

## Saving lives

## through passive

fire protection



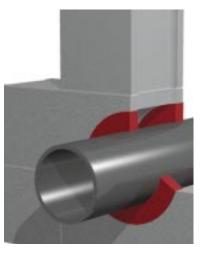


# Saving lives through passive fire protection

#### What is "Passive" fire protection?

Passive fire protection is an integral part of fire protection engineering. Firestop systems protect against the passage of flames, deadly gases and toxic smoke through openings that are created by penetrations, joints and other breeches in fire-resistive walls, floors and floor/ceiling assemblies. The integrity of fire-rated assemblies is restored by firestop systems. Other materials such as duct

enclosures, mineral wool insulation, and fire-rated drywall are also critical in forming "passive" fire resistive compartments in buildings. Building codes require third-party tested systems to be installed wherever fire-resistive construction is compromised by openings.



## What are "third-party" tested systems?

Building codes require that firestop systems be tested in accordance with ASTM E814, E119, E1966. Third party testing laboratories such as Underwriters Laboratories or



Omega Point Laboratories, perform those tests. Manufacturers specify the system to be tested, and if the system performs to the particular test standard, a system is sublished. The installation must comply with the details of

published. The installation must comply with the details of the tested system.

#### **Passive Fire Protection in the Codes**

Tested systems are required to be installed in accordance with model building codes such as:

| NFPA  | Life Safety 101              |
|-------|------------------------------|
| BOCA  | National Building Code (NBC) |
| ICBO  | Uniform Building Code (UBC)  |
| SBCCI | Standard Building Code (SBC) |
| IAPMO | Uniform Plumbing Code        |
| IBC   | International Building Code  |
| NFPA  | Building Code 5000           |

Codes are not always easy to interpret, and are constantly changing. That's why IFC is committed to educating the construction marketplace as to the importance and the nature of the codes. New codes are emerging, and the debate over the roles of active and passive fire protection in modern construction continue to escalate.

Regardless of the debate, the IFC remains steadfast to its belief that the best fire protection systems are those that integrate the benefits of both active and passive fire protection. In short: "A Balanced Approach"

Formed in 1990, IFC's mission is to promote the technology of fire containment in modern building construction through research, education, and development of safety standards and code provisions.

### What is the IFC?

The International Firestop Council is a not-for-profit association of manufacturers,

distributors, and installers of fire protective materials and systems. For designers, contractors and inspectors, IFC offers tools such as the *Recommended IFC Guidelines for Evaluating Firestop Systems Engineering Judgments*. This document is an important guide to understanding what to do when third-party testing does not cover an application. The *Building Inspection Guidelines for Firestopping* offers inspectors a guide to building code requirements and recommendations for the inspection process.









## Balanced Fire Protection

## "Active" vs. "Passive" fire protection: Both are necessary?

A balance fire protection system is comprised of three key elements: Detection, Suppression, and Containment. Without any one of these elements, total protection would be compromised.

"Active" fire suppression includes mechanical systems that are designed to extinguish fires after they have started, such as sprinklers. But "active" system do not control propagation of smoke and gases, the leading cause of death in fires.

"Passive" fire protection functions to contain fires within the areas in which they start, preventing loss of life by preventing the products of combustion (smoke, hot gasses and flames) from spreading throughout a building. "Passive" fire protection refers to fire-resistive construction and the code-required, third-party tested, firestop systems that are installed to restore the rating of fire-resistive construction.

Fire is a dangerous enough phenomenon that redundancy in fire protection is necessary. Having "passive" protection in place helps assure building occupants that there will be time to exit occupancies before gasses, fire and smoke spread throughout the building.

## Who installs "Passive" fire protection products?

Firestop is not a separately licensed construction trade, so in reality, many different trades can install their own firestop. It is common to find electricians, plumbers or drywallers who are qualified to install firestopping systems. In many jurisdictions, specialty firestop contractors relieve the other trades of the firestop installation.

For a building owner or architect, it makes sense to insist on a qualified installer to do the firestopping, ensuring single source liability for firestopping. Factory



Mutual, in conjunction with the Firestop Contractors International Association (FCIA), offers accreditation of firestop contractors to assure quality firestop applications.





## Membership Benefits

There are many outstanding benefits of IFC membership designed to enhance your career and enable you to be a leader in the fire protection industry:

#### Information

As an IFC Member, you'll learn about critical code and industry changes before they happen, giving you time to plan and be a leader.

#### Shape your market

- Development of educational programs
- Participation in technical committees
- Directing the goals of the Council, with your ideas and input

#### Network

Meet industry peers and contacts. Relationships are invaluable to business and careers

#### Certificate

Receive a membership certificate and a letter of appreciation for your support.

#### **IFC Logo**

Use the IFC logo on your brochures, letterhead, business cards, and other communications.

#### Newsletter

Receive newsletters and updates containing information about the latest developments in fire safety, articles from industry experts, and discussions of test standards and codes.

For more information, or to join IFC and start enjoying the benefits immediately, contact Executive Director Rich Byrne today! IFC Membership Information:

#### **Current Voting IFC Members:**

3M Fire Protection Products Fire Trak Corporation Grace Construction Products Hilti, Inc. Intumex Nelson Firestop Products, Div O-Z/Gedney Roxul, Inc. Specified Technologies, Inc. The Rectorseal Corporation Thermafiber Unifrax Corporation United States Gypsum Company Vesuvius, Inc.

For a full list of membership including non-voting members such as contractors, code officials, architects engineers, and related associations, check the IFC website at www.ifc.org.

### For more information on IFC, or to join, contact Rich Byrne, Executive Director at:



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Saving lives through passive fire containment



**THERMAL INSULATION** 

Roxul Inc.

Thermafiber

#### **IFC working together for one cause.** Join forces with the leaders of the Passive Fire Protection Industry

Total passive fire protection cannot be achieved with the use of a singular product. It is the use of many products designed for specific applications that comprise a complete passive fire protection system. When installed properly, these products work in concert with one another to create effective barriers against the passage of flames, smoke, and superheated gases. Used in conjunction with other fire protection methods, properly installed passive fire protection will save lives, protect property, and minimize business losses.

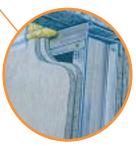
The IFC, a not for profit organization, is comprised of many of the industry's leading manufacturers of passive fire protection products. Illustrated below are the product groups represented by our current membership. If you would like to be part of this dynamic industry leading association simply contact us or fill out the membership application on the back.



3M Fire Protection Products Grace Construction Products Hilti, Inc. Intumex Nelson Firestop Products Rectorseal Corporation Specified Technologies, Inc United States Gypsum Co.



MECHANICAL TRACK SYSTEM Fire Trak Corp.



**GYPSUM** United States Gypsum Co.

JOINTS 3M Fire Protection Products Grace Construction Products Hilti, Inc. Nelson Firestop Products Rectorseal Corporation Specified Technologies, Inc United States Gypsum Co.

#### ALTERNATE ENCLOSURES (Duct Wrap)

3M Fire Protection Products Nelson Firestop Products Specified Technologies, Inc Unifrax Corporation Vesuvius, Inc.