



INTERNATIONAL FIRESTOP COUNCIL

THE Source of Firestop Expertise®

ASTM E3157-2019: New Firestop Installation Guide provides wealth of expertise in a concise document

A landmark publication came out in June 2019, when ASTM published ASTM E3157, “Standard Guide for Understanding and Using Information Related to Installation of Firestop Systems”. This new 22-page Standard Guide contains information that will help construction project stakeholders avoid many common firestopping errors. The stated purpose of the industry task group in developing ASTM E3157, was to create a compendium of general information and strategies to ensure better firestopping and help mitigate foreseeable installation problems. The guide mentions the concept of coordination between contractors that make the holes in fire-rated construction and contractors who must seal them up, ensuring they are properly firestopped. Some of the concepts covered in the Standard Guide include the following:

- The important nature of pre-construction meetings to coordinate between those who will make the openings and those that will ultimately be required to seal them.
- The essentials of planning penetrations up front, including adequate spacing in assemblies constructed using frangible materials such as gypsum board.
- Proper surface preparation techniques to ensure good adhesion and material performance.
- The effects of “movement-during-cure” and how to mitigate the deleterious impact that can happen when penetrants move and sealants are not fully cured.
- Avoiding complicated arrangements of running piping through walls or floors, including attempting to pass through at 90 degree angles vs. angled penetrations.
- Warning to not mix products from different manufacturers in the same openings.
- Use of proper bond breakers, and suggestions on what to avoid to prevent failures.
- The importance of sealant tooling and placement.
- Shrinkage of firestop materials and how different materials may ultimately dry or cure.



We encourage all those involved with firestop specification, planning or installation to purchase a copy of [ASTM E3157 \(\\$108\) at: https://www.astm.org/Standards/E3157.htm](https://www.astm.org/Standards/E3157.htm)

While the Standard Guide is not completely exhaustive, it does reinforce the idea that firestop contractors and firestop inspectors play extremely important roles on construction projects stating, “Many times the experience of the firestop contractor and firestop industry inspector can help identify and avoid potential issues associated with the installation of the firestop systems.”

To summarize, the Guide is an introduction to firestopping, a dictionary of useful firestop terms, a primer on the background codes and test standards that define modern firestopping and a short book full of tips for the successful planning and installation of penetration firestopping. It is indispensable for anyone who must install firestopping as part of their job responsibilities and can help guide them to understand the complexities they need to address to become experts. This 22-page guide will gladly give way to in-depth training.

The Guide does not specify who should be contractually responsible for each of the steps that lead to a proper and reliable firestop installation, as it is a technical guidance document, not a business guidance document. Work scope and responsibilities should be dealt with in specifications and in contracts.

By using this Standard Guide, construction project stakeholders can vastly improve the firestopping process and ensure that public safety is served.

