

Application:	Linear joints and penetration seals
Fire resistance period:	240 minutes
Insulation/integrity:	Integrity and insulation
Test standard:	BS EN 1366-3 and BS EN 1366-4:2009
Approval type:	CE Mark - 0843-CPD-0148

CE Intumescent Acrylic Sealant



Pyroplex[®] CE Intumescent Acrylic is used to form linear gap seals where gaps are present in wall and floor constructions and linear joints where wall and floor constructions abut. The sealant can also be used to form a penetration seal around metallic pipes and electrical cables to reinstate the fire resistance performance of wall and floor constructions, where they have been provided with apertures for the penetration of services. Pyroplex Intumescent Acrylic has slight intumescent properties that cause it to expand on exposure to elevated temperatures. The intended function of the sealant is to reinstate the fire resistance performance of fire compartment. Pyroplex CE Intumescent Acrylic can provide up to 240 minutes fire resistance integrity depending on application and backing material and has been tested to BS EN 1366-3 and BS EN 1366-4.

ETA-13/0659 & ETA-13/0660, ETA No. 026 Parts 2 & 3, Linear Joint & Gap Seal & Penetration Seal 'Pyroplex Intumescent Acrylic' Use category Z₁. See ETA 13/0659 & 13/0660 for other relevant characteristics.

FIELD OF APPLICATION

The intended use of Pyroplex CE Intumescent Acrylic is to reinstate the fire resistance performance of:

- Gaps at the head of flexible wall constructions.
- Gaps in rigid wall and floor constructions.
- Joints between rigid wall and floor constructions.
- Metal pipe services penetrations through rigid wall and floor constructions, up to 150mm in diameter, with and without combustible insulation and electrical cables.

PRODUCT FEATURES

- Fire resistance up to 240 minutes.
- Excellent adhesion with common building materials.
- Extended shelf life – 24 months.
- Movement capability +/- 15%.
- Fully paintable.
- Cartridges and foil packs are fully recyclable.
- Available in White. Other colours are available on request.

INSTALLATION INSTRUCTIONS

Installation of Pyroplex CE Intumescent Acrylic shall be conducted as follows:

1. Wear Suitable protective clothing, skin and eye protection.
2. Ensure all surfaces are clean and dry.

Linear Joint/Gap Seals

3. Position appropriate backing material within the gap at the minimum depth to allow for the specified thickness of sealant.
4. Gun the sealant into the opening ensuring that the gap is fully filled and scrape away any excess material.

Penetration Seals

3. Tightly pack mineral wool backing material (nominal density kg/m²) within the opening and around the service(s), leaving a minimum 10mm depth to the plane of the floor/wall surface at both sides.
4. Gun the sealant onto both exposed faced of the mineral wool backing and around the service(s), ensuring that good contact is achieved with both the service(s) and sides of the opening. Scrape away excess material ensuring that a minimum 10mm thickness of sealant is achieved.
5. Tool the surface of the seal as required within 30 minutes of application using a wet spatula.
6. Clean tools using soap and warm water.

PRODUCT PACKAGING

Pyroplex[®] CE Intumescent Acrylic is supplied in:



310ml cartridges



600ml foil packs

QUALITY APPROVAL

Pyroplex Limited has a Quality Management System that meets the requirements of ISO 9001, and is independently verified Certificate No. FMI0371.

OTHER 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.

TECHNICAL DATA:

PRODUCT TESTING

Pyroplex® CE Intumescent Acrylic has been tested to the requirements of BS EN 1366-4: 2009 and has the following classifications:

Linear Joints

Linear joints in rigid wall constructions - 100mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry Concrete	15mm min. depth	0 - 30mm	PE	EI - 120	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	15mm min. depth	0 - 30mm	PE	E - 240	Vertical	Movement capacity not exceeding <7.5%

Linear joints in rigid wall constructions - 150mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry Concrete	10mm min. depth	0 - 20mm	PE	EI - 120	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 20mm	PE	EI - 240	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 30mm	PE	EI - 90	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 30mm	PE	E - 240	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	15mm min. depth	0 - 30mm	MF [120mm min. depth]	EI - 180	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	20mm min. depth	0 - 30mm	PE	E - 120	Vertical	Movement capacity not exceeding <7.5%

Linear joints in rigid wall constructions - 200mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry Concrete	10mm min. depth	0 - 30mm	20mm depth Stone Wool (90kg/m ³)	EI - 240	Vertical	Movement capacity not exceeding <7.5%
Masonry Concrete	20mm min. depth	0 - 30mm	20mm depth Stone Wool (90kg/m ³)	E - 120	Vertical	Movement capacity not exceeding <7.5%

Linear joints in floor constructions - 150mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry Concrete	10mm min. depth	0 - 30mm	PE	EI - 180	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 30mm	PE	E - 240	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 30mm	PE	EI - 90	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 30mm	PE	E - 240	Horizontal	Movement capacity not exceeding <7.5%

Linear joints in floor constructions - 150mm in thickness with sealant applied to top of floor only [unexposed face] Single-sided joint configuration						
Substrate	Depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry Concrete	10mm min. depth	0 - 30mm	20mm depth Stone Wool (90kg/m ³)	EI - 240	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 30mm	20mm depth Stone Wool (90kg/m ³)	EI - 180	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 10mm	PE	EI - 120	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 10mm	PE	E - 240	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 20mm	PE	EI - 60	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	10mm min. depth	0 - 20mm	PE	E - 240	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	15mm min. depth	0 - 30mm	PE	EI - 45	Horizontal	Movement capacity not exceeding <7.5%
Masonry Concrete	15mm min. depth	0 - 30mm	PE	E - 90	Horizontal	Movement capacity not exceeding <7.5%

Linear joints in flexible wall constructions - 110mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration - Header Joints						
Substrate	Depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry Concrete to Gypsum Board	30mm min. depth	0 - 10mm	50mm (min) Steel head track filled with 50mm Stone Wool	EI - 240	Vertical	Movement capacity not exceeding <7.5%

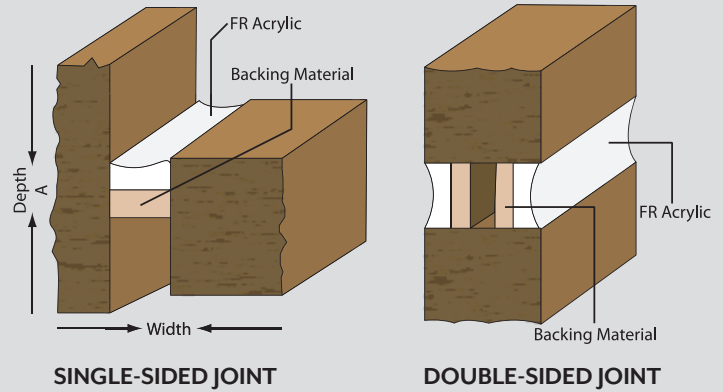
Penetration Seals

Penetration Seals in Rigid Walls 150mm in thickness (min.)				
Aperture	Sealant configuration	Services	Position of services in penetration	Fire resistance (Classification)
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 89mm diameter (3mm - 14.7mm wt)	Central	EI - 120 C/U
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 150mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel or copper pipe 35mm diameter (1mm - 14.7mm wt)	Central	EI - 90 C/U

Penetration Seals in Floors 150mm in thickness (min.)				
Aperture	Sealant configuration	Services	Position of services in penetration	Fire resistance (Classification)
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 89mm diameter (3mm – 14.7mm wt)	Central	EI – 120 C/U EI – 240 C/U
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single copper or mild pipe 35mm diameter (1.2mm – 14.2mm wt). Provided with 500mm long 19mm Armaflex insulation (continuous or interrupted through the penetration)	Central	EI – 90 C/U
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 89mm diameter (3.0mm – *14.2mm wt)	Central	EI – 240 C/U EI – 90 C/U*
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 35mm diameter (1.20mm – 14.2mm wt)	Central	E – 240
100mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single bundle of 21 x 14mm diameter (3 - 1.5mm 2 copper core/steel armoured cables (BS7671-6944XLH)	Central	EI – 240 C/U EI – 120
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single bundle of 4 x 25mm diameter (4 x 16mm 2 copper/steel armoured cables (BS7671-6944XLH) *5 x 19mm diameter (4 x 6.0mm 2 core copper/steel armoured cables (BS7671-6944 LSH)	Central	E – 240 *EI – 90
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	21 x 16mm diameter (3 x 6 copper core/steel armoured cables (BS7671-6944XLH) with 20mm separations	Central	E – 120
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single bundle of 9 x 30mm diameter 4 x 25mm copper core, steel armoured cables - BS7671-6944XLH) (3 - 1.5mm 2 copper core/ steel armoured cables (BS7671-6944XLH)	Central	EI – 60

JOINT CONFIGURATION

The fire resistance performance of the material is based upon the joint configuration and the position and location of the seal, within the construction and backing materials used.



BACKING MATERIALS

Backing materials	
PE	Polyethylene, with a nominal density of 0.35kg/m ³
MW	Mineral fibre, with a nominal density of 100kg/m ³

STRUCTURAL CONSTRUCTIONS

Pyroplex CE Intumescent Acrylic can be used in walls and floors, of a solid construction.

Construction element	Fire resistance period [mm]	Minimum thickness	Material types and minimum density
Wall and floor	Up to 120 minutes	100mm	Solid masonry work*, with a density no less than 650kg/m ³
Wall and floor	Up to 240 minutes	150mm	Solid masonry work*, with a density no less than 650kg/m ³

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

Wall construction and fire resistance periods:

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

Depth	Width			
	6mm	10mm	15mm	20mm
6mm	8.6m	5.1m	3.8m	12.5m
10mm	5.16m	3.1m	2.5m	1.0m
15mm	3.8m	2.0m	1.3m	0.8m

Linear metres per 310ml cartridge, the figures quoted estimated and for guidance only.

MAINTENANCE AND INSTALLATION RECORDS

This product is not subject to routine and replacement programmes, Pyroplex Limited recommend that all firestopping materials are checked regularly to ensure that the product remains integral.

PRODUCT GUARANTEE

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

TECHNICAL SUPPORT AND GUIDANCE

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

MATERIAL SAFETY DATA:

COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health hazard within the meaning of the CHIP Regulations or which are assigned Occupational Exposure Limit values:

Name	Einics No.	Conc. range	Symbol	R-phrases
Di Isononyl Phthalate	249-079-5	2.5-10%	-	-

POSSIBLE HAZARDS

Principle hazards: Not classified as dangerous according to the CHIP Regulations.

FIRST AID MEASURES

General advice: In all cases of doubt or when symptoms persist, seek medical attention.

On skin contact: Wash skin thoroughly with soap and water or a recognised skin cleaner. DO NOT USE SOLVENT OR THINNERS.

On contact with eyes: Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes holding eyelids apart, and seek medical advice.

On ingestion: If accidentally swallowed wash mouth with water and give water to drink. DO NOT induce vomiting.

If inhaled: Move patient to fresh air. No emergency care anticipated.

FIRE FIGHTING MEASURES

Suitable extinguishing media: Alcohol resistant foam, CO₂, powder, and water spray/mist.

ACCIDENTAL RELEASE MEASURES

Exclude non-essential personnel. Do not allow to enter drains or water courses. If the product enters drains or sewers, the local water company should be contacted immediately. In the case of contamination of streams, rivers or lakes, the relevant Environment Agency.

HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in areas of storage and use. Never use high pressure to empty, the container is not a pressure vessel. Ensure good housekeeping and regular safe removal of waste materials.

Storage: Shelf life 24 months. Observe label precautions. Store between +5°C and +35°C in a dry well-ventilated place away from sources of heat. Protect from frost. Keep out of reach of children. Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure controls: Provide adequate ventilation during application and drying. Where practicable this should be achieved by the use of local exhaust ventilation. If this is not sufficient to maintain concentration of solvent vapours below the relevant Occupational Exposure Limit, suitable respiratory protection must be worn.

Occupational exposure controls: All Personal Protective Equipment [PPE], including Respiratory Protective Equipment [RPE] used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH regulations.

Respiratory protection: If exposure to hazardous substances cannot be controlled by the provision of natural ventilation e.g. work in enclosed areas, exposure should be controlled, where reasonably practicable, by the use of mechanical exhaust ventilation; when this is not reasonably practicable, suitable respiratory protective equipment must be worn.

Hand protection: When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection.

Eye protection: Eye protection should be worn.

Skin protection: Cotton or cotton/synthetic overalls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a recognised skin cleaner.

PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Thixotropic paste
Specific gravity	1.62 - 1.66 @ +20 °C
Solubility in water	Yes, not suitable

STABILITY AND REACTIVITY

Stable under the recommended storage and handling conditions. In a fire, hazardous decomposition products such as smoke, carbon dioxide, carbon monoxide and oxides of nitrogen may be produced. Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of an exothermic reaction.

TOXICOLOGICAL INFORMATION

There is no data available on the product itself. The product has been assessed following the conventional method in CHIP and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and chronic effects of components from short term and long term exposure by oral, inhalation and dermal routes of exposure and eye contact.

ECOLOGICAL INFORMATION

The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply.

The product has been assessed by the conventional method in CHIP and is not classified as dangerous for the environment.

DISPOSAL CONSIDERATIONS

Dispose of in accordance with local authority requirements.

TRANSPORT INFORMATION

Transport within the users premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Onwards transport subsequent to purchase: Transport to be in accordance with ADR for road, IMDG for sea and ICAO/IATA for air.

Proper shipping name: The product is not classified as dangerous for carriage.

REGULATORY INFORMATION

The product is determined as not being dangerous according to the CHIP Regulations.

The provisions of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation.