

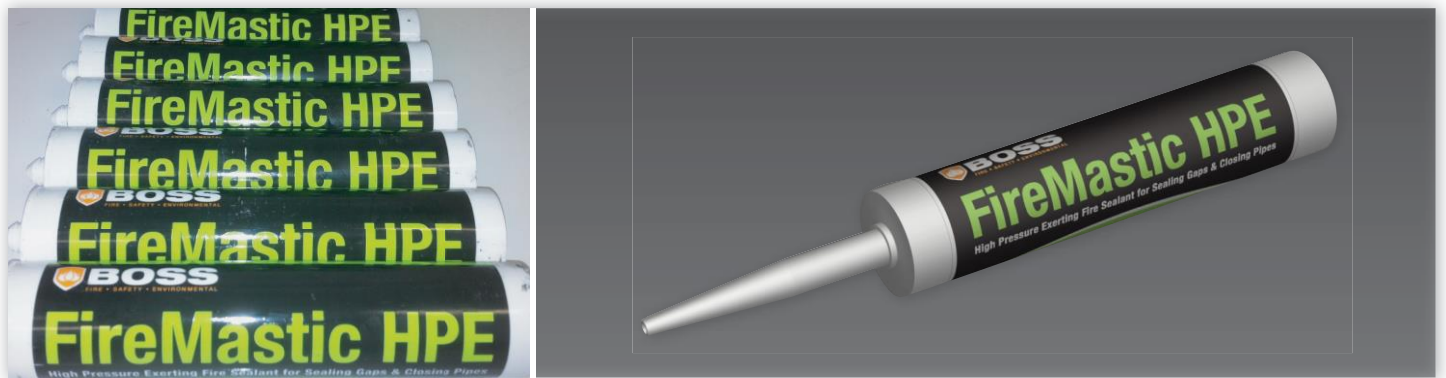


FireMastic-HPE

High Pressure Expanding Mastic

Advanced graphite-based intumescent sealant for closing of pipes, sealing of linear gaps and protecting penetrations from fire and smoke

Approved to AS1530.4:2005 and ISO 6944



Technical Data Sheet

ADDRESS

Unit 8 / 15-23 Kumulla Road
Caringbah NSW 2229, AUSTRALIA

MAILING ADDRESS

PO Box 707, Caringbah NSW 1495, AUSTRALIA

INTERNATIONAL CALLERS

+612 9531 8591

PHONE

1300 50 BOSS

FAX

1300 60 BOSS

EMAIL

info@bossfire.com.au

WEB

www.bossfire.com.au

KEY BENEFITS

- High pressure 40x expansion rate
- Closes down PVC and Rehau pipes
- 2 hours fire rating on cables and pipes
- Approved to be use on Armaflex lagging
- Approved on masonry, Hebel and plasterboard

INTRODUCTION



FireMastic-HPE is a graphite-based, thixotropic, one-part acrylic emulsion that is designed to resist the passage of fire and smoke. Under heat, FireMastic-HPE will expand with enough pressure to close PVC pipes and seal around cables and metal pipes to maintain the integrity and insulation performance of the seal, yet without placing any unnecessary pressure on the building substrate.

FireMastic-HPE is supplied in cartridges suitable for caulking via an applicator gun or also available in buckets. It has excellent non-slump properties coupled with the ease of application due to its water-based nature.

The sealant is intended for use in either linear gap seals or services penetrations through walls where fire integrity and insulation needs to be preserved. Under fire conditions the product expands up to 40 times its volume and exerts pressure to the surrounding substrates leading to closure of the penetration. The integrity and insulation is then maintained by the stability of the remaining product char.

PRODUCT APPLICATIONS & ADVANTAGES

- Sealing combustible and non-combustible penetrations.
- Sealing combustible pipes.
- Sealing around metal pipes with insulated lagging remaining on the pipe.
- Sealing of cables.
- Suitable for use in irregular applications.
- Excellent insulation properties.
- Easy clean up with water and odourless.
- Long life and paintable.
- Smoke, gas and water tight.
- Approved on a wide range of masonry, Hebel and plasterboard applications.

PHYSICAL PROPERTIES

Description	Aqueous thixotropic paste
Density	1.3g/cm ³
Colour	Grey
Application temperature	+5°C to 30°C
Expansion onset temperature	180°C
Expansion	Up to 40 times
Skin time	15 minutes @ 25°C/50%RH
Shelf life	18 months when unopened
pH	8 - 9
Testing	AS1530, EN1366

INSTALLATION

- Ensure the opening and any substrate which the product will come into contact with is clean, free from dust and loose particles.



- Use open cell foam backing rod to offer base support for Sealant to sit against.
- Sealant should be applied around the service(s) on both exposed faces where the seal width:depth ratio is 1:1.



- The sealant can be tooled and smoothed with a pallet knife using water.



- All dimensions and tolerances should be in line with the recommended guidelines as dictated by the relevant test data and assessments documents

APPROVED APPLICATIONS

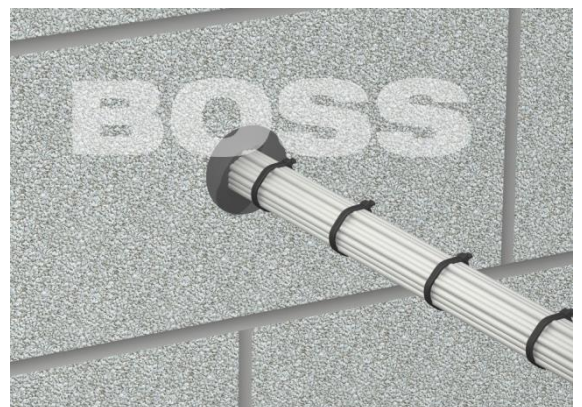
- Rehau / Cross-Linked Polyethylene (XLP)



- Insulated or Uninsulated Copper or Steel pipe



- Bundles of cables



SPECIFICATION

Approved to AS1530.4-2005 by CSIRO (report FCO2990/4227 and CSIRO report FSP1583)

Service	Seal / Penetration Size	Wall Type	Seal Size	FRL
120min Wall System:				
Copper pipes with Armaflex and insulated lagging	Pipe 15mm – 60mm dia Lagging up to 124mm dia	Plasterboard	15 x 24mm deep 20 x 24mm deep	-/120/120
Steel pipes with Armaflex and insulated lagging	Pipe 15mm – 60mm dia Lagging up to 124mm dia	Plasterboard	15 x 24mm deep 20 x 24mm deep	-/120/120
Copper pipes – uninsulated	15mm up to 60mm dia	Plasterboard	15 x 24mm deep 20 x 24mm deep	-/120/0*
Steel pipes – uninsulated	15mm up to 60mm dia	Plasterboard	15 x 24mm deep 20 x 24mm deep	-/120/0*
Copper pipes with Armaflex and insulated lagging	Pipe 15mm – 60mm dia Lagging up to 124mm dia	Masonry	15 x 24mm deep 20 x 24mm deep	-/120/120
Steel pipes with Armaflex and insulated lagging	Pipe 15mm – 60mm dia Lagging up to 124mm dia	Masonry	15 x 24mm deep 20 x 24mm deep	-/120/120
Copper pipes – uninsulated	15mm up to 60mm dia	Masonry	15 x 24mm deep 20 x 24mm deep	-/120/0*
Steel pipes – uninsulated	15mm up to 60mm dia	Masonry	15 x 24mm deep 20 x 24mm deep	-/120/0*
Copper pipes with Armaflex and insulated lagging	Pipe 15mm – 60mm dia Lagging up to 124mm dia	Aerated Concrete Block (Hebel)	15 x 24mm deep 20 x 24mm deep	-/120/120
Copper pipes with Armaflex and insulated lagging	Pipe 15mm – 60mm dia Lagging up to 124mm dia	Aerated Concrete Block (Hebel)	15 x 24mm deep 20 x 24mm deep	-/120/120
Copper pipes – uninsulated	15mm up to 60mm dia	Aerated Concrete Block (Hebel)	15 x 24mm deep 20 x 24mm deep	-/120/0*
Steel pipes – uninsulated	15mm up to 60mm dia	Aerated Concrete Block (Hebel)	15 x 24mm deep 20 x 24mm deep	-/120/0*
Linear Joint Seals	Up to 20mm wide Up to 120mm deep	Masonry to masonry Concrete to concrete Plasterboard-plasterboard Any combination above	20mm wide 25mm deep	-/120/120
Cables Bundled and insulated with: PVC EPR/PO XLPE/EVA	Bundled of 10 or less sheathed up to 5mm x 1.5mm ² Pairs up to 1mm x 95mm ² A1, A2, A3 or B cables	Plasterboard Masonry Concrete Block Hebel	Fill available void to 25mm deep	-/120/120

90min Wall System:

Plastic Pipes – Rehau Cross-Linked Polyethylene (XLP)	Pipe 20 – 25mm up to 63mm wall hole	Plasterboard Aerated Concrete Block (Hebel) Masonry	21.5 x 25mm deep 19 x 25mm deep	-/90/30
--	--	---	------------------------------------	---------

60min Wall System:

HVAC Copper and PVC Conduit Paircoil Insulated copper pipes with cable inside PVC pipe	Copper paircoil 6.35mm and 9.52mm with insulation. 1.5mm ² 2C+E TPS cable 16mm dia PCV conduit	1hour plasterboard cavity wall All services clustered together	80mm dia hole 13mm deep seal	-/60/60
---	--	---	---------------------------------	---------

*uninsulated metal pipe penetrations generally not required to have insulation criteria, as per BCA C3.15

SAFETY CAUTION

As FireMastic-HPE contains graphite to provide its high performance intumescence, it is therefore conductive of electricity. Caution is needed to ensure FireMastic-HPE does not come into contact with live current or electrically charged equipment as electric shock may occur. When using FireMastic-HPE to firestop around power cables, check to make sure that the cables' insulation is free from defects.

For more information on this please contact BOSS Fire & Safety Technical Services on 1300 502 677.

HEALTH AND SAFETY

To learn more about the safe handling of FireMastic-HPE, see the Material Safety Data Sheet available at www.bossfire.com.au or scan the 3D barcode below with a compatible QR Reader.

Scan here to view MSDS:



LIMITATION

BOSS Fire & Safety Pty Ltd has provided the above technical information in good faith and to be best of its knowledge. This information was deemed to be correct at the time of publication. Should any data come to BOSS Fire & Safety's attention relating to the fire resistance or performance of the product described, BOSS Fire & Safety reserve the right to amend this report.

BOSS Fire & Safety strive to constantly improve and developed products so this information may change without notice.

FURTHER TECHNICAL INFORMATION

For additional technical information on the performance of FireMastic-HPE or other BOSS products please contact our Technical Services team on:

Phone 1300 502 677
Fax 1300 602 677
Direct +612 9531 8591
Email info@bossfire.com.au
Web www.bossfire.com.au