

|            |                                |  |
|------------|--------------------------------|--|
| QUICK VIEW | <b>Application:</b>            | Service Penetrations - Plastic SWD Systems |
|            | <b>Fire Resistance Period:</b> | 120 minutes and 240 minutes                |
|            | <b>Insulation/Integrity:</b>   | Insulation and Integrity                   |
|            | <b>Test Standard:</b>          | BS476 Part 20: 1987                        |
|            | <b>Page No:</b>                | 1 of 2                                     |

## Pipe Collars - 2 Hour & 4 Hour Fire Rated

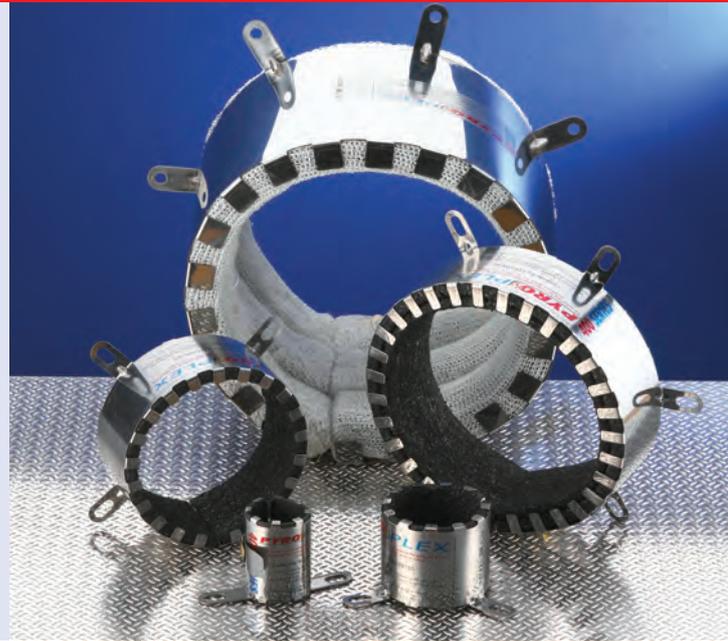
## Product Data Sheet

Pyroplex® pipe collars 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 collars will seal closed flammable pipes from 25mm to 400mm diameter and can be face fixed or set-in to a wall or ceiling structure. They are suitable for use on concrete, masonry and plasterboard partitions.

Pyroplex® pipe collars are available in two fire ratings; 2 hour and 4 hour. Each version features a tab closing device which ensures the pipe collars are quick and easy to fix in place.

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



### Typical Installation - Wall Application



### Field of Application

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

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

### Product Features

- Collars have achieved a fire rating of either 2 hour or 4 hour.
- 2 hour collar has a galvanised steel outer casing.
- 4 hour collar has a stainless steel outer casing.
- Tab closing device means collars are easy to fix in place around pipe and rotate or 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/F98105 and this is available on request from Pyroplex® Limited.

### Product Range

#### 2 Hour FR Pipe Collar with Zintec Mild Steel Galvanised Casing

| Part Number | Pipe Diameter | Collar Depth | No. of Fixing Lugs |
|-------------|---------------|--------------|--------------------|
| PPC55-2     | 55            | 60           | 3                  |
| PPC82-2     | 82            | 60           | 3                  |
| PPC110-2    | 110           | 60           | 4                  |
| PPC160-2    | 160           | 60           | 6                  |

#### 4 Hour FR Pipe Collar with Stainless Steel Casing

| Part Number | Pipe Diameter | Collar Depth | No. of Fixing Lugs |
|-------------|---------------|--------------|--------------------|
| PPC25-4     | 25            | 60           | 2                  |
| PPC32-4     | 32            | 60           | 2                  |
| PPC40-4     | 40            | 60           | 2                  |
| PPC48-4     | 48            | 60           | 2                  |
| PPC55-4     | 55            | 60           | 3                  |
| PPC68-4     | 68            | 60           | 3                  |
| PPC82-4     | 82            | 60           | 3                  |
| PPC110-4    | 110           | 60           | 4                  |
| PPC125-4    | 125           | 60           | 4                  |
| PPC135-4    | 135           | 60           | 4                  |
| PPC160-4    | 160           | 60           | 6                  |
| PPC200-4    | 200           | 190          | 7                  |
| PPC225-4    | 225           | 190          | 7                  |
| PPC250-4    | 250           | 190          | 8                  |
| PPC275-4    | 275           | 190          | 9                  |
| PPC315-4    | 315           | 190          | 11                 |
| PPC350-4    | 350           | 190          | 12                 |
| PPC400-4    | 400           | 190          | 14                 |

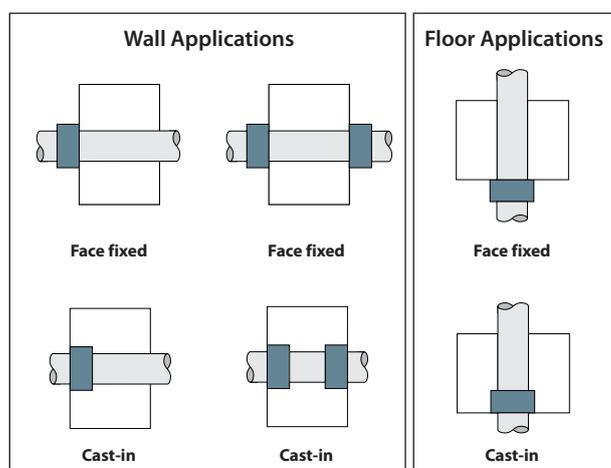
All measurements are shown in millimetres (mm).

|                   |                                |  |
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## Pipe Collars - 2 Hour & 4 Hour Fire Rated

## Product Data Sheet

### Installation Instructions



Check the likely direction of the fire. In some cases, two collars may need to be fitted to prevent the fire spread.

1. Ensure that the substrate around the penetration is flat and free from any obstructions, which may prevent the correct installation of the collar. Beware of any obstructions, which may interfere with the fixing tags. If the substrate is uneven it may be necessary to first render the substrate with mortar or some form of rendering material.
2. Any residual gaps, which are smaller than 3mm around the service penetration will need to be filled, this can be done by using Pyroplex® Intumescent Acrylic, ensure that the gap is completely back filled. For any gaps which are greater than 3mm the penetration should be back filled using mortar or some other form of rendering material.
3. Remove the Pyroplex® pipe collar from its packaging, and remove the retaining pin.
4. Using both hands open the collar by sliding the tab through the slot, this will release the collar 'open' to allow installation.
5. Using both hands fit the collar around the pipe by sliding the tag through the slot. Once through, ensure that the collar is firmly fitted around the pipe and that the two sections of the collar meet.
6. The tag can now be folded back through 180° and once completed the collar can be moved towards the substrate. Correct fitting can be achieved by rotating and pushing the collar, in some instances the collar can be slid into place.
7. Once the collar has been presented to the substrate it can be securely fitted. Using a drill, fitted with a masonry bit, place the drill in the circular-fixing hole of the fixing tag and commence drilling to the required depth. This usually is 65mm deep into the substrate and remove any debris from the hole. Using M8 x 65mm sleeve anchors (not plastic), place the anchor in the hole and using a hammer lightly tap the anchor into position. Tighten the sleeve anchor firmly to fix into position. Repeat this procedure, until all fixings tags have been fitted.
8. When the collar has been securely fitted into place any residual gaps between the collar and the substrate can be filled using Pyroplex® Intumescent Acrylic.
9. Ensure that any obstructions, which may have been temporarily moved, are refitted into place.

### 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](http://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, 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](http://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 we understand that some of the terms used in our literature may need explaining in more detail.

#### What are BS references, in particular BS476?

BSI British Standards is a component of the UK's National Standards Body (NSB). Standards help to make life simpler and to increase the reliability and the effectiveness of many goods and services we use. Although the standards are designed as voluntary, laws and regulations may refer to certain standards and make compliance with them compulsory.

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 and Insulation.

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## Pipe Collars - 2 & 4 Hour Fire Rated

## Technical Data Sheet

|                    |                  |                     |   |                     |        |
|--------------------|------------------|---------------------|---|---------------------|--------|
| <b>Issue Date:</b> | 1st October 2007 | <b>Issue No.</b>    | 1 | <b>Revision No.</b> | 1      |
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### 1. Field of Application

Pyroplex® pipe collars 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 collars seal closed flammable pipes from 25mm to 400mm diameter and can be face fixed or set-in to a wall or ceiling structure. They are suitable for use on concrete, masonry and plasterboard partitions.

Pipe collars are available in two fire ratings; 4 hours and 2 hours. Each version features a tab closing device which ensure the pipe collars are quick and easy to fix in place.

Pipe collars are tested to BS476 Part 20:1987 and many other International Standards.

### 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 (PP) Polypropylene. Not suitable for use on metallic services.

### 3. Structural Constructions

Pyroplex® pipe collars can be used in wall and floors, with a solid construction of a density not less than 650kg/m<sup>3</sup>. Can be used in stud wall partitions with a fire resistance up to 2 hours. Collars can be installed directly, face fixed or semi-cast into the penetration.

### 4. Pyroplex Test Reports

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 22, EN1366-4 and other international standards.

| Test Reports  |
|---|
| Warrington Fire Research Warres No. 101758          |
| Warrington Fire Research Warres No. 102754          |
| Chiltern International Fire Report No. IF98040      |
| Chiltern International Fire Report No. IF98041      |
| SP, Sweden Test Report No. 98R1 3166B               |
| Afiti-Licof Test Report No. 3971/99                 |
| Chiltern International Fire Report No. IF00028      |
| Chiltern International Assessment Report FEA/F98105 |

The reports have been consolidated in Assessment Report No. FEA/F98105 and this is available on 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 hours and 4 hour fire resistance.

### 6. Specifications of Metal Work

2 Hour Pipe Collar:

Zintec Mild Steel, compliant with BS EN10152:2003.

4 Hour Pipe Collar:

Stainless Steel Type 430 BA, compliant with BS EN10152:2003.

### 7. Installation Guidance Notes

| Equipment Required:  |
|--|
| Pyroplex® pipe collars   |
| Sleeve anchors, M8 x 65mm (not plastic based)                        |
| Pyroplex® Intumescent Acrylic  |
| Mastic gun   |
| Drill, with masonry facility   |
| Personal protective equipment - Gloves, eye protection and face mask |

Check the likely direction of the fire, in some cases, two collars may need to be fitted to prevent the fire spread within a compartment. This 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 flat and free from any obstructions, which may prevent the correct installation of the collar. Beware of any obstructions, which may interfere with the fixing tags. If the substrate is uneven it may be necessary to first render the substrate with mortar or some form of rendering material.
2. Any residual gaps, which are smaller than 3mm around the service penetration will need to be filled, this can done by using Pyroplex® Intumescent Acrylic, ensure that the gap is completely back filled. For any gaps which are greater than 3mm the penetration should be back filled using mortar or some other form of rendering material.
3. Remove the Pyroplex® pipe collar from its packaging, and remove the retaining pin.
4. Using both hands open the collar by sliding the tab through the slot, this will release the collar 'open' to allow installation.
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6. The tag can now be folded back through 180° and once completed the collar can be moved towards the substrate. Correct fitting can be achieved by rotating and pushing the collar, in some instances the collar can be slid into place.
7. Once the collar has been presented to the substrate it can be securely fitted. Using a drill, fitted with a masonry bit, place the drill in the circular-fixing hole of the fixing tag and commence drilling to the required depth. This usually is 65mm deep into the substrate and remove any debris from the hole. Using M8 x 65mm sleeve anchors (not plastic), place the anchor in the hole and using a hammer lightly tap the anchor into position. Tighten the sleeve anchor firmly to fix into position. Repeat this procedure, until all fixings tags have been fitted.

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|            | <b>Test Standard:</b>          | BS476 Part 20: 1987                        |

## Pipe Collars - 2 & 4 Hour Fire Rated

## Technical Data Sheet

|                    |                  |                     |   |                     |        |
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### 7. Installation Guidance Notes (cont'd.)

- When the collar has been securely fitted into place any residual gaps between the collar and the substrate can be filled using Pyroplex® Intumescent Mastic.
- Ensure that any obstructions, which may have been temporarily moved, are refitted into place.

### 8. Fixing Details

All fixing tags are elongated for aid alignment and positioning. Pyroplex® collars also can be supplied with loose fixing tags for use in restricted areas, or limited fixings can be installed.

Dependent upon the density and type of wall or floor, will determine the types of fixings that can be used. Pyroplex® recommend M8 x 65mm sleeve anchors or 70mm Tapcon anchors, all tags provided shall be fixed and secured firmly into position.

Do not rely upon anchors that rely upon plastic fixings or chemical 'cement' bonding.

### 9. Supporting Constructions

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

### 10. 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 of the wall or floor.

### 11. 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.

### 12. 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.

### 13. Technical Support and Guidance

Should you require any further information regarding this product please contact Pyroplex® or visit our website, [www.pyroplex.com](http://www.pyroplex.com).

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|            | <b>Test Standard:</b>          | BS476 Part 20: 1987                        |

## Pipe Collars - 2 & 4 Hour Fire Rated

## Material Safety Data Sheet

|   |                  |                     |   |                     |        |
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| In accordance with 91/155/EEC directive |                  | <b>No. of Pages</b> | 1 | <b>Page No.</b>     | 1 of 1 |

### 1. Field of Application

For sealing flammable pipes - 2 and 4 hour fire resistance

### 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 'steel' outercasing to form the final 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.

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. Drilling create a dust hazard.

Hand protection: Appropriate protective gloves.

Eye protection: Appropriate protective goggles.

Skin protection: None normally required.

### 9. Physical and Chemical Properties

|                          |                       |
|--------------------------|-----------------------|
| <b>Form:</b>             | Solid                 |
| <b>Colour:</b>           | Black                 |
| <b>Odour:</b>            | Acidic                |
| <b>Explosion limits:</b> | None                  |
| <b>Density:</b>          | 1.3 kg/m <sup>3</sup> |

### 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

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.