



NEWSLETTER



GEOTECHNICAL  
CONSULTANTS INC.

October 2024

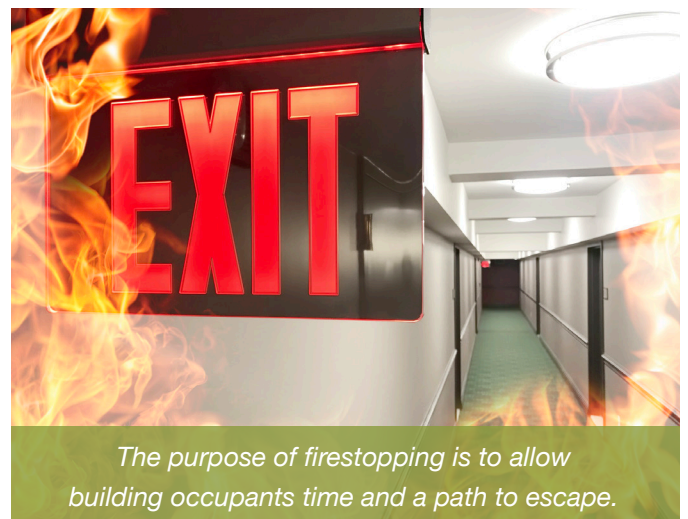
## Firestopping is Everyone's Responsibility

October is Fire Prevention Month, and the perfect time for building developers, owners, architects, construction managers and trade contractors to review essential information about firestopping assemblies and required inspections.

The purpose of firestopping is to allow building occupants time and a path to escape.

Fire- and smoke-rated assemblies are required by building codes to create compartments which limit fire or smoke spread and provide time, paths and prescribed maximum path lengths for building occupants to escape safely.

The goal of firestop systems is to increase the time for safe evacuation of the building occupants by containing a fire to its zone of origin for a specified time.



*The purpose of firestopping is to allow building occupants time and a path to escape.*

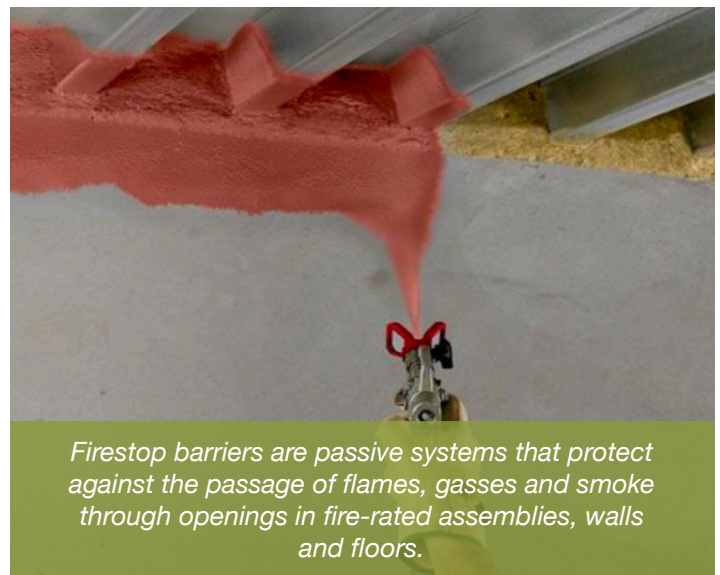


## Both active and passive fire protection methods are needed:

- **Active fire suppression** aims to suppress fire after it starts. Mechanical sprinkler systems, gaseous fire suppression, and AFFF are considered active fire suppression, not firestop.
- **Passive fire protection** works to contain fire, smoke and gases. Passive systems including firestop, protect against the passage of flames, deadly gases, and toxic smoke through openings that are created for penetrations, joints and gaps in fire-resistant walls, floors and floor/ceiling and floor/curtain wall assemblies.
- **Fire protection redundancy is necessary.** Active fire suppression methods such as fire sprinklers, suppress the flames, but a passive firestop system is also needed to seal penetrations and joints to help contain fire and the products of combustion within the compartmentalized area in which it started, increasing time to escape.



*Active fire suppression includes mechanical sprinkler systems and gaseous fire suppression.*



*Firestop barriers are passive systems that protect against the passage of flames, gasses and smoke through openings in fire-rated assemblies, walls and floors.*

## Every building trade is tasked with installing firestop associated with their work.

Joints and penetrations by pipes, cables, ducts, busways, cable trays, and miscellaneous structural elements through fire- and smoke-rated wall and floor/ceiling assemblies **destroy the assembly rating**.



*Fire-rated wall and floor systems are defeated if joints and penetrations allow fire and combustible gasses to make "end runs" around rated systems and assemblies. Every building trade is responsible for installing firestop associated with their work.*

- Tested/listed firestop methods are installed to **restore the rating of each assembly**. Building codes require third-party tested and listed systems to be installed whenever fire-rated construction is compromised by such openings.
- In addition, dynamic joints and penetrations (where floors adjoin curtain walls, non-load bearing walls meet lateral support structure, and penetrations by pipes subject to dynamic loads) require firestop systems that move.



## IBC requires third-party Special Inspections for firestopping.

As with all Special Inspections, the Registered Design Professional completes Part 1 of the local municipality's Statement of Special Inspections (SSI) form as part of the building design process.

Part 1 includes a complete list of work requiring Special Inspections and the frequency of inspections as required by Chapter 17 of the Ohio Building Code and the local municipality.

Some Special Inspection Code categories specifically related to fire resistance and firestopping include:

- Sprayed fire-resistant materials
- Mastic and intumescent fire-resistant coatings
- Fire-resistant penetrations and joints
- Fire-resistant rated assemblies
- Perimeter joint/gap systems such as the juncture between curtain walls and floors/walls



*Third-party special inspections are required to confirm that tested and listed proven firestop are properly installed in each required location.*

Third-Party Special Inspectors are required by Code to be engaged by the building owner or owner's agent to confirm that tested and listed proven firestop are properly installed in each required location.

## Firestop special inspections are required for occupancy permit.



*Performing the required firestop Special Inspections throughout a construction project can help avoid the denial of occupancy permits, project delays, and costly rework.*

An occupancy permit will not be issued without a completed and approved Final Report For Special Inspections.

If any Special Inspections were skipped or not performed during construction, building officials will require that components be exposed for inspection, even if that means completed work must be demolished to allow access.



## UFGS Recognizes International Firestop Council (IFC) Firestop Special Inspectors.

The Master Update to the Unified Facilities Guide Specifications posted on August 15, 2024, now allows individuals who have passed the IFC Firestop Special Inspector Exam to perform firestop inspections on Department of Defense related projects.

This change allows ICF Special Inspectors, including GCI's Jack Chapin, Jr., IFC Premier Certificate holder, to pursue work within facilities managed by the U.S. Army Corps of Engineers, the Naval Facilities Engineering Systems Command, and the Air Force Civil Engineer Center.

GCI is a Special Inspector member of the IFC, an association of manufacturers, distributors, installers, inspectors, and associated testing companies, code officials and other professionals engaged in passive fire protection materials and systems in North America and abroad.

### To learn more:

Contact GCI's team to learn about third-party firestopping inspection services.

**Bob Hiles** - [bhiles@gci2000.com](mailto:bhiles@gci2000.com)

**Matt Justus** - [mjustus@gci2000.com](mailto:mjustus@gci2000.com)

**Jack A. Chapin, Jr., AIA, NCARB, BEC2, IFC Premier Certificate** – [jchapin@gci2000.com](mailto:jchapin@gci2000.com)



**INTERNATIONAL FIRESTOP COUNCIL**

THE Source of Firestop Expertise®

**MEMBER**



*Jack A. Chapin, Jr., AIA, NCARB, BEC2,  
IFC Premier Certificate Inspector*



## Staff Promotions

### **Matt Justus Promoted to Manager of Field Services**

Matt Justus, P.E., has been promoted to Manager of Field Services. Matt works alongside CEO Bob Hiles to manage field operations and technicians performing construction observation and materials engineering testing services, special inspections, and building envelope consulting. He will further develop field services policies and procedures, help expand service offerings, and sustain client relationships.



Matt Justus, P.E

### **Ben Herington Promoted to Steel Department Supervisor**

Ben Herington, AWS-CWI, ICC S1/S2, ASNT ACCP Level II, has been promoted to Supervisor of the NDE Structural Steel Department. Ben has been with GCI since 2018, working as a Senior Steel Supervisor. Glenn McLaughlin, immediate past NDE Supervisor, remains with GCI as a senior steel business consultant.



Ben Herington, AWS-CWI, ICC S1/S2, ASNT ACCP Level II



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