

TGN-002

Partial Penetrations Guidance Note

Introduction

Technical guidance notes serve to validate and elaborate on the proven fire stop systems offered by FSi Limited. These notes offer valuable advice to specifiers, designers, and installers, focusing on specific applications, configurations, and aspects relating to fire stopping systems and materials. The document provides guidance on practical and effective recommendations, aiding in the selection criteria for a project. Furthermore, this insightful advice is instrumental for building owners and individuals responsible for the maintenance and installation of fire stopping systems.

The purpose of this document is to address the scenarios on a project in which partial penetrations are present. Ordinarily, we would expect services to penetrate compartment lines fully from one side of the substrate to another. However, in the instance of partial penetrations, as their name suggests, services will only partially penetrate a substrate.

FSi Promat Guidance

In the instance where partial penetrations are required to be fire stopped on site, FSi Promat recommend utilising a solution tested to BS EN 1366-3 for a fully penetrating service, given the absence of a specific test standard for partial penetrations. This is providing that there is a mechanism to test the service penetration in question.

This recommendation aligns with the ASFP Advisory Note 13. This advisory note identifies that a tested solution for a full penetration, if used on a partial penetration, would be expected to perform equally provided the substrate and service type is consistent.

Guidance Notes

The ASFP Advisory Note 13 has been issued and states the ASFP's position on the best practice in relation to partial penetrations. This document identifies the requirement for any system proposed, to retain both the integrity and insulation of the substrate in which the system is installed. They acknowledge that whilst there is no specific test standard for this scenario, at date of document issuance, the ASFP advises adhering to the general principles of BS EN 1366-3.

Additionally, whilst there is no direct test standard to follow, products and systems installed should all still achieve 3rd Party Certification as a measure of best practice, if a 3rd party certification is applicable for the product in question.

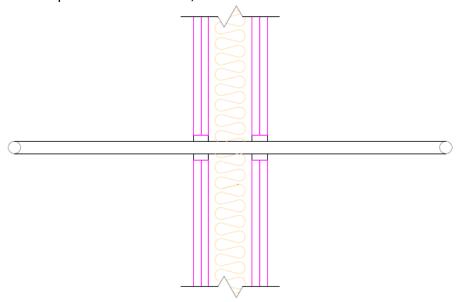
Technical Documents - Association for Specialist Fire Protection (asfp.org.uk)





Annexure

Annexure 1: An example of a tested detail, tested to EN 1366-3.



Annexure 2: An example of a non-tested partial penetration detail, using the principles obtain from the tested detail in Annexure 1.

