

ASFP Advisory Note 13:

ASFP position on Partial Penetrations through walls

Introduction

A partial penetration is a service(s) or device(s) that penetrate(s) one face of a separating element but does not pass completely through it as for example a cable tray or a pipe might do. Partial Penetrations are usually electrical or mechanical equipment which penetrates one face of the separating element, often at the termination of a service e.g. an electrical socket, a switch box or recessed media equipment etc.

Regulation/Requirements

In line with the general principle of fire stopping as stated in Approved Document B to the Building Regulations in England & Wales and national equivalent documents in Scotland and Northern Ireland; where a partial penetration is installed, products, systems or materials, shall be used at the position where service(s) penetrate through separating elements, to reinstate the fire resistance performance of the element. By the nature of this requirement, the systems will therefore be proprietary and supported by the manufacturers' test data.

Although there is currently no specific test standard in place for partial penetrations, except for testing them within a wall system to BS EN 1364-1, a new standard is being developed under the BS EN 1366 series. The sealing products are required to have demonstrated their ability to reinstate the performance of the relevant separating element and construction type, with the required service type, when subjected to European fire resistance test methods. At present, the general principles of BS EN 1366-3 penetration sealing standard are being utilised for the fire testing of these systems.

ASFP Advice

In order to run a service or device through a separating element, flexible or rigid, it is obvious that a hole to be made in it. This shall require some form of fire stopping to be provided to maintain the fire resistance performance of the element. This fire stopping or partial penetration sealing system can take a variety of forms from putty pads, sealants, to intumescent devices. Such sealing systems also need to be suitable for use in lightweight flexible partitions.

The installation of a “metal” galvanised back box, plastic box, light switch or any other device does not mitigate the need for the installation of suitably tested fire protection systems unless proven by test. The installed system needs to maintain the integrity and insulation of the wall.

ASFP further recommends that these products be 3rd Party certificated as fit for purpose and installed by third party certificated installers operating under a UKAS accredited third party certification scheme for contractors.

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