

QUICK VIEW	Application:	Cable Penetration Sealing
	Fire Resistance Period:	120 minutes
	Insulation/Integrity:	Insulation and Integrity
	Test Standard:	BS476 Part 20: 1987
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Fire Bags - 2 Hour Fire Rated

Pyroplex® fire bags are used to create temporary or permanent fire barriers in walls and floor/ceiling structures. They are suitable for use on concrete, masonry, porous concrete wall constructions and concrete floor constructions.

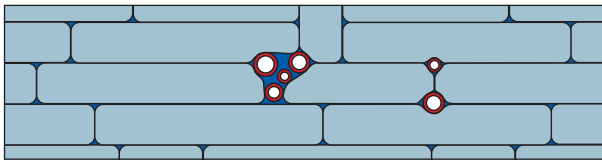
Pyroplex® fire bags are fire rated up to 2 hours and are simple to install, remove or replace. The staggering of joints between layers of fire bags is essential with a minimum overlap of 25mm recommended. They contain no respirable fibres and are unaffected by moisture, condensation and humidity.

Pyroplex® fire bags are tested to BS476 Part 20:1987 and other International Standards.

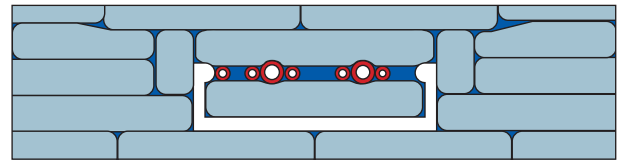
Product Data Sheet



Typical Configurations



Horizontal and Vertical Packing - Cable Penetrations



Cable Tray Application

Field of Application

Pyroplex® fire bags have been specifically designed for:

- Concrete, masonry and porous concrete wall constructions.
- Concrete floor construction.

Product Features

- Fire rating up to 2 hours.
- Simple to install, remove and replace - can be re-used with confidence.
- Maintenance free.
- Contain no respirable fibres.
- Unaffected by moisture, condensation and humidity.

Product Testing

Pyroplex® have carried out numerous independent fire resistance tests to confirm the suitability of the product and to demonstrate product compliance by utilising BS476: Part 20 1987 and other international standards.

The reports have been consolidated in an Assessment Report WF Report No. 165277 which is available on request.

Pyroplex® fire bags are compliant with CERTIFIRE TS03 for penetration sealing systems. Certificate No CF571

Product Range

Part Number	Length (mm)	Width (mm)	Thickness (mm)
PFB200	300	200	25
PFB175	300	175	45
PFB60	300	60	20

Installation Instructions

Wall Construction:

Ensure that the substrate around the penetration is free from any obstruction which may interfere with the installation of the fire bags. Shake the pillows to give an equal distribution of the infill material prior to the installation.

If the substrate is uneven it may be necessary to first render the substrate with mortar or alternative rendering media.

Lay the pillows in to the aperture with the shortest span across the width of the opening, laid in a brick format. Ensuring that the lower layer is placed overlap by the top layer.

Pack the bags in the aperture around any services to the required quantity, adding smaller pillows where necessary to fill any small voids, where the aperture is penetrated with cable services ensure that PFB60 is used.

Floor construction:

Prior to the installation of the bags in the floor penetration, ensure that a wire mesh is installed on the underside of the aperture being protected. The wire mesh sieve size measuring 50mm x 50mm and with a gauge of 5mm diameter, mild steel. Fix the mesh into place using a 50mm wide steel strap, secured using M8 x 65mm sleeve anchors, spaced at 250mm centres. Do not use fixings, which rely upon plastic or chemical fixings for retention purposes.

Ensure that the substrate around the penetration is free from any obstruction, which may interfere with the installation of the fire bags.

Shake the pillows to give an equal distribution of the infill material prior to the installation.

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Installation Instructions (cont'd.)

Prepare to lay the pillows in to the aperture with the shortest span across the width of the opening, laid in a brick format. Ensuring that the lower layer is placed overlap by the top layer.

Pack the bags in the aperture around any services to the required quantity, adding smaller pillows where necessary to fill any small voids, where the aperture is penetrated with cable services ensure that PFB60 is used.

Always ensure that any large voids are completely sealed, and that records of the installation are kept.

Health and Safety Information

For detailed information on this product please refer to the relevant Material Safety Data Sheet which is available on request or downloadable at www.pyroplex.com.

Transportation & Storage

Transport Hazards:

No regulations apply for the transport of this material. Not classified as hazardous for road, rail, sea or air transport.

Storage:

Store dry and in a cool place (not above 35°C) and ensure sufficient ventilation.

Product Guarantee

Providing the product is installed in accordance with the requirements of the guidance document the product is guaranteed for a period of 10 years.

Quality Approval

Pyroplex® Limited has a Quality Management System that meets the requirements of BS EN ISO 9001:2000, and is independently verified by BSI Quality Assurance under Certificate FM10371.

Technical Support and Guidance

Should you require any further information regarding this product please contact Pyroplex® Limited or visit our website, www.pyroplex.com where you will be able to download Material Safety and Technical Data Sheets.

Additional Information

The information contained herein is based upon the present state of our knowledge. Recipients of our Pyroplex® products must take responsibility for observing existing laws and regulations.

Due to our policy of continuous improvement Pyroplex® Limited reserves the right to amend specifications without prior notice.

Pyroplex® Jargon Buster

At Pyroplex, in response to feedback from our customers and distributors, we understand that some of the terms and references used within the passive fire protection industry, and in our documentation, often need explaining in more detail. Throughout our datasheets we include, where possible, our jargon buster panels to help clarify recurring terms and references.

What are BS references, with particular reference to BS476?

BSI British Standards is a component of the UK's National Standards Body (NSB). It represents UK economic and social interests across all of the European and International Standards Organisations and through the development of business information solutions for British Organisations of all sectors and sizes.

Standards help to make life simpler and to increase the reliability and the effectiveness of many goods and services we use. They are intended to be aspirational rather than general practice. Although the standards are designed as voluntary, laws and regulations may refer to certain standards and make compliance with them compulsory.

There are five types of British Standards:

- Specifications
- Methods
- Guides
- Vocabularies
- Codes of Practice

These all carry the prefix BS and all have the same status and authority.

There is a wide range of BS relating to fire safety regulations. One area of fire safety is BS476 which is concerned with fire testing on building materials and structures.

When the tests are undertaken the results of the tests are expressed as a number of minutes for each of the following characteristics:

- Stability
- Integrity
- Insulation

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1. Field of Application

Pyroplex® fire bags have been specifically designed to create a temporary or permanent fire barriers in compartment walls and floor/ceiling structures. Suitable for protecting cable trays and metallic piping services, which penetrate through compartment walls and floors.

2. Advantages

- Manufactured using water resilient glass fibre woven cloth
- Tear resistant and dust-free cushions specifically for dust free environments
- Easy installation, no special tools are needed
- Active material contained within a protective polyethylene sleeve
- Provide limited insulation to services when used in conjunction with the fire bags
- Service temperature conditions -20°C to 130°C
- Suitable for internal and external conditions

3. Service Penetrations

Suitable for use in solid cavities in wall and floor applications, Pyroplex® pillows can not be used in dry lined applications or be submerged in water.

4. Pyroplex® Test Reports

A number of independent fire resistance tests have been carried out to confirm the suitability of the product and to demonstrate product compliance by utilising BS476: Part 20 and other international standards.

The reports have been consolidated in Assessment Report No. WF165277 and are available upon request from Pyroplex®.

5. Specification of Fire Bags

The active element is contained within a glass-fibre woven material and is available in three sizes.

Part Number	Length (mm)	Width (mm)	Thickness (mm)
PFB60	300	60	20
PFB175	300	175	45
PFB200	300	200	25

6. Structural Applications

Pyroplex® fire bags can be used in wall and floors, of a solid construction.

Wall construction & fire resistance periods

Construction Element	Fire Resistance Period (mins)	Minimum Thickness (mm)	Material Types	Minimum Density
Wall	Up to 120	100	Solid Masonary*	no less than 680kg/m ³

* Aerated concrete, lightweight ash blocks and/or solid brick construction.

Not recommended for use in partitions dry-lined using plasterboard. Refer to WF165277 for further guidance.

7. Structural and Penetration Conditions

The following dimensions must be observed during installation of the fire bags in walls and floors.

Condition Types	Wall	Floor
Maximum Opening Size	1000m ² and must not be exceeded	1000m ² and must not be exceeded
Cable Loading	Must not exceed 50% of the total area size being protected	Must not exceed 50% of the total area size being protected
Distance between cable tray and wall/floor aperture	40mm - Minimum distance between cable trays and other through penetrations is 50mm	40mm - Minimum distance between cable trays and other through penetrations is 50mm

Maximum opening apertures

8. Consumption Guide

The consumption guides are quantities required to fill the through aperture being filled, no account has been made for provision of cable trays and other services penetrating through the aperture. Therefore, the figures are only estimated quantities.

Consumption Guide (based upon using Part No. PFB175)

Construction Type	Width (mm)	Length (mm)					
		100	300	500	700	900	1000
Wall	200	3	7	12	17	21	24
Floor	200	2	4	6	9	11	12
Wall	400	5	14	24	33	42	47
Floor	400	3	7	12	17	22	24
Wall	600	7	21	35	49	63	70
Floor	600	4	11	18	25	33	36
Wall	800	9	28	47	66	84	94
Floor	800	5	15	24	34	43	48
Wall	1000	10	38	59	82	105	117
Floor	1000	6	15	30	42	54	60

* Width and length relate to the aperture being filled.

Consumption Guide (based upon using Part No. PFB200)

Construction Type	Width (mm)	Length (mm)					
		100	300	500	700	900	1000
Wall	200	5	13	22	31	39	50
Floor	200	3	7	12	17	22	32
Wall	400	9	26	44	61	78	95
Floor	400	5	15	24	34	43	52
Wall	600	13	39	65	91	117	130
Floor	600	7	22	36	51	65	75
Wall	800	18	52	87	122	157	180
Floor	800	10	29	48	67	87	100
Wall	1000	22	65	109	152	196	217
Floor	1000	12	36	60	84	108	120

* Width and length relate to the aperture being filled.

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9. Installation Guidance Notes

Wall Construction:

Ensure that the substrate around the penetration is free from any obstruction, which may interfere with the installation of the fire bags.

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If the substrate is uneven it may be necessary to first render the substrate with mortar or alternative render material.

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Always ensure that any large voids are completely sealed, and that records of the installation are kept.

10. Supporting Constructions

Any supporting constructions shall be replaced after installation of the fire bags.

11. Material Safety Data Sheets

For detailed information on this product please refer to the relevant Material Safety Data Sheet which is available on request or downloadable at www.pyroplex.com.

12. Maintenance and Installation Records

Since the product is not subject to routine and replacement programmes, Pyroplex® recommend that all firestopping materials are checked on a regular basis to ensure that the product remains integral. Replace and fit any damaged components to reinstate the fire resistance.

13. Product Guarantee

Providing the product is installed in accordance with the requirements of the guidance document the product is guaranteed for a period of 10 years.

14. Quality Approval

Pyroplex® Limited has a Quality Management System that meets the requirements of BS EN ISO 9001:2000, and is independently verified by BSI Quality Assurance under Certificate Number FM10371. Copies of this approval are available on request.

15. Technical Support and Guidance

Should you require any further information regarding this product please contact Pyroplex® or visit our website, www.pyroplex.com.

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1. Field of Application

For fire rated floors to create a fire barrier.

2. Composition/Information on Ingredients

Contains: Treated PVC outer bag containing a blend of mineral fibre and expandable graphite.

Hazardous Components: None.

3. Possible Hazards

Principle Hazards: No significant hazard.

4. First Aid Measures

On Skin Contact: Wash thoroughly with soap and water

On Contact with Eyes: Wash for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On Ingestion: Rinse mouth immediately, do not induce vomiting, and seek immediate medical attention.

If inhaled: Not applicable in solid state.

5. Fire Fighting Measures

Suitable Extinguishing Media: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special Protective Equipment: Use self contained breathing apparatus

In the event of fire, contact the appropriate emergency services for assistance..

6. Accidental Release Measures

Personal Precaution Refer to section 7 for personal protection details.

Environmental Precaution: Dispose of in accordance with local authority requirements.

Methods for Cleaning Up: Transfer to suitable container. Dust should be damped down prior to removal with water. Refer to section 12 for suitable method of disposal.

7. Handling and Storage

Handling: No special precautions necessary unless bag splits and releases its contents. Wear suitable protective clothing.

Storage: Store in a cool, dry area, off the ground.

Suitable Packaging: Store in original packaging.

8. Exposure Controls and Personal Protection

Exposure Limit Values: Contents (man-made mineral fibre): LTEL 2 fibre/ml, 5mg/m³ (8-hour TWA reference period).

Respiratory Protection: None required.

Hand Protection: Protective gloves.

Eye Protection: None required.

Skin Protection: Protective clothing.

9. Physical and Chemical Properties

Form:	Solid
Colour:	Grey/Silver
Odour:	Odourless

10. Stability and Reactivity

Stability: Stable at normal temperatures.

Conditions to be avoided: Temperatures which lead to intumescent activation.

Materials to be avoided: None.

Hazardous Decomposition Products: In combustion emits oxides of carbon.

11. Toxicological Information

Routes of Exposure: Refer to section 4 for routes of exposure and corresponding symptoms.

Acute Toxicity: No data available at this time.

12. Ecological Information

Persistence and Degradability: Not readily biodegradable.

Bio-accumulative Potential: No data available.

Other Adverse Effects: Slightly toxic to aquatic life. Do not allow to reach ground water, water bodies or sewage systems.

13. Disposal Considerations

Disposal Operations: Dispose of in accordance with local or national legislation. Do not discharge into drains or waterways.

Disposal of Packaging: Dispose of as normal industrial waste according to local or national legislation.

14. Transport Information

Transport Hazards: No regulations apply for transport of material. Not classified as hazardous for road, rail, sea or air transport.

15. Regulatory Information

Hazard Symbols: No significant hazard.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. Additional Information

The information provided in this safety data sheet is correct to the best of our knowledge. The information given is designed only as guidance and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the next.

Due to our policy of continuous improvement Pyroplex Limited reserves the right to amend specifications without prior notice.