

Pyromas A[®]

INTUMESCENT ACRYLIC SEALANT

CI/SfB	(K2)
August 2000	

Introduction

Pyromas A is an intumescent sealant manufactured from water based acrylic emulsion containing fillers, that combine to provide high levels of fire resistance.

Description

Pyromas A is a one part sealant system which is solvent free. When subjected to fire, the chemical mechanism emits low smoke and an inorganic meringue is formed.

The intumesced product provides fire sealing in building joints up to 35mm wide.

Pyromas will not slump in joints up to 35mm wide.



Performance

Fire resistance tests have been conducted to BS476: Part 20: 1987 achieving 4 hours fire resistance in gaps up to 35mm wide.

Tests were conducted between a number of substrates including Hardwood, Softwood, Steel, Concrete, Vermiculite Board and Aerated Concrete.

Applications

Pyromas A is suitable as a permanent fire seal in low movement joints, door frame to wall gaps, dry lining and partitions.

Construction

Joints in structures should be dry, clean, and free of friable materials.

Pyromas A should be inserted to the correct depth to ensure the necessary fire performance (see table left). To improve surface finish, smooth with a spatula. Cured Sealant can be overpainted.

Packaging

Pyromas A is supplied in 310ml cartridges to fit standard skeleton mastic guns. Box quantities are 25 per box.

Estimating Quantities

To calculate the required number of cartridges required to fill a gap use the following equation:

$$W \times D \times L = N$$

310

- W** = Width of gap in mm
- D** = Depth of gap in mm
- L** = Length of gap in mtrs
- N** = No. of cartridges

Orientation	Gap Surface Combination	Gap Width (mm)	Seal Depth (mm)	Integrity (mins)	Insulation (mins)
Vertical	AC/AC	35	20	240	92
Vertical	AC/AC	15	15	240	92
Vertical	AC/AC	12	12	240	Unclassified
Vertical	AC/AC	15	10	240	40
Vertical	AC/AC	20	15	240	49
Vertical	AC/AC	35	20	240	92
Horizontal	Hardwood/Softwood	25	25	66	64
Horizontal	Hardwood/Softwood	10	15	63	40
Horizontal	Softwood/Softwood	10	35	91	81
Horizontal	Softwood/Softwood	25	35	74	74
Vertical	Softwood/Softwood	25	35	82	82
Vertical	Softwood/Softwood	10	35	87	80
Vertical	Hardwood/Softwood	10	15	59	37
Vertical	Hardwood/Softwood	25	25	61	51
Horizontal	Steel/Steel	25	25	240	404
Horizontal	Steel/normal concrete	25	25	240	48
Horizontal	Normal Concrete/Normal Concrete	30	25	240	48
Horizontal	VermiculiteBoard/AC	25	25	240	48
Vertical	Steel/Steel	25	25	240	58
Vertical	Steel/normal concrete	25	25	240	52
Vertical	Normal Concrete/Normal Concrete	30	25	240	33
Vertical	VermiculiteBoard/AC	25	25	240	58

AC denotes aerated concrete

Technical Services

Mann McGowan can advise on the application of Pyromas A intumescent sealant. Please contact our Technical Department.

Physical Data

Colours	White (Standard) Brown & Grey (Non Standard)
Storage Temp.	+5° to +25°C
Reaction Temp.	120°C
Application Temp.	+5° to +30°C
Volume Expansion	150%
Tack Free Time	10-60 (minutes depending on conditions)
Shelf life	12 months
Joint movement	+/- 10%

Chemical Resistance

Pyromas A shows good resistance to a wide range of commonly found chemicals. Care must be taken to avoid prolonged contact with hydrocarbon based products.

Corrosion

Slight oxidation on some metals may occur but not enough to warrant concern.

Health & Safety

Internal Contact

Do not ingest

External contact

Always wash hands thoroughly after handling, with soap and water.

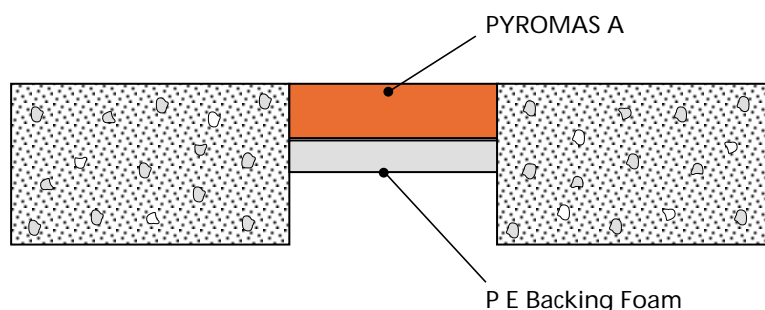
Eye Contact

Wash with copious amounts of water.

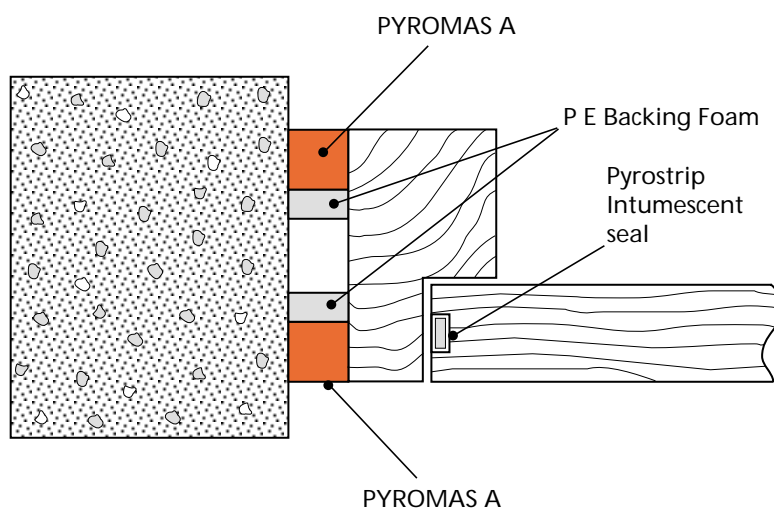
All of the information, specifications and illustrations contained in this literature is given as guidance only and does not form part of any contract.

CONSTRUCTION EXAMPLES

1 MOVEMENT JOINT (CONCRETE - CONCRETE)



2 FIRE DOOR FRAME JOINT (CONCRETE - TIMBER)



3 FIRE SCREEN/WALL JOINT (CONCRETE - STEEL)

