

QuelStop HPE Graphite Sealant INSTALLATION INSTRUCTIONS

This installation guide is intended for general information only and all details should be checked against relevant supporting test evidence and certification.



QuelStop CE Marked HPE Graphite Sealant forms part of a lifesaving system designed to prevent the spread of fire through compartment walls and floors, it is therefore essential that the product is installed in a responsible and workmanlike manner with life safety in mind.

QuelStop HPE Graphite Sealant can be used for sealing directly around services such as cable, cable bundles, trays, ladders and non-combustible pipes, either as part of a seal directly within the wall or floor substrate or as part of a QuelStop Fire Batt Seal in either case the annulus (the width of the seal around the service) and the depth of the seal is critical in providing the specified fire performance.

Key considerations before installing QuelStop HPE Graphite Sealant:

- ❗ Ensure that the aperture or services in question are tested with QuelStop Intumescent HPE Graphite Sealant and the site conditions are within the application specification.
- ❗ The supporting construction must be installed in accordance with the manufacturer's guidelines and must be capable of achieving the required fire rating of the firestop.
- ❗ All services should be adequately supported either side of the firestop to ensure that no load is transferred onto the firestop seal.
- ❗ Check that any services are compatible with the sealant - note for example that CPVC sprinkler pipes should not come into contact with non-approved sealants, QuelStop HPE is however approved for use and compatibility by both Spears and Lubrizol.
- ❗ Ensure there is adequate space and accessibility to apply and tool the sealant.
- ❗ Consider the use of backing materials to ensure the correct depth of the QuelStop HPE Graphite Sealant is applied in order to achieve the required performance.
- ❗ Where the QuelStop HPE Graphite Sealant is being used in conjunction with other Quelfire products such as QuelStop Fire Batt, this document should be read in conjunction with the relevant supporting details and installation guides.

Installation principles of QuelStop CE Marked HPE Graphite Sealant

- 🔧 Before application, surfaces should be free of any dust, grease, debris and bond breaking contamination and consideration could be given to the use of a primer. On good, solid substrate priming is not normally required, though you should refer to the substrate compatibility requirements.
- 🔧 The sealant should not be applied if the ambient temperature is below 5°C or above 35°C, as the adhesion may be impaired.
- 🔧 The sealant should be pumped into position directly from an appropriate gun and installed to the specified annulus or gap.
- 🔧 A spatula, or similar instrument, can be used to gently compact the seal and ensure a smooth finish.

QuelStop HPE Graphite Sealant has been tested in a number of different scenarios both in conjunction with QuelStop Fire Batt as a single, double and pattress batt installation and also direct to the wall or floor substrate. The following pages show the following typical scenarios but should be read in conjunction with the standard installation details and other supporting documentation which sets out the scope of application and performance information:

- 🔧 QuelStop HPE Graphite Sealant to services penetrating concrete floors with correct size hole.
- 🔧 QuelStop HPE Graphite Sealant to services penetrating walls with correct size hole.
- 🔧 QuelStop HPE Graphite Sealant & QuelStop Fire Batt to services penetrating walls with an oversized hole.

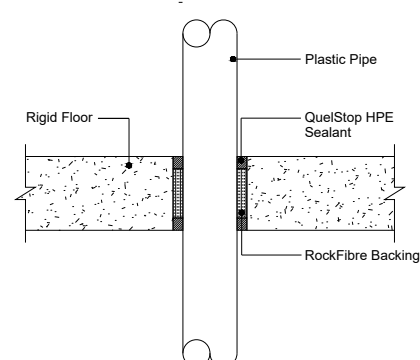
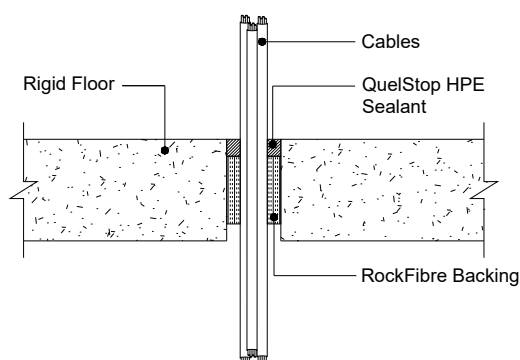
Installation of QuelStop HPE Graphite Sealant to services penetrating concrete floors with correct size hole.

Quelfire Products used:

- 🔧 QuelStop HPE Graphite Sealant

1. Check the services and aperture is clean of any debris and remove dust from all edges.
2. Install rockfibre backing material as per the specification by packing around the services and ensuring that the rockfibre backing material is recessed from the face of the seal by the required depth of QuelStop HPE Graphite Sealant.
3. Apply the QuelStop HPE Graphite Sealant to the annulus around the services ensuring the full depth is achieved using a suitable applicator gun.
4. Use a spatula to lightly compact the seal and smooth off the seal leaving a professional and neat finish.
5. Where a double seal is required – both sides of the floor - repeat steps 1-4 on the other side of the floor.

Typical QuelStop HPE Sealant direct to floor installation detail:



QuelStop HPE Graphite Sealant

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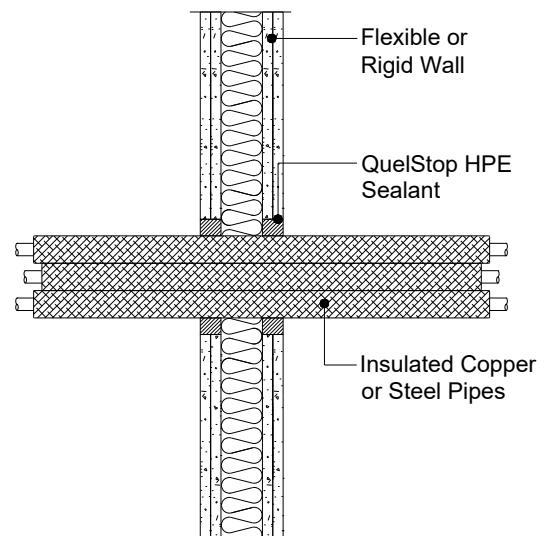
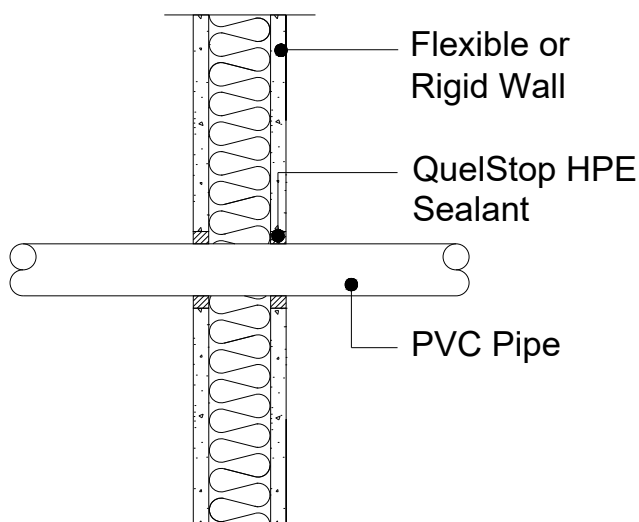
QuelStop HPE Graphite Sealant to services penetrating walls with correct size hole.

Quelfire Products used:

 QuelStop HPE Graphite Sealant

- 1.** Check the wall specification is in accordance with the tested scope of application and any required insulation/backing material is installed.
- 2.** Check the services and aperture is clean of any debris and remove dust from all edges.
- 3.** Ensuring that the insulation/backing is not restricting the aperture and that it is recessed from the face of the seal by the required depth of QuelStop HPE Graphite Sealant.
- 4.** Apply the QuelStop HPE Graphite Sealant to the annulus around the services ensuring the full depth is achieved using a suitable applicator gun.
- 5.** Use a spatula to lightly compact the seal and smooth off the seal leaving a professional and neat finish.
- 6.** Repeat steps 1-5 on the other side of the wall.

Typical QuelStop HPE Sealant direct to wall installation detail:



QuelStop HPE Graphite Sealant INSTALLATION INSTRUCTIONS

QuelStop HPE Graphite Sealant & QuelStop Fire Batt to services penetrating walls and floors with an oversized hole.

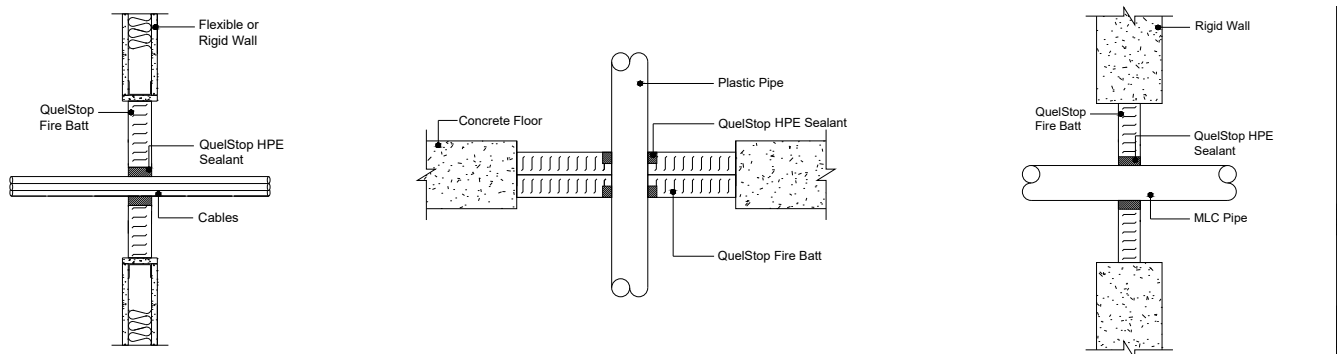
Quelfire Products used:

-  QuelStop HPE Graphite Sealant
-  QuelStop Fire Batt
-  QuelStop Intumescent Acrylic Sealant

The core principles behind installing QuelStop HPE Sealant in conjunction with QuelStop Batt, in whatever scenario the batt is installed, (Single, Double or Pattress) remain the same:

- 1.** Check the services and sides of the aperture is clean of any debris and remove dust from all edges
- 2.** Cut the QuelStop Fire Batt to suit the aperture making sure allowance is made for the correct annulus (and depth) of QuelStop HPE Sealant – this may be between 10 and 20mm annulus and may be between 25mm deep and the full depth of each batt. Refer to the specific tested detail to determine the specific requirements.
- 3.** Install the QuelStop Fire Batt and Acrylic Sealant system making reference to the relevant documentation and installation guides.
- 4.** Apply the QuelStop HPE Graphite Sealant to the annulus around the services ensuring the full depth is achieved using a suitable applicator gun.
- 5.** Use a spatula to lightly compact the seal and smooth off the seal leaving a professional and neat finish.
- 6.** Finally, touch up any damage to the QuelStop Fire Batt coating that might have occurred during installation with Ablative Coating or QuelStop Acrylic Sealant.
- 7.** Where a double batt or pattress batt seal is required, repeat steps 1-6 on the other side of the wall or floor.

Typical QuelStop HPE Sealant and Fire Batt installation detail:



QuelStop HPE Graphite Sealant

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ADDITIONAL DATA

Density	Ca. 1.23 – 1.33g/cm ³
Shore Hardness A	68
Colour	Black
Expansion Temperature	Ca. 180°C
Expansion Pressure	7 bar
Expansion	Up to 20 times
Skin Time	15 minutes at 25°C / 50% Relative Humidity
Cure Time	1.7mm per 24 hrs
Shelf Life	18 months unopened
pH	06 - 09
Air Permeability	600Pa – 100Pa 11.1/16.7 m ³ /h/m ²
Acoustics	Rw(C;Ctr): 52 (-1;-6) dB
Durability	Type Z ¹ , intended for use in internal conditions

Packaging & Storage:

QuelStop HPE Graphite Sealant is supplied in disposable cartridges, packaged in cardboard boxes and must be stored in ventilated, cool and dry conditions.

Recommended temperature ranges for storage and application are between +5 °C and +35 °C.

Health & Safety:

QuelStop HPE Graphite Sealant should be handled and applied wearing appropriate protective clothing, including gloves, dust mask, safety glasses, to guard against dust inhalation, eye and skin irritation.

For further information, please refer to the Material Safety Data Sheet, available on request.

Technical Support & Guidance:

Should you require any further information regarding this product, please do not hesitate to contact the technical department at Quelfire Ltd.

Tel: 0161 928 7308. Email: technical@quelfire.co.uk

Please be aware that this document is intended for general information only and all details should be checked against all relevant supporting test evidence, certification and installation guidelines.

Use of alternative components or deviations from the instructions in any way is likely to mean that the installation will not comply with the assessed rating.

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