

FAQ's Fire

1. what is the position on: service penetrations to partitions?

Knauf Service penetrations should be installed to manufacturer's instructions with alignment to flexible wall constructions (drywall). Due to the number of service types and levels of penetrations it is important that the installers of both drywall and fire stopping are collaboratively working to ensure compartmentations are maintained.

ASFP: Service penetrations to partitions, where they pass through fire resisting walls (both for means of escape or compartment) must be fire stopped with suitable materials/products to prevent the spreads of fire and smoke.

Fermacell UK Where required, clarity should be obtained to distinguish between the responsible limits of the partition and the Fire stopping.

Fire stopping is designed to deal with the 'holes' that are required to pass through these partition systems, and thus clear and concise advice should be asked for and qualified. This will then help reduce confusion on site, and ensure that the correct 'Fire Stopping' products are used in the correct manner they were designed and tested for.

2. what is the position on: Proprietary and non-proprietary fire stopping, Putty pads, what has been tested? How would site conditions impact performance?

Knauf We would recommend following proprietary type solutions where possible to ensure test certification and warranties can be produced. If non-proprietary fire stopping is used it is important to ensure product certification can be produced to warrant the product for its given application. i.e. following the relevant BS & EN standards for service penetrations etc. Again, it is important that the installers of both drywall and fire stopping are collaboratively working to ensure compartmentations are maintained.

ASFP: Approved Document B contains tables of non-proprietary materials which can be used to fire stop around some penetrations. ASFP believes that these are acceptable

for some penetrating services e.g. using sand and cement around a metal pipe in a masonry wall, but are not in others e.g. plastic pipes in a masonry wall or in dry lining.

In general, we would support a tested solution and preferably a product that has third party certification e.g. from BRE, CERTIFIRE, IFC, UL etc. and is installed by specialist third party contractors also holding third party certification for installation. We realise that not all fire-stopping is installed by specialists and so we are working on training course for this which we intend to launch in the autumn.

3. what is the position on: Deflection heads, intumescent mastic at abutments to other systems what is tested what is known what is assessment?

FIS Manufacturers will test their systems using intumescent products, which should be used when installing a manufacturers fire rated partition. Intumescent products can perform in different ways i.e. some solidify and expand whilst others can act as a lubricant, therefore it is important that the correct intumescent product is correctly installed, any deviation from this without a 3rd party assessment or retest would NOT stand up to scrutiny.

4. what is the position on: floor tracks?

Knauf Floor tracks should be installed as per manufacturer's instructions. They are generally embedded on sealant/or mastic beads to help minimising acoustic transfer and are fixed using appropriate fixings depending on the substrate material.

It is important to note that the location of tracks can vary depending on sequence of works and site performances.

Fermacell UK Manufacturers details on the installation of Head and Floor tracks should be followed. Though most likely are similar, there may be some slight differences that need to be allowed for. In addition, the way that some mastics are used can impact on the acoustic performance of systems as a 'flanking' issue.

ASFP: I would suggest the same answer as for head tracks? I would defer to FIS/British Gypsum/Promat etc. guidance. It is of less importance from a fire safety perspective than head tracks as there is less pressure for smoke leakage.

5. what is the position on: What is needed for fire performance in a lab and what is the reality on site?

FIS A laboratory test is there to provide a consistent method of testing the performance of a product. The automotive sector now makes it clear that the results from a standard

test for fuel efficiency may not be replicated during normal driving conditions; which is ok as it doesn't compromise safety. Similar laboratory tests for safety ENCAP are stringent enough to ensure peoples safety. The fire tests for partitioning are onerous with temperatures of +900oc being reached within minutes.

ASFP: The fire test (BS 476 and EN 1363 cellulosic curve fire resistance) is usually much more severe than a 'real' fire. The issue is not the test per se, but the way in which what was tested is not replicated on site. This happens for a number of reasons:

- poor design (wrong product specified, installation that is almost impossible to build)
- HVAC and other services being put in same opening (should be separate)
- Poor installation
- No inspection, no sign off
- Action of follow on trades
- Lack of maintenance...

Fermacell UK There can be a lack of understanding of the system being designed leading to assumptive details or junctions that in reality do not work, our advice is to check with the manufacturer if you are in any doubt.

6. what is the position on: What is critical to fire performance and what is fit for purpose?

FIS Any performance product should be independently tested as a system and be able to be demonstrated that it will perform in the configuration being proposed. It should be constructed strictly in accordance with the manufacturer's instructions. There is a question on how to assess the competency of the operatives installing the products and how to assess their familiarity with the individual details of that products installation process.

ASFP: We would add that it is impossible to test every variation of fire-stopping and so assessments or engineering assessments are used to extend the range of end-use situations covered. Sometimes these assessments are project specific. They are usually undertaken by UKAS accredited laboratories or suitably qualified independent fire consultants and are as valid as test reports if undertaken correctly. Personally, I am uncomfortable with such assessment being undertaken by manufacturers, because although they may be very technically competent and they know their product inside out, I am unhappy with the conflict of interest, but this is not an ASFP position.

As stated earlier we prefer Passive Fire Protection to be installed by third party certificated installers (BRE, FIRAS, IFC

etc), but recognise that other trades do it and so we need to address this and are via training we are developing.