NEW FIRESTOP SPECIAL INSPECTION STANDARDS

Firestopping is a critical area of fire protection in commercial buildings to limit the spread of building fires. This is the reason NYC Department of Buildings changed their new 2014 code to require firestop special inspections utilizing the ASTM firestop inspection standards for all buildings. According to these standards, the inspector shall provide visual and/or destructive testing for a percentage of the firestop systems. The New ASTM firestop inspection standards have proven to be an excellent standard to protect the liability of the special inspection agency and general contractors. To reduce your liability these standards need to be adhered to, so NYSSPE has supported firestop special inspection training for its membership.

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Firestop Special Inspection Requirement:

Firestopping, is becoming more and more of a hot button item these days. Why is that? Because of its extreme importance in fire resistive floors and walls. Firestopping is the use of materials for building; such as ducts, pipes, etc. that prevent flames, heat and gases from spreading through penetrations of ceilings, walls and floors to restore its full fire rating. Not only do many buildings not have the proper firestop systems installed, but we are finding that it is inexperienced workers from each trade installing the firestop systems, leaving their walls, joints, ceilings, etc. exposed and at great risk. When a building is at risk, people’s lives are at risk of injury and fatality, that could lead to litigation for your company. To reduce this liability the NYC Department of Buildings has recently required firestop special inspections according to the new ASTM firestop inspection standards.

Review Some of the Highlights of the New ASTM Firestop Inspection Standard:

You may be aware that the International Building Code used in the US has included new firestop inspection standards since the 2012 codes were adopted. These standards were put in place to help increase the efficiency of firestop systems and inspections. The ASTM firestop inspection standards have been also adopted into the 2014 NYC codes. The two ASTM Standards are E-2174 (Penetrations) and E-2393 (Joints) that are in place for special inspectors to adhere to. These two standards are similar and important to understand, starting with Conflicts of Interest. The firestop inspector needs to be completely independent of and divested from the installer, contractor, manufacturer, or supplier.

Inspection Documents, Materials and Schedule

When complying with these ASTM firestop inspection standards, it is important to understand the requirements for inspection documents, materials, and the inspection schedule and process. Inspection documents are required to be submitted for review. The firestop inspector will be provided with these approved documents at least 10 days prior to the inspection.
Special Inspector Responsibilities

There are various responsibilities for the Firestop Special Inspector. One important task is that the firestop inspector verifies that the materials and systems used for firestopping are in compliance with the tested and listed systems. The inspector and installers coordinate their schedules for the installation and the approximate timeline of the inspection process. If any originally agreed upon items need to be changed, the installer is responsible for notifying the inspector within one day, so arrangements can be made.

Methods of Inspecting Firestop Systems

Testing of firestop systems shall be conducted in the following manner:

Methods of Inspection for penetration systems (E 2174):

- **Visual Inspection** - onsite during installation and randomly witness a minimum of 10% of each type of fire stop being installed.
- **Destructive Inspection** – post installation inspection, which requires destructive type verification of the fire stop and repair of the fire stop. A minimum of 2%, but not less than one, of each type of fire stop shall be inspected per floor or for each area of a floor when a floor is larger than 10,000 sq. ft.

Method of inspection for Joint Systems (E 2393)

- **Visual Inspection** – randomly witness a minimum of 5% of total linear feet of each type of fire resistive joint system being installed.
- **Destructive Inspection** – post installation inspection should consist of a minimum of one sampling per type of joint system per 500 linear feet.

Special Inspection Reports

Inspection forms are an important element following the inspection process. The last step is completing a proper final report. ASTM Standard Final Reports need to contain each of the following: Name and Address of Inspector, design professional, AHJ, and each firestop installer, as well as the prime contractor. The report will need an Executive Summary outlining verification method used to ascertain compliance and deficiencies along with all daily inspection reports.

Below is a little intro of our firestop instructor:

Our Trainer, Brice Miller has provided firestop training to over 4000 Firestop Special Inspectors and Code Officials in over 40 states of the US and has been providing this training for 12 years. He has also had the opportunity to serve as the Executive Director of the International Firestop Council.