

Fire Protection



DUFAYLITE®

Introduction

Dufaylite Developments Ltd manufacture a complete range of fire protection systems, specifically designed to give building contractors flexibility and reliable protection from 30 minutes to 4 hours in a wide variety of applications.

This brochure is intended to give professionals an overview of the range; full technical specifications and installation instructions are available upon request.

Included in the Dufaylite range of fire protection products are fire dampers & grilles, firesleeves & pipe wraps, strips and sealants, fire batts, bags and mortar to provide an effective passive fire solution for all parts of the building envelope.

Dufaylite Fire Protection is suitable for:

- Floors, walls and ceiling voids
- Ductwork
- Doors
- Pipes
- Service penetrations and joints

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The illustration (opposite) shows some typical applications for Dufaylite fire protection products and is not a technical representation of installation. Products can be found on the page numbers quoted. For technical advice, please telephone Dufaylite Developments Ltd on 01480 215000.

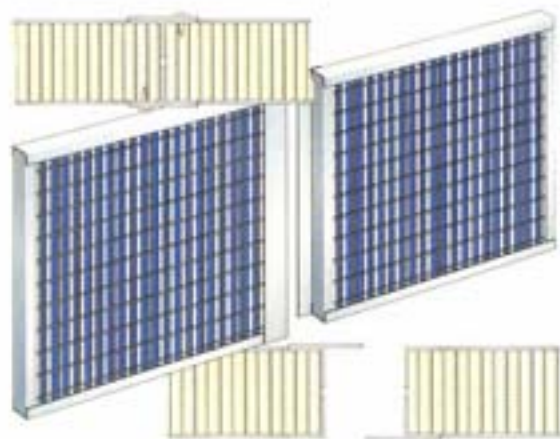
Dufaylite Fire Protection Systems



2 hr 4 hr Fireblock Ultra

Fully certified in accordance with BS476 Part 20, Fireblock Ultra dampers are designed to provide up to 83% free area for optimum performance. Manufactured from slats of quick activating moisture-resistant intumescent material secured in a galvanised steel frame, Fireblock Ultra is a robust damper ideal for high air movement. Suitable for aggressive environments and resistant to moisture, Fireblock Ultra is suitable for both external and internal situations with fast closure in a fire situation.

- Fully certified to BS476 Part 20 (1987)
- Slim construction - only 40mm thick
- Lightweight
- Optimum performance for high air movement applications
- Suitable for aggressive environments
- 2hr & 4hr fire protection



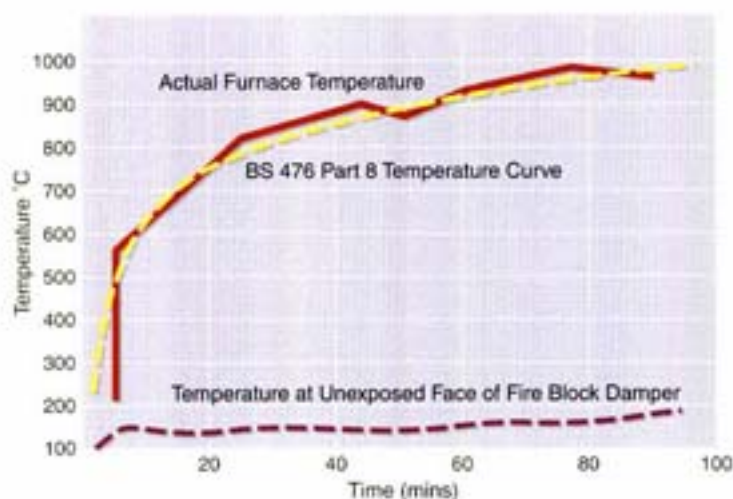
Lapping flanges on the co-ordinating opposite sides of each unit allow easy assembly to fit large or small areas. This detail is seen in the cross section. Self-tapping screws are applied at max. 150mm pitch. Inject InterdensTM paste or silicone 4 sealant in any gaps.

2 hr 4 hr Fireblock Ultra Hi Air™

For high air movement ducting, Fireblock Ultra Hi Air dampers have been purpose designed to provide a super efficient performance. The damper's framework is sited on the outside of the duct to eliminate all 'solid' elements of the damper from within the duct interior. Fireblock Ultra Hi Air is manufactured from the same quick activating material as Fireblock Ultra with all the inherent benefits.

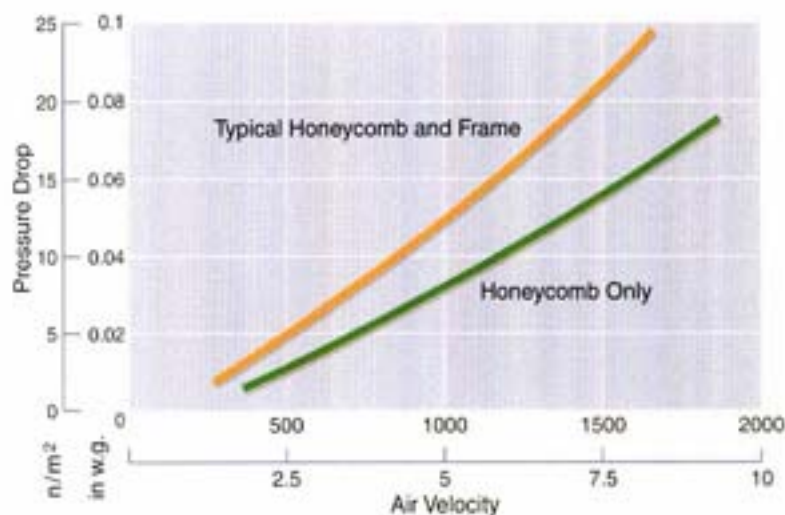
- Exterior spigot connection method to create maximum area for airflow within duct
- High air volumes at up to 20m/sec

Temperature curve & pressure drop tests



Temperature Curve

Recorded during an official furnace test on a Fireblock compared with the standard curve for BS476 Part 20 1987.



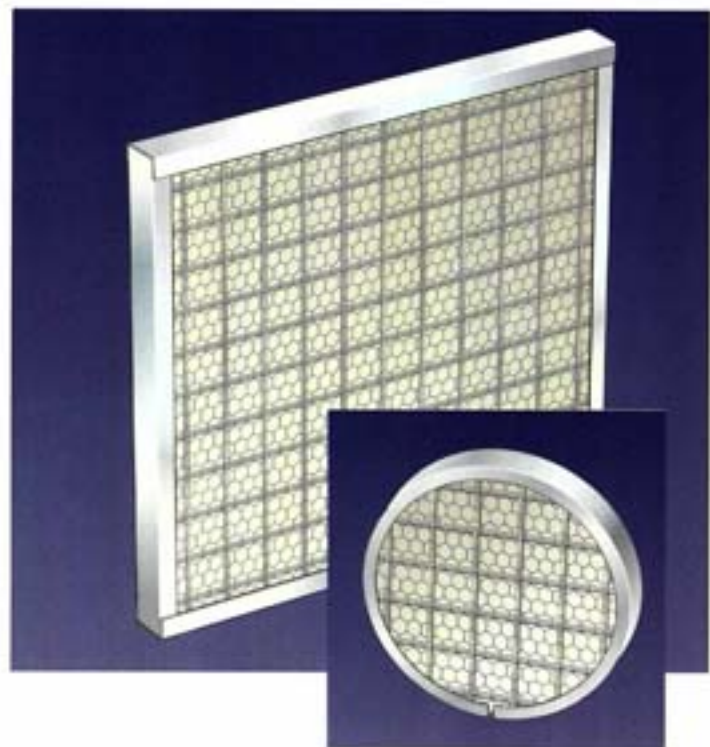
Pressure Drop

Shown through a Fireblock damper.

1 hr Fireblock

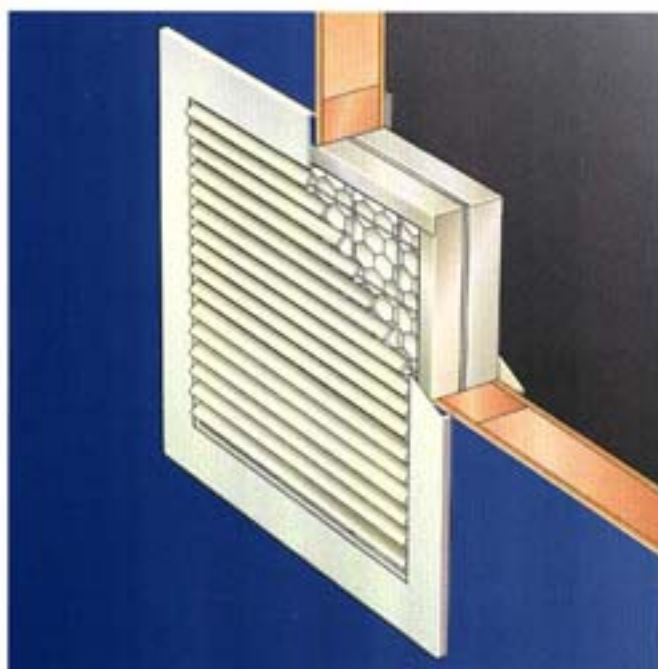
The principle of Fireblock was developed by the Fire Research Station, and is the original intumescent honeycomb damper, renowned for its reliability and air movement efficiency.

Designed to provide 1 hour fire resistance in accordance with BS476 Part 20 (1987) and ISO 834, Fireblock is available in square and circular formats to suit interior applications and can be made to fit irregular angles within the building envelope. Joined together, Fireblock forms an effective fire compartmentation in roof space, walls and floors, allowing the free movement of air in non-fire situations.



Suitable applications:

- Fully certified to BS476 Part 20 (1987), ISO 834
- Efficient air movement
- Fast closure in fire situation
- Available in almost any size
- Virtually no maintenance required



1/2 hr 1 hr Fireblock FD30 & FD60

Designed specifically for flush mounting into 1/2 hour and 1 hour internal fire doors and partitions, Fireblock FD30 and FD60 provides effective ventilation in non-fire situations.

Both products have been tested in accordance with BS476 Part 20 (1987) with all the inherent benefits of the standard Fireblock construction. Non-vision blocks are also available.

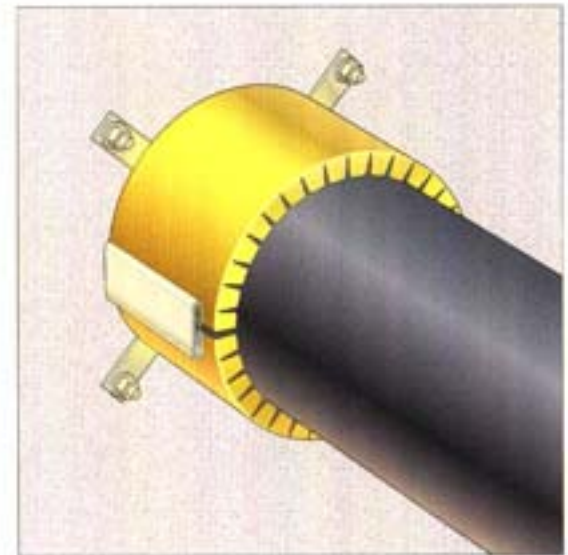
1
hr

2
hr

4
hr

Firesleeve™

For horizontal and vertical PVC pipework penetrations through fire barriers, Firesleeve is fully tested in accordance with BS476 Part 20 (1987). The galvanised steel outer casing has intumescent lining that swells in a fire to crush the softening pipe, preventing the spread of fire. Suitable for soil and vent pipework, chemical waste, pneumatic document transfer systems, electrical cables and conduit.



- 1, 2 and 4 hour Fire Resistance tested to BS476 Pt 20 (1987)
- Slim, lightweight, easy installation in confined spaces
- For PVC-U pipes with outside diameter from 56mm to 160mm
- Recessed and surface mounting in a single unit
- 1hr Firesleeve available for polyethylene, polypropylene and ABS pipework.

4
hr

Pipe Wraps

For horizontal and vertical PVC-U pipework penetrations from 56-200mm, Pipe Wraps give up to 4 hours protection against fire. Use in conjunction with Dufaylite fire resistant mortar.



- Certified to BS476 Part 20 (1987)
- Low cost reliable protection with simple installation
- Water resistant
- Fits PVC-U pipes up to 200mm diameter

4
hr

Fire Batts & Mastic

Dufaylite Fire Batts and Mastic provides up to 4 hours protection to service penetrations. Acoustic rating to 46dB Use in conjunction with Dufaylite high-performance water-based acrylic ablative mastic.



- Certified to BS476 Part 20 (1987)
- Superior integrity
- Halogen free -reduced smoke
- Excellent chemical and weather resistance
- Acoustic rating to 46dB

2
hr

Fireseal Bags

For cable runs and cable trays, Fireseal Bags are easy to install and relocate, providing up to 2 hours fire protection.



- Certified to BS476 Part 20 1987, Class 1 surface spread of flame to BS476 Part 7 (1987)
- Dustproof
- Asbestos and halogen free
- Water resistant

4 hr Linear Gap Seals

For movement joints and junctions of building elements, Dufaylite Gap Seals provides a fire and flame proof barrier for up to 4 hours.



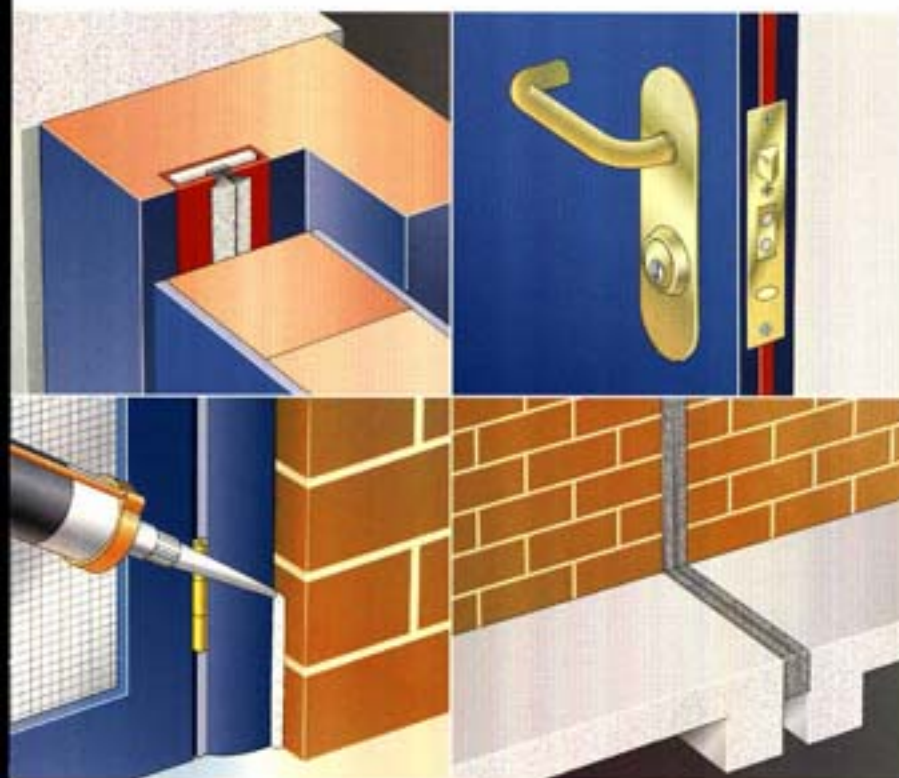
- Certified to BS476 Part 20 (1987)
- Operational at any angle
- Water resistant to humid and damp locations
- Easy to install without special equipment
- Chemically stable and durable
- Resistant to rot and vermin
- Suitable for gap widths from 7mm to 100mm

4 hr Fire Resistant Mortar

Offering over 4 hours protection for service penetrations in vertical and horizontal barriers, Dufaylite Fire Resistant Mortar contains no fibres, silicons, halogens, or solvents.

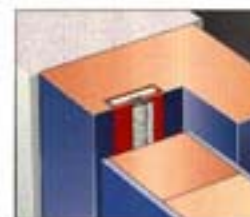


- Certified to BS476 Part 20 1987
- Can be re-activated for up to 45 minutes after mixing
- Can be float finished up to 16 hours after installation
- Does not crack or shrink under fire conditions
- Suitable for load bearing seals up to 1.5N/m²



1/2 hr 1 hr Dualstrip™ & Monostrip™

Intumescent high pressure activation, low volume strip for door edges and frames. Monostrip provides 1/2 hour and 1 hour fire protection. Dualstrip provides 1/2 hour and 1 hour fire and smoke protection.



- Certified to BS476 Part 22 (1987)
- High pressure, low volume for fast reaction in a fire situation
- Factory fit or on-site fitting

2 hr 4 hr Fire Sealants™

Interdens hard setting paste protects internal glazing, door lock cavities, architraves and partitions.



- Acrylic 2:
Up to 2 hours fire resistance
movement capability +/- 20% of total joint width
- Silicone 4:
Up to 4 hours fire resistance
movement capability +/- 50% of total joint width

1/2 hr 1 hr Interdens Strip™

Intumescent low pressure activation, high volume strip ideal for glazing applications within doors or screens, providing up to 1 hour fire resistance.



- Certified to BS476 Part 22 (1987)
- Effective in a fire situation without exerting undue pressure on glass

Fire Protection

Technical information

Full technical specifications for the individual products shown in this literature are available upon request together with copies of official test certificates.

HEALTH AND SAFETY STATEMENT

Individual Health & Safety statements are available for all Dufaylite products upon request.

FIRE TESTS

PRODUCT	BRITISH STANDARD	Fire resistance (time)			
		30 mins	1 hour	2 hour	4 hour
Fireblock Ultra	BS476 Part 20 (1987)				
Fireblock Ultra Hi Air	BS476 Part 20 (1987)				
Fireblock	BS476 Part 20 (1987) ISO 834 (1975)				
Fireblock FD	BS476 Part 20 (1987) BS476 Part 22 (1987) ISO 834 (1975)				
Firesleeve	BS476 Part 20 (1987)				
Pipe Wraps	BS476 Part 20 (1987)				
Interdens Strip	BS476 Part 22 (1987)				
Dualstrip & Mono-strip	BS476 Part 22 (1987)				
Linear Gap Seals	BS476 Part 20 (1987)				
Seal Bags	BS476 Part 20 (1987)				
Firebatts & Mastic	BS476 Part 20 (1987)				
Fire Sealants	BS476 Part 20 (1987)				
Fire Resistant Mortar	BS476 Part 20 (1987)				



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