

QUICK VIEW	Application:	Service Penetrations - Plastic SWD Systems
	Fire Resistance Period:	120 minutes and 240 minutes
	Insulation/Integrity:	Insulation and Integrity
	Test Standard:	BS476 Part 20: 1987
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Pipe Wraps - 2 & 4 Hour Fire Rated

Pyroplex® pipe wraps have been specifically designed to re-instate the fire resistance of a wall or floor which has been penetrated by services such as plastic flammable pipes used in soil, waste and drainage services.

Pyroplex® pipe wraps are available in two fire ratings; 2 hour and 4 hour. To fit, simply fix wrap around the pipe using adhesive tab and slide along pipe into wall/floor cavity. After insertion the cavity around the pipe can be made good with filler.

Pyroplex® pipe wraps are tested to BS476 Part 20:1987 and many other International Standards.

Product Data Sheet



Typical Installation - Wall Application



Field of Application

Pyroplex® pipe wraps have been specifically designed to prevent the passage of fire and hot gases through:

- Concrete and masonry walls.
- Concrete floor constructions.
- Soil, waste and drainage 'above ground' applications.

Product Features

- Wraps have achieved a fire rating of either 2 hour or 4 hour.
- Wraps are easy to place around pipe and slide into position.
- Intumescent material is totally unaffected by water, is robust, 'non-flaking' and difficult to tear.

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 Assessment Report No. FEA/F98172 & this is available on request from Pyroplex® Limited.

Product Range

2 Hour Fire Rated Pipe Wrap

Part Number	Fire Rating	Pipe Diameter	Dia. Hole Wall/Floor
PPW55-2	2 Hours	55	70
PPW82-2	2 Hours	82	98
PPW110-2	2 Hours	110	130
PPW160-2	2 Hours	160	190

4 Hour Fire Rated Pipe Wrap

Part Number	Fire Rating	Pipe Diameter	Dia. Hole Wall/Floor
PPW55-4	4 Hours	55	70
PPW82-4	4 Hours	82	98
PPW110-4	4 Hours	110	130
PPW125-4	4 Hours	125	155
PPW160-4	4 Hours	160	190

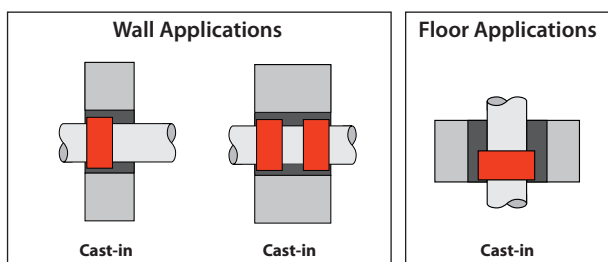
Note: Diameter hole in wall or floor for guidance only.



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Installation Instructions

1. The wall or floor must be of solid construction. The recess hole must be the correct size. See table.
2. Fix wrap around the pipe using adhesive tab and slide along pipe into wall/floor cavity to a depth of 5mm min./10mm max.
3. After insertion the cavity around the pipe can be made good with filler. The surface can then be decorated.

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.

Related Product

We recommend the use of Pyroplex® Intumescent Acrylic for residual gaps and face finishing and air tightness.

Technical Support and Guidance

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

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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Technical Data Sheet

Issue Date:	1st October 2007	Issue No.	1	Revision No.	1
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1. Field of Application

Pyroplex® pipe wraps have been specifically designed to re-instate the fire resistance of a wall or floor which has been penetrated by services such as plastic flammable pipes used in soil, waste and drainage services. The product is available for 2 hours and 4 hours fire resistance with pipe diameters ranging from 55mm through to 160mm.

2. Service Penetrations

Suitable for use on plastic flammable pipes; typical installations include soil, waste and other service applications. Piping materials include uPVC, cPVC (unplasticised and chlorinated), Polyethylene (PE) and Polypropylene (PP). Not suitable for use on metallic services.

3. Structural Constructions

Pyroplex® pipe wraps can be used in wall and floors, with a solid construction of a density not less than 650kg/m³. Pyroplex® wraps must not be used in stud wall partitioning systems.

The wall or floor shall not be less than 100mm in overall thickness. It is recommended that the overall distance between the wrap and the hole does not exceed 5mm. Failure to observe this may result in underperformance in a fire situation.

4. Pyroplex® Test Reports

Pyroplex® pipe wraps have been tested nationally and internationally using a number of product standards and test methods; BS476, EN1366 and ISO834 to confirm the fire resistance classification and fire resistance period.

Test Reports
Chiltern International Fire IF03048
Chiltern International Fire IF05061
Chiltern International Fire IF98064
Chiltern International Fire IF98066
SP, Sweden Test Report 98R1 3166B
Afiti-Licof Test Report 3971/99

The reports have been consolidated in a Global Assessment Report No. FEA/F98172 which is available upon request from Pyroplex®.

5. Intumescent Material

The intumescent material is based upon an expandable graphite, which when heated expands multi-directionally generating high pressure to fill the cavity of the plastic pipe which has been consumed in the fire. The expanded graphite exhibits sufficient char to restrict the passage of fire through the penetration for 2 hour or 4 hour fire resistance.

6. Specification of Wraps

The pipe wrap consists of a polyethylene sleeve which contains a single or multiple layers of intumescent material. For pipe diameters of 125mm-160mm the intumescent is contained within a glass-fibre woven sock. The sleeve is provided with a self-adhesive tag to aid installation.

7. Installation Guidance Notes

Check the likely direction of the fire, where this cannot be established two wraps may need to be fitted depending on the depth/thickness of the floor or wall. Information can be obtained from the Architect or specifier or by reference to the Building Control Officer or Local Building Regulations.

1. Ensure that the substrate around the penetration is free from any obstruction, which may interfere with the installation. If the substrate is uneven it may be necessary to first render the substrate with mortar or alternative rendering material.
2. Position the pipe wrap at a maximum depth of 5mm from the underside of the ceiling/floor.
3. Check that the through penetration can accommodate the wrap when fitted around the pipe. Typically the installation needs to be 10mm larger in diameter to allow the pipe wrap to be fitted easily.
4. Fit the wrap around the pipe by using the self-adhesive tag. Once around the pipe ensure that the wrap is firmly around the pipe and that the two sections of wrap meet.
5. Correct fitting can be achieved by rotating and pushing the wrap, in some instances the wrap can be slid into place. Ensure that any obstructions, which may have been moved, are refitted into place.

8. Back Filling Materials

Any residual gaps, smaller than 3mm around the service penetration will need to be filled by using Pyroplex® Intumescent Acrylic. Ensure that the gap is completely back filled. For any gaps greater than 3mm the penetration should be back filled using mortar or some form of rendering material.

9. Supporting Constructions

Any supporting constructions shall be replaced after installation of the wrap. Once the wrap has been installed no other supporting system is necessary unless otherwise specified.

10. Product Guarantee

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

11. Quality Approval

Pyroplex® Limited has a Quality Management System that meets the requirements of BS EN ISO 9001:2001, the quality management system is independently verified by BSI Quality Assurance under Certificate Number FM10371. Copies of this approval are available on request.

12. 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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Material Safety Data Sheet

Issue Date:	1st October 2007	Issue No.	1	Revision No.	1
In accordance with 91/155/EEC directive		No. of Pages	1	Page No.	1 of 1

1. Field of Application

For sealing flammable pipes - 2 hour and 4 hour

2. Composition/Information on Ingredients

Chemical Nature: Thermoplastic element composition containing intercalated graphite in a synthetic compound with the addition of fillers and process oils, presented in a polyethylene sleeve to form the product.

3. Possible Hazards

Principle Hazards: Not subject to decree of hazardous substances.

Critical Hazard to Man and Environment: Not applicable

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

Pyroplex® intumescent material is self-extinguishing.

Suitable Extinguishing Media: Water, foam, powders and dry extinguishing media.

Special Protective Equipment: Suitable forms of PPE (personal protective equipment.)

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

6. Accidental Release Measures

Personal Precaution: In the event of fire ensure sufficient ventilation.

Environmental Precaution: Do not discharge the product into drains or water courses, ensure materials are disposed of in accordance with Local Authority regulations and/or Government legislation.

Methods for Cleaning Up: No special measures necessary.

7. Handling and Storage

Handling: No special requirements. Keep away from food and drink. When handling Pyroplex® materials do not eat, drink or smoke.

Storage: Store dry and in a cool place (not above 35°C). Keep out of reach of children. Take care for sufficient ventilation.

8. Exposure Controls and Personal Protection

Respiratory protection: None normally required, when supplied in solid form.

Hand protection: Appropriate protective gloves.

Eye protection: Appropriate protective goggles.

Skin protection: None normally required.

9. Physical and Chemical Properties

Form:	Solid
Colour:	Black
Odour:	Acidic
Explosion limits:	None
Density:	1.3 kg/m ³

10. Stability and Reactivity

Conditions to be avoided: Thermal decomposition above 300°C
Hazardous Decomposition Products: Thermal decomposition, fumes contain hydrogen chloride. However, the activated graphite is effective at removing aromatic particles from smoke emissions.

11. Toxicological Information

Acute Toxicity: Not applicable in solid state.

12. Ecological Information

General Advice: Observe the legal provisions regarding the prevention of ground water and surface water as well as air. Do not discharge product into natural waters without pre-treatment.

13. Disposal Considerations

Product Packaging: Refer to local authority regulations

Recommendations: Disposal of by special means in accordance with local regulations e.g. suitable deposition

Contaminated Packaging Recommendation: Not applicable

14. Transport Information

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

15. Regulatory Information

Labelling according to EEC directives:	
National legislation/ regulations	Not applicable
VbF Classifications	None
Water hazard class	Not applicable

16. Additional Information

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