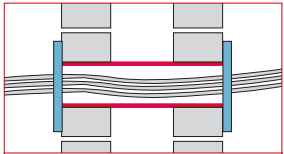


FIROBLOK® ELECTRICAL INTUMESCENT CONDUIT SLEEVES

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.



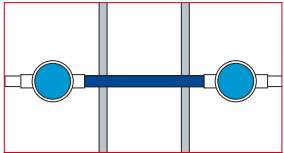
Fireblok® conduit sleeve fitted into a 20mm coupling



Cable protection in hollow walls including smoke seals.



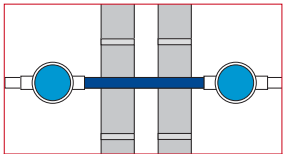
Fireblok® conduit sleeve fitted into a 20mm BESA box



Fireblok® conduit sleeve fitted into a hollow dry wall



Fireblok® conduit sleeve fitted into a 25mm BESA box



Fireblok® conduit sleeve fitted into a block cavity wall

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.

USE

Fireblok® electrical conduit sleeves are made in the same sizes as 20mm and 25mm conduit, so they fit into sockets or BESA boxes. Fireblok® 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.

Fireblok® sleeves are used for all sizes of PVC, UPVC, steel, and copper pipes from 15mm to 600mm. In a fire, Fireblok® 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. Fireblok® 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.

Fireblok® 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.

PERFORMANCE

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 122 minutes integrity and insulation; and EN1366-3 (2005) achieving 78 minutes integrity.

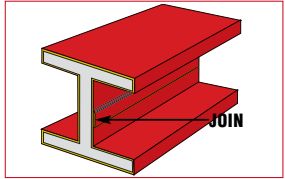
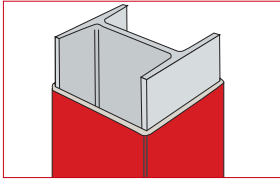
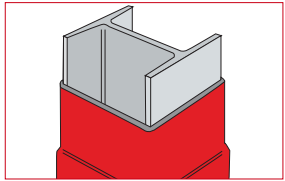
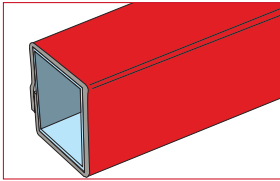
ORDERING REFERENCES:

Reference	Description	Length
110C/20	20mm Fireblok® conduit sleeve	300mm
110C/25	25mm Fireblok® conduit sleeve	300mm

Packs of 12 pieces are also available

FIROBLOK

COATED CERAMIC QUILT FOR STEEL



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 1220mm wide, and **CQB** is 6mm thick and available in 50mm, 75mm, 100mm, and 150mm 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.

ORDERING REFERENCES :

CQT/6	6mm thick x 1220mm x 8m roll
CQB/6/ 50	6mm thick x 50mm x 8m roll
CQB/6/ 75	6mm thick x 75mm x 8m roll
CQB/6/100	6mm thick x 100mm x 8m roll
CQB/6/150	6mm thick x 150mm x 8m roll



HIGH-TEMP SILICONE TAPE SEAL FOR STOVES, BOILERS, ETC

DESCRIPTION

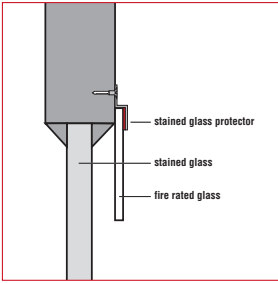
Envirograf® SIL/T is a self-adhesive silicone tape suitable for sealing in high-temperature applications.

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 :

SIL/T30	Silicone Tape 30mm wide x 5m long roll (black or red)
SIL/T75	Silicone Tape 75mm wide x 5m long roll (black or red)

116**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 holds clear wired glass, laminated glass, or ceramic fire protection glass behind decorative glazing, thereby giving 30 or 60 minutes of fire protection, leaving the decorative glass undisturbed. 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**117****SMOKE CURTAIN****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

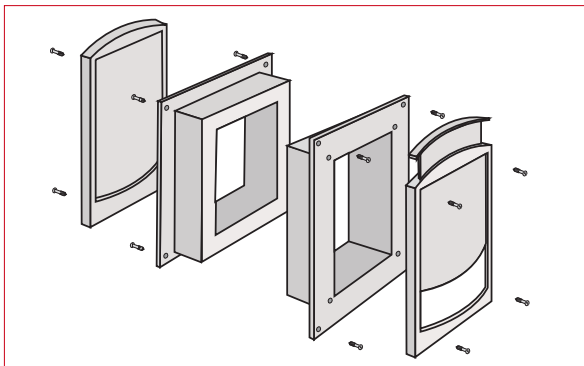
For shopping malls and other large areas that need smoke protection and/or BS476 Class 0/Class 1 spread of flame protection. The curtain can be cut with a sharp knife or scissors, and adhesive is supplied so that a 25mm to 30mm overlap can be made, allowing the curtain to be made up to any size required. 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

ANIMAL DOOR FLAP PROTECTOR

**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) and prEN1366-3, achieving 68 minutes protection.

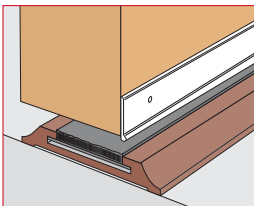
ORDERING REFERENCES :

PATENTED

Ref	To Suit Staywell Type	Staywell Aperture	FP Aperture
FP01	Series 300 / 400 / 500	168mm x 175 mm	228mm x 235 mm
FP02	Series 600 (Small)	245mm x 150 mm	305mm x 210 mm
FP03	Series 600 (Medium)	348mm x 225 mm	408mm x 285 mm
FP04	Series 600 (Large)	451mm x 277 mm	521mm x 347 mm
FP05	Series 600 (X Large)	642mm x 366 mm	722mm x 446 mm
FP06	Series 700 (Small)	180mm x 155 mm	240mm x 215 mm
FP07	Series 700 (Medium)	265mm x 230 mm	325mm x 290 mm
FP08	Series 700 (Large)	354mm x 306 mm	424mm x 376 mm
FP09	Series 800	429mm x 291 mm	499mm x 361 mm
FP10	Series 900	169mm x 169 mm	229mm x 229 mm

To suit Staywell brand flaps. Others can be made to order.



119**WEATHER BAR SEALS****DESCRIPTION**

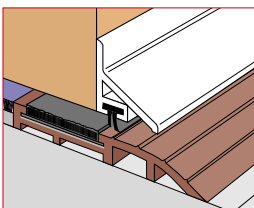
A PVC seal which can be used in conjunction with Envirograf® Products 106, 107, and 120 threshold seals. Available in black, brown, or grey.

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**

**MEMBER OF
THE FIRE
PROTECTION
ASSOCIATION**

**120****WEATHER BOARD****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**

123**FIRE PROTECTION CARDBOARD****DESCRIPTION**

White cardboard with fire protection properties

USE

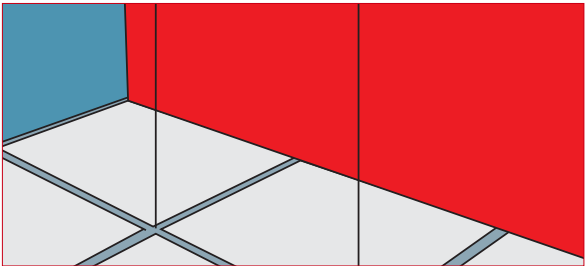
This product is ideal for use in doctors' surgeries and hospitals, and in the sign industry for silk screen printing, painting by hand, packaging, exhibition displays, etc.

PERFORMANCE

Fire protection cardboard has been tested to BS476 Class 0 and Class 1 (Spread of Flame) classification. Also tested at WIRA to BS476 Parts 6 and 7.

ORDERING REFERENCES :**PATENTED**

FPB3 320g/m² density 920mm wide (state length required in metres)

125**FIRE BARRIER CURTAIN FOR ROOF VOIDS****DESCRIPTION**

A fire barrier curtain for use where insulation is not an important criterion. Available in 1200mm widths.

USE

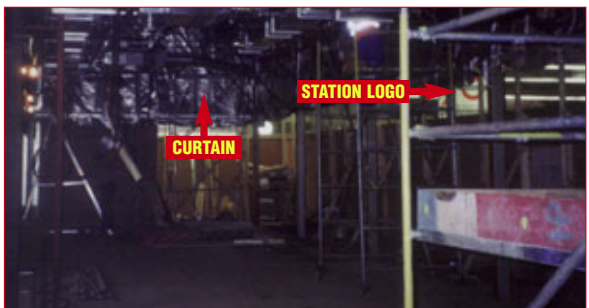
For loft and suspended ceiling separation. All joints must overlap by 50mm and be adhered using Envirograf® Product 57 fireproof adhesive. Service penetration can be passed through. See data sheet for fixing applications.

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 :**PATENTED**

VB3012 Barrier curtain for roof voids 1200mm wide



INSTALLATION AT KING'S CROSS UNDERGROUND STATION, LONDON, ENGLAND

PROTECTIVE COVERS FOR WORKS OF ART AND OTHER VALUABLES



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.

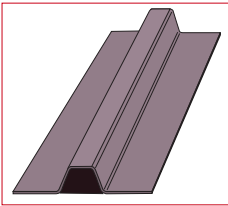
ORDERING REFERENCES :

ARTCOVER Please contact the technical department before ordering

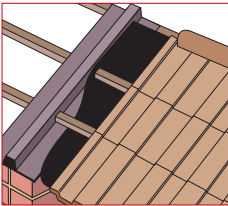
PATENTED

EXTERNAL ROOF FIRE BREAK MEMBRANE

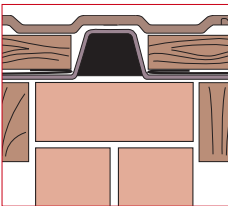
For use under roofing tiles and slates



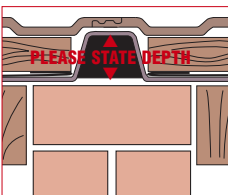
The membrane is supplied as a ready-to-install unit



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

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.

ORDERING REFERENCES :

FBM State the width required and the height between the top side of the wall and the underside of slates or tiles when ordering

PATENTED

INTERNAL ROOF FIRE BREAK BARRIER

For use under roofing tiles and slates, to isolate a property from its neighbours



UNPROTECTED



BEFORE THE FIRE TEST



DURING THE FIRE TEST



AFTER THE FIRE TEST

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

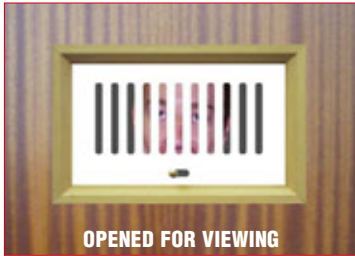
Recent tests undertaken on this product have indicated that unprotected roofs collapse in 39 minutes, whereas the **FB70 fire protection barrier curtain has been tested to 81 minutes integrity, holding back the fire from the adjoining roofs, thus giving valuable time to allow the fire department to arrive on site.**

ORDERING REFERENCES :

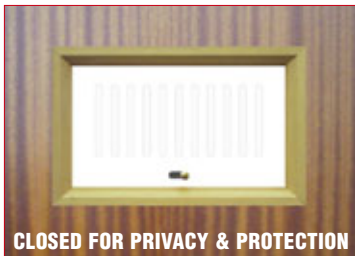
IRB State length required

PATENTED

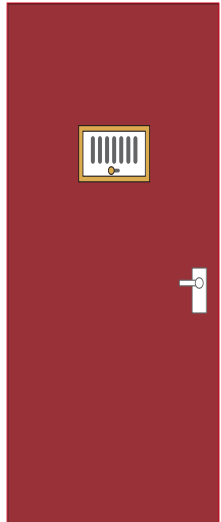
FIRE-PROTECTED SECURITY DOOR VIEWER FOR USE IN EXTERIOR OR INTERIOR DOORS



OPENED FOR VIEWING



CLOSED FOR PRIVACY & PROTECTION



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 zinc 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.

PERFORMANCE

Tested to BS476 Part 22 (1987) for 66 minutes.

ORDERING REFERENCES :

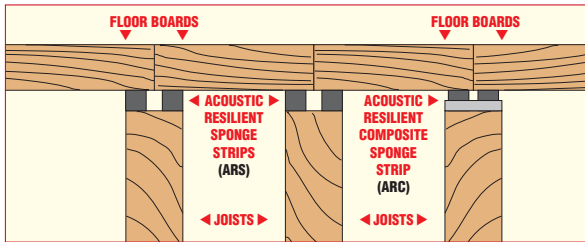
DV30 DV + Beading set for 44mm doors - 30min fire rating - softwood
DV60 DV + Beading set for 54mm doors - 60min fire rating - hardwood
 Other viewers can be made to order to suit doors of other thicknesses
 The product can be fitted with a locking device – state if required

PATENTED



131

ACOUSTIC SPONGE STRIPS COMPRESSION SEAL FOR IMPACT SOUND PROTECTION



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. 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.

ORDERING REFERENCES :

ARS **Black anti-vibration sponge supplied in a roll of 10m**
ARC **Composite grey/black acoustic strips 2.5m long**

132

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 :

GT15	15mm wide	3mm thick	15m roll
GT20	20mm wide	3mm thick	15m roll
GT25	25mm wide	3mm thick	15m roll

133**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 (m²) 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

**134****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.

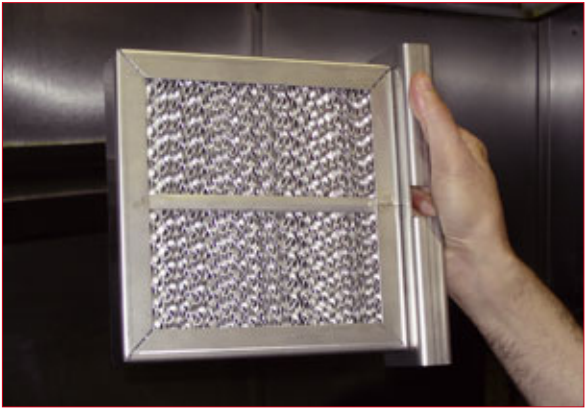
PERFORMANCE

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



COOKER HOOD GRILLE**DESCRIPTION**

Kitchens are places of high fire risk. Efficient protection is vital to safeguard both personnel and visitors. Top of the fire protection list is the cooking area, which needs special attention in the event of unexpected fire. The cooker hood extraction unit provides the necessary ventilation outlet for unwanted fumes and smoke but, in many establishments, extraction units are connected by ducting that passes through the building and is a potential route for a fire transmission. The new Envirograf® CHG cooker hood grille is made with wave-patterned lightweight aluminium baffles and a stainless steel frame. It can be produced in a range of different sizes to suit a wide range of ducting systems. To facilitate cleaning, the grille unit can be removed for easy cleaning in mild detergent solution.

USE

Kitchens in hotels, restaurants, hospitals, care homes, community centres, etc.

PERFORMANCE

The specially-designed Envirograf® ventilation grille unit with its internal baffles can help to restrict the passage of fire into ducting.

ORDERING REFERENCES :

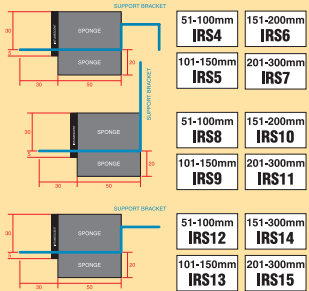
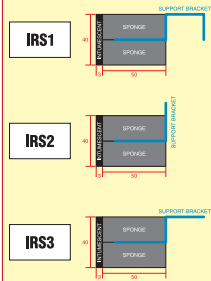
CHG Please ask for a quotation



RAINSCREEN PROTECTION

FOR GAPS UP TO 50mm

FOR GAPS OVER 50mm & UP TO 150mm/300mm



4 metal brackets fitted per 1m strip

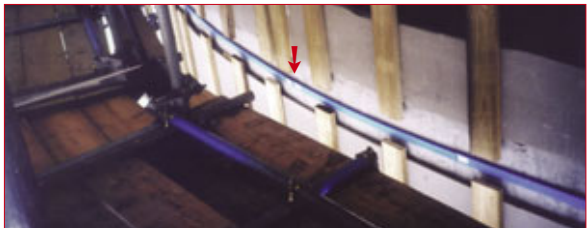
30mm metal ledge supports intumescent seal

DESCRIPTION

The new Envirograf® Product 136 intumescent rainscreen protection (IRS) is designed to be used between glass curtain walling and concrete, glass, or timber walls. It consists of fire-rated sponge strips with an attached high-expansion intumescent strip covered in foil on the top and back, plus metal fixing brackets in three shapes with screw holes pre-drilled. Depending on the gap required between the concrete, glass, or timber wall and the glass curtain wall, the thickness of the intumescent material may vary. For gaps up to 50mm, 3mm thick intumescent strips are fitted; for gaps over 50mm, 4mm thick intumescent strips are fitted; for gaps over 150mm, 8mm thick intumescent strips are fitted. Supplied in 1m long strips with four metal brackets fitted per strip, available in six configurations to suit the required application. All configurations are shown in the illustrations above and below.

ORDERING REFERENCES :

IRS Configurations are shown in the illustration above



FIRE BARRIER PROTECTS GAP BETWEEN FLOOR LEVELS



FIRE BARRIER

EXTERNAL FIRE BARRIER FITTED TO ESCAPE ROUTES

137

HI-TAK SPRAY ADHESIVE



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 :

HI-TAK 500ml aerosol can

PATENTED



ENVIROGRIP® FIRE-RESISTANT ADHESIVE

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

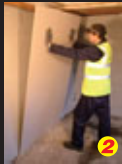
**PRESS BOARD TO WALL OR TIMBER
STUDDING. ENVIROGRIP® ALLOWS FOR
MOVEMENT OF BOARD ON CONTACT.
CAN BE PULLED OFF IF REQUIRED,
RE-POSITIONED AND RE-ADHERED.**

3

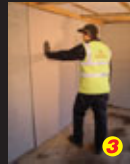
CAN BE PLASTERED AFTER 2 HOURS



1



2



3



INTUMESCENT SYSTEMS LTD
ENVIROGRAF HOUSE, BARFRESTONE,
DOVER, KENT, CT15 7JG
PHONE: 01304 842555 – FAX: 01304 842666
EMAIL: SALES@ENVIROGRAF.COM



XYZ

INSUGLASS® XYZ MULTI-PROTECTION COATING FOR GLASS

DESCRIPTION

A clear coating for glass or plastics materials. It is a two-part aqueous mix with a coverage of 8m²/kg and a top protective film. The film offers the advantage of protection against glass fragmentation in the event of impact damage to the glass or explosion etc plus extra insulation to the building. Almost 98% of harmful UV rays are absorbed by the protective film.

PERFORMANCE

Tested on wired clear glass measuring 980mm x 1500mm, achieving 67 minutes integrity and 50 minutes insulation. Also tested on 6mm standard clear glass, achieving 60 minutes integrity and 30 minutes insulation.

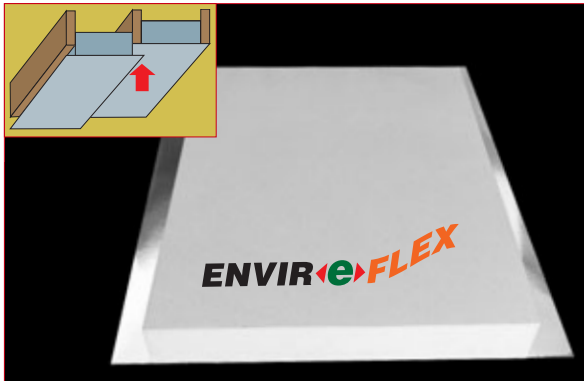
ORDERING REFERENCES :

XYZ Insuglass® 2-part glass coating system

CAF Clear protective film 1200mm wide (state length in metres)

PATENTED

ENVIREFLEX® 3-IN-1 INSULATION SYSTEM



DESCRIPTION

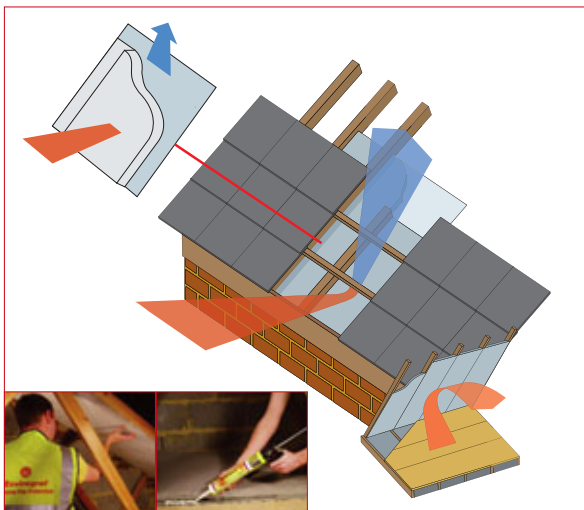
The new Envireflex® floor/roof insulation offers non-irritant acoustic/thermal insulation and fire protection material for application to new and existing floors and flat roofs and between rafters in loft conversions. The system allows free air movement, is moisture-resistant, and meets the requirements of Document C of UK Building Regulations for condensation. It is made to order, as dimensions between rafters and joists can vary. When using only 9mm thick plasterboard, it can give in excess of one hour fire protection and sound studio levels of acoustic protection. When used to insulate floors in loft areas, the ceiling below does not require a fire-rated upgrade, meeting the requirements of Document B of UK Building Regulations. 'U' values between 0.20W/m²K (truss) and 0.27W/m²K (floor). See data sheet for full details of options and fitting instructions.

USE

The components are fitted between the rafters or joists, resulting in minimal cutting on site and fast installation. Overlap joints are adhered with Envirograf® Product 46 (intumescent adhesive) and are fastened in place with a staple gun.

PERFORMANCE

Tested at BDA Keur in the Netherlands. Fire tested to BS476 Part 21 (1987), achieving 70 minutes of fire resistance. Tested for airborne and impact sound at Building Test Centre, meeting the requirements of Document E of UK Building Regulations.



FIROBOND ULTRA ADHESIVE



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.

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.

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/m² [10m²/kg] to 250g/m² [4m²/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.

Drying and Curing Times:

Initial bond:	10 to 20 minutes
Tack life:	10 minutes
Full cure:	within 24 hours

ORDERING REFERENCES :

FUA/0.5	½ kg
FUA/1	1 kg
FUA/2.5	2½ kg
FUA/5	5 kg
FUA/20	20 kg

PATENTED

LOFT-FIRE PAINT PLUS



DESCRIPTION

Loft extensions are now one of the most common methods of increasing living space in the domestic housing sector. UK Building Regulations offer clear guidance on the fire protection requirements specific to loft extension projects, and this often requires upgrading walls and ceilings to 30 or 60 minutes fire rating. The most common method of upgrading these surfaces to the required fire rating is to apply extra plasterboard, which includes skimming and decorating to finish, all at huge extra expense!

Envirograf® Loft-Fire Paint Plus has been developed specifically for loft extension projects. By simply applying a primer, then two coats of Loft-Fire Paint Plus, and finishing with Envirograf® acrylic emulsion coating (AEC) onto the existing plasterboard or lath-and-plaster ceilings or walls, you can achieve 60 minutes fire rating with **no more extra plasterboard, skimming, or decorating!** Loft-Fire Paint Plus will save hundreds, if not thousands of pounds on loft extension work, saving time and the inconvenience of skimming and redecorating usually required to upgrade the means of escape walls and ceiling areas.

USE

The skimmed plasterboard surface must be clean, dry, and free from dust, grease, and water-repellent surfaces. All wallpaper must be removed. Apply the Envirograf® EP/CP/P primer first. When dry, apply the Loft-Fire Paint Plus (allowing up to 90 minutes drying time between coats). Finish with the matt Envirograf® AEC acrylic emulsion coating.

EP/CP/P primer

This is a water-based clear primer for application before the EP/CP coating.
Coverage: one coat at 14m² per litre.

Loft-Fire Paint Plus

This is a water-based intumescent coating.
As soon as this coat has dried a protective topcoat must be applied.
Allow to dry thoroughly.
Coverage: two coats at 8m² per litre per coat (for 60 minutes fire rating)

AEC acrylic emulsion coating (matt finish)

Envirograf® matt acrylic emulsion coating (AEC) is a hard-wearing and flexible top coat. This coating is excellent for areas requiring high levels of durability and flexibility, where movement may occur. This coating has been specially-designed as a top coat for Loft-Fire Paint Plus.
Coverage: two coats at 12m² per litre per coat.

ORDERING REFERENCES :

PATENTED

EP/CP/P primer

1 litre, 2½ litres, 5 litres

LFP (Loft-Fire Paint)

1 litre, 2½ litres, 5 litres

AEC (Acrylic Emulsion Coating)

1 litre, 2½ litres, 5 litres

ENERGY-SAVING WITH FIRE PROTECTION



ADVANTAGES

- Potential energy saving of up to 40W per unit
- Change to low energy long-lasting bulbs with major cost savings
- Easy to install adaptor
- Offers up to 66 minutes of fire protection
- Can upgrade existing downlighters to use low energy bulbs in 9W, 11W, 15W, and 20W ratings and BC or ES type holders

Current fire legislation requires effective fire safety systems for ceilings and floors in both commercial and private buildings. Downlighters, whilst offering an attractive lighting solution, can pose a real danger to the fire integrity of the building for two main reasons:

1. Holes are cut into the ceiling for the light units, compromising the fire resistance of the ceiling and, because lamp units can operate at extremely high temperatures, this presents an ignition risk which could cause a fire to start and spread.
2. Energy-saving has become a major priority for building owners and occupiers. Downlighters can require up to 50W per unit. Ceilings in many commercial buildings may contain a large number of this type of lamp, resulting in extremely high energy bills.

An Envirograf® retro-fitting adaptor has been developed to convert your existing downlighter fittings into low-energy units, potentially saving up to 40W per light, whilst simultaneously providing 66 minutes of fire protection.

EARTH TO FITTING

DA1



BAYONET LAMPHOLDER EARTHING

DA2



ORDERING REFERENCES :

PATENTED

DA1 is supplied with a standard white lamp holder with an earth terminal
DA2 is supplied with a brass lamp holder including earth terminal

Add suffix /BC (bayonet cap) or /ES (Edison screw) to the reference for fitting type

When ordering, please specify the original light fitting's product name and code or send a sample of the fitting

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