ASTROFLAME
PASSIVE FIRE STOP SYSTEMS

Product Data Sheet

Astro PFP FR Graphite

Revision 3 - 26th March 2026



UKCA 0843-UKTA-23/0029
0843-CPR-1320

CE CE-ETA - 22/0638
CE-2531-CPR-CXO10380

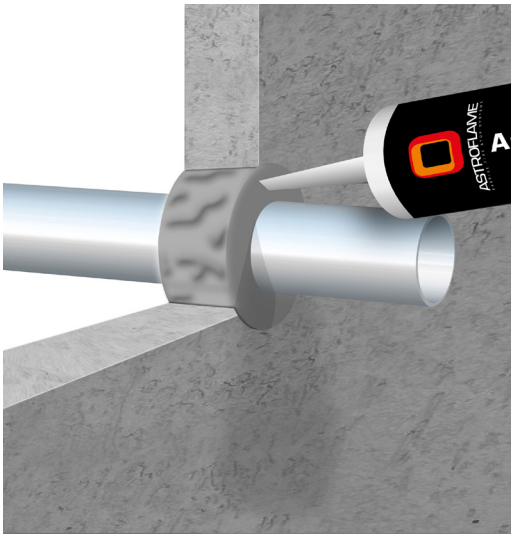
Astroflame (Fireseals) LTD : Unit 8 , I.O Centre : Stephenson Road : Segensworth : Fareham : PO15 5RU
T - **01329 844500** : **W** - **www.astroflame.com** : **E** - **sales@astroflame.com**

Astro PFP FR Graphite

High Pressure Sealant



- Classified in most constructions for plastic pipes, cables and combustible pipe insulations.
- Easy to apply.
- High sound insulation.
- Low emissions - environmentally and user friendly.
- Simple to apply with a smooth surface finish.
- Permanently flexible – will accommodate movement up to 12.5%.
- No priming necessary for application to most materials; see the installation instructions for further details.
- Suitable for most surfaces, included concrete, bricks, Leca, steel, wood, gypsum, glass, plastics and most non-porous surfaces.
- Hardens quickly, tack free after 1 hour.
- The fire performance specification of the joint filler has been derived when the joint filler has been allowed to cure for 30 days.
- 30 years working life.
- **Now Extended to 18 months** storage time (under correct conditions).



Product Description

Astro PFP FR Graphite is a high specification formulation designed to prevent the spread of fire, smoke and gases through openings in fire rated walls and floors. Astro PFP FR Graphite expands when it is subjected to fire and closes openings around penetrations when any combustible or low temperature melting materials have burnt away.

Astro PFP FR Graphite is designed to fire seal difficult services which traditional fire rated mastics do not achieve such as large plastic pipes.

Astro PFP FR Graphite can be used with a suitable filling material, i.e. stone wool or Astroflame Backing material in order to ensure correct width to depth ratio and to reduce the shrinking of the sealant during curing. Minimum depth and maximum width of the joints are included in the installation instructions. Thermal activation takes place at 150 °C when the material will expand (intumesce) to prevent the passage of fire and smoke for periods up to 4 hours.

Astroflame Fireseals Ltd
Unit 8 I.O Centre
Stephenson Road
Segensworth, Fareham
Hampshire, PO15 5RU

CE
CE-2531-CPR-CXO10380
CE-ETA - 22/0638
ASTRO PFP FR GRAPHITE
"See ETA - 22/0638 for relevant characteristics"

UK CA
0843-CPR-1320
0843-UKTA-23/0029
ASTRO PFP FR GRAPHITE
"See UKCA - 23/0029 for relevant characteristics"

Sound Insulation

Description	Sound reduction
Single sided seal ≥ 25mm depth	Rw 53 dB
Double sided seal ≥ 25mm depth	Rw > 53 dB

Astro PFP FR Graphite has been tested at EXOVA BM Trada (UKAS accredited); according to EN ISO 10140-2:2010. Usage of any backing material is optional, due to the tests being conducted with sealant only.

Emission data (indoor air quality)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	51 µg/m³	20 µg/m³
TSVOC	< 5 µg/m³	< 5 µg/m³
VOC w/o NIK	< 5 µg/m³	< 5 µg/m³
R Value	0.17	0.14
Formaldehyde	< 3 µg/m³	< 3 µg/m³
Acetaldehyde	< 3 µg/m³	< 3 µg/m³
Carcinogenic	< 1 µg/m³	< 1 µg/m³
n.d. or < means not detected		

Regulation or Protocol	Conclusion
French VOC Regulation	A+
French CMR components	Pass
Italian CAM	Pass
ABG / AgBB to the guidelines of DIBt	Pass
Belgian Regulation	Pass
EMICODE	EC 1 PLUS
Indoor Air Comfort GOLD®	Pass
Blue Angel (DE-UZ 123)	Pass
BREEAM-International	Exemplary Level
BREEAM-NOR	Pass
LEED v4.1	Compliant

Astro PFP FR Graphite has been tested by Eurofins Product Testing; reports available upon request.

Pipe end configurations

When testing pipes, one can choose not to cap (or close) the pipe, or cap the pipe inside the furnace, or outside the furnace, or on both sides. The configuration chosen depends on the intended application of the pipe and/or the installation environment. The code defining if a pipe is capped is stated after the fire classification. For instance EI 60 C/U which means the pipe was capped inside the furnace, and uncapped outside the furnace. The test configuration defines the approvals possible.

Our engineering judgment based on EN 1366-3:2009 are:

Intended use of pipe		Pipe end condition [4]
Rainwater pipe, plastic	At drainage	U/U [1]
	Not at drainage	C/C [2]
Drainage or sewage pipe, plastic	Ventilated drain	U/U [1]
	Unventilated drain	U/C [1]
	Drain w/water trap	U/C [1]
	Not at drainage	C/C [2]
Pipe in closed circuit (water, gas, air, electricity etc.)		C/C [2] [3]
Flue gas recovery system pipe, plastic		U/C [1]
Pipe with open ends and ≥ 50cm length on both sides, plastic		U/U [2]
Pipe supported by suspension system, metal	Fire rated support	C/U [1]
	Non-fire rated	U/C [1]
Waste disposal shaft pipe, metal		U/C [1]

[1] Suggested in EN 1366-3:2009. [2] Astroflame's judgment based on tests.
[3] Metal pipes should have fire rated support. [4] U/U classified fire seals cover C/U, U/C and C/C. C/U classified fire seals cover U/C and C/C. U/C classified fire seals cover C/C.

Air Permeability

Positive Pressure (Pa)	Leakage (m^3/h)	Negative Pressure (Pa)	Leakage (m^3/h)
25	0.00	25	0.00
50	0.00	50	0.00
100	0.00	100	0.00
200	0.00	200	0.00
300	0.00	300	0.02
450	0.03	450	0.06
600	0.13	600	0.12

Astro PFP FR Graphite has been tested at Warringtonfire Testing and Certification Ltd (UKAS accredited); according to EN 1026: 2016.

Technical Data

Condition	Ready for use, water based graphite sealant
Specific gravity	1.56 – 1.60
pH	8.00 – 9.50
Reaction to fire	B - s1, d0
Flash point	None
Expansion rate	Approx. 1 : 25
Non-sticky	60 minutes
Film forming	30 minutes
Totally hardened	3 to 5 days depending on thickness and temperature, full cure may take up to 30 days
Flexibility	Low to medium 12.5% according to ISO 11600
Durability	Class Z_2 intended for internal conditions with humidity classes other than Z_1 excluding temperatures below O °C
Thermal conduct.	0.85 W/mK (+/- 3%) @ 20mm depth
Storage	18 months stored in unopened cartridges. To be stored in temperatures between 5˚C and 30˚C
Working life	30 years
Service temp.	-15 to +75°C
Application temp.	+4 to +30°C
Compatibility	Suitable for use with most materials, but should not be used In direct contact with bituminous materials
Limitations	Should not be used in permanently damp areas or in joints with excessive movement, joints at floor level or joints below the ground
Classification	CE-marked - Sealant for fire rated penetrations class EI 240
Colours	Dark grey (may grow darker during curing)

Availability

Product Code	Product Description	Colour	Sizes
AFPFPGRAPH	Astro PFP FR Graphite - Cartridges	Dark grey	310 ml

To Order & Specify

Please contact us and quote the following information - Quantity / Product Code / Product Description / Size
Typical example:- 25 / AFPFPGRAPH / Astro PFP FR Graphite - Cartridges / 310 ml

>> Tel: 01329 844 500 or >> Email: sales@astroflame.com

Installation

We have technical representatives who provide assistance in the selection and specification of the products on this site and should be consulted for exact installation and product suitability. Ensure an early engagement with ourselves, designers, main contractor and specialist installers before any installation. Other trades and/or manufacturers may need to be consulted. For in-depth information, specification and technical advice please call our Head Office on tel 01329 844 500 or email sales@astroflame.com

Maintenance

All interested parties, designer, specifier, main contractor and specialist installers should provide access to allow the fire stopping seals to be regularly inspected and maintained, as well as records kept of such maintenance at minimum periods of 12 months, as required by the Regulatory Reform Order, and repaired if necessary. Reference should be made to ASFP TGD 17 – Code of Practice for the Installation and Inspection of Fire Stopping.

Competency

It is vital that those entrusted to design or install a fire stopping product have the necessary levels of competence to undertake the task professionally and thoroughly. The level of competency required will be commensurate with the expected complexity of the building. All designers must eliminate, reduce or control foreseeable risks that may arise during installation, construction or maintenance when preparing or modifying designs. Clients should ensure that the principal designer and principal contractor carry out their duties under CDM regulations. The ASFP foundation course in passive fire protection provides essential knowledge as part of demonstrating competency and understanding in this key fire protection specialism.

Additional Notes

Please refer to the ETA/UKCA sheet for fields of application for this product. For further information on installation requirements please refer to the manufacturer of the services and the wall/floor specification to ensure the compatibility of this product, if in doubt please contact the technical team with services and wall/floor specification on: T: 01329 844 500 or E: sales@astroflame.com

Health and Safety

Please see (SDS) Safety Data sheet - This can be requested from our sales team T: 01329 844 500 or E: sales@astroflame.com

As part of our policy of ongoing improvements, we reserve the right to modify, alter or change product specifications without giving notice. Product illustrations are representations only. All information contained in this document is provided for guidance only, and as ASTROFLAME (FIRE SEALS) LTD has no control over the specific application or installation methods of the products, or of the prevailing site conditions, no warranties expressed or implied are intended to be given as to the actual performance of the products mentioned or referred to, and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given of products mentioned or referred to herein.

The above information to the best of our knowledge is true and accurate and based upon current test data and is supplied for your guidance only. Customers should satisfy themselves to the suitability of the product based on the products limitation of applications and that the product is fit for purpose for their intended use and no guarantee is given or implied since the conditions of actual use are beyond our control. ASTROFLAME (FIRE SEALS) LTD, disclaim any liability for loss, damage or other expense arising from the use of information, data or products mentioned or referred to and reserve the right to change any details or specifications without notice. If you are in any doubt as to the suitability of this product for your intended application please contact our technical team on 01329 844500 or email sales@astroflame.com and we will contact you.