

Volume 3, No. 1

January 2007

The Magazine of Effective Compartmentation

# Life Safety DIGEST

## Inside this issue:

Repairing Fire Resistance  
Rated Gypsum Board Systems

NFPA 80 Update

Revisiting Toronto's  
Pearson Airport

Industry News



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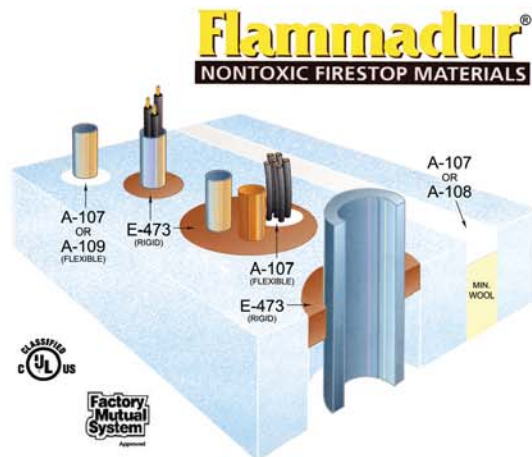
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## Editors' Message

Effective compartmentation involves dividing large areas into horizontal and vertical compartments to contain fires in the areas of origin until automatic or firefighter suppression systems extinguish the blaze or the fire runs out of oxygen.

Important elements of effective compartmentation include fire, smoke and other resistance-rated floors and walls with openings, penetrating items and gaps protected by firestopping, fire and smoke dampers that limit the spread of fire and smoke in and around air handling ductwork penetrating walls and floors.

Other elements include swinging and rolling fire doors that protect large openings for access to, or entry and exit of spaces. It also includes fire glass systems that allow transparency and fire resistance when it's important to see what's on the other side of the wall for security.

There are new developments in the effective compartmentation industry. Design and testing processes are changing. Standards are reflecting the concept through NFPA, ASTM, cULus, plus quality programs are making inroads into the compartmentation industry while inspection protocols are starting to gain momentum.

Compartmentation maintenance systems are being updated for today's technology and safety needs. Many of these new developments are already requirements in building and fire codes for certain compartmentation industries. Protocols not in the code will be debated in the ICC and NFPA Code and architectural specification development process-

es over the next several years.

This issue contains new developments from the rolling door and shutter industries on the revision of NFPA 80, plus the second in the three part series on the new Toronto Pearson Airport project. In addition, we report on the September ICC code hearings from Orlando, Fla.

Life Safety Digest celebrates its first anniversary with this issue. Whether you are a loyal reader, FCIA member or advertiser, we thank you for making the publication a rousing success. For 2007, look for more solid information about effective compartmentation while we try to make an impact in total fire protection.

Enjoy this collection of articles from the effective compartmentation industry in this issue. Join the associations that support effective compartmentation and FCIA because, as a group, our education will establish fire and life with compartmentation as a key component. Compartmentation saves lives.

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# Repairing Fire-Resistance-Rated Gypsum Board Systems

by Lee Jones

During its life cycle, a building's fire-resistance-rated gypsum board system may experience damage. Damaged systems must be quickly and properly repaired to maintain required fire-rated separation between occupancies or areas. The severity of the damage will determine the scope and extent of repairs needed to return the system to its required fire-resistance rating.

## Limited Damage

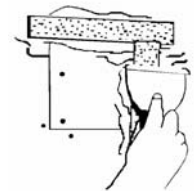
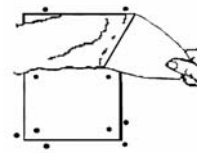
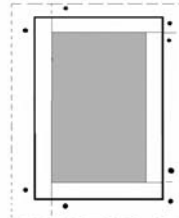
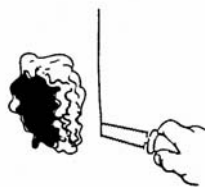
A simple patch is sufficient to repair small holes, such as those made by door knobs. However, patches must be mechanically attached to the diaphragm to maintain the integrity of the surface membrane. Patches that are attached using only joint compound material are unacceptable.

The following is a description of how to patch a small hole in a fire-resistance-rated gypsum board system.

A patch should be cut from type X or proprietary type X gypsum board. It should be the same thickness and core type as the material used to build the system under repair. It should also be the same geometric shape as, but slightly larger than, the damaged area.

The damaged area should be enlarged to match the size and shape of the patch exactly. Caution should be used when cutting or fastening into stud cavities to avoid electrical shock and water leaks. If present, thermal insulation should be restored and metal runner track should be attached to the inside edges of the damaged area.

Screws should be used to attach the



**Graphic 1** Damaged areas of fire-resistance-rated gypsum board systems should be removed.

**Graphic 2** Metal track should be attached to the insides of the damaged area.

**Graphic 3** Joint compound should be applied over patched areas.

**Graphic 4** Tape and joint compound should be applied to patched edges.

patch to the metal runner track, spacing fasteners a maximum of eight in. apart. The patch should be finished with tape and joint compound to restore appearance, fire resistance qualities, and acoustical performance.

Several proprietary clip products designed to provide mechanical support for patching materials are available as alternates to using the runner track described above. The product manufacturers should be contacted to receive additional information.

## Larger Areas

Whether the damage was the result of mechanical contact or environmental changes (flood, leak, fire, etc.), damaged areas exceeding 100 sq. in. in 100 sq. ft. of gypsum system area require materials in the damaged area must be removed down to the original framing prior to making the repair.

Once the damaged materials are removed, the framing area should be inspected in the area to be repaired, and, if necessary, any damaged framing replaced without increasing original framing spacing. The replacement material should be cut to size and attached directly to the framing.

Screw attach metal runner track to support ends and edges of the board that are not backed by framing materials. Finish the repaired area with tape and joint treatment compound as necessary.

## Multi-Layer Systems

Most building systems that use multiple layers of gypsum board require that joints are staggered between layers. To properly repair multiple-layer systems, it is necessary to remove the face layers of board beyond the base layer joint to maintain the staggered-joint feature.

## Additional Layer

To improve the appearance of large areas that are in structurally sound, but aesthetically unacceptable condition, attach a new layer of regular or type X gypsum board to the existing surface with adhesive or mechanical fasteners. This will not adversely affect the fire resistance rating or acoustical performance. 🔥

*Lee Jones is with the Gypsum Association, Washington, D.C., and can be contacted at [info@gypsum.org](mailto:info@gypsum.org).*



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## The Standards... They Are A Changin' - NFPA 80

by Steve Hahn

NFPA-80 should be a familiar name to anyone who has anything to do with fire doors.

It is the Standard for Fire Doors and Fire Windows, published by the National Fire Protection Association. This document, which can trace its beginnings to the late 1800s, has remained relatively unchanged during the past 15 or so years (1990, 1992, 1995, 1999 editions) particularly as it relates to rolling fire doors.

But during the course of the last several years, the committee that develops this Standard has undertaken the major task of trying to reorganize, simplify, update, and expand its scope in an effort to provide a more complete, concise and correct document.

A new edition of NFPA-80 has been published for 2007-and it definitely is a changin'!

The new document is entitled Standard for Fire Doors and Other Opening Protectives. As well as continuing to regulate the installation and maintenance of fire doors, fire windows and other types of fire rated glazing, it now also includes requirements for fabric fire safety curtains<sup>1</sup> and fire dampers<sup>2</sup>.

Some of the changes in the Standard have a major effect on rolling fire doors. The following are brief highlights of the more significant items you should be aware of:

### Installation

Items that are not a part of the fire door assembly cannot be attached to any part of the fire door.

Access to and clearances between

surrounding construction and a fire door must be adequate for required testing and maintenance.

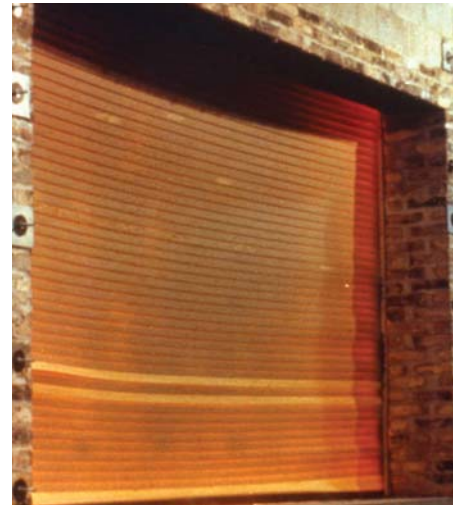
Framing, braces, supports, and any other building construction components that are part of the work of other trades are prohibited from being fastened to a fire door. This, along with the requirement to provide sufficient access to and space around doors-especially when installed above a ceiling or inside a wall-should result in improved conditions in which to inspect, drop test and repair rolling fire doors.

### Annual Testing

Two successful drop tests are required. The first drop test will demonstrate proper operation and full closure (average closing speed of not less than 6 inches per second nor more than 24 inches per second with bottom bar coming to rest on the sill). A second drop test must now be done to verify that the door has been reset properly.

Testing of fire doors must be done by individuals with knowledge and understanding of the operating system of the type of door being tested.

As a result, fire doors with closing systems that are easily or automatically reset will likely become even more desirable. This may also create more opportunities for the use of retrofit fire door operators to replace older traditional closing systems that take longer to test and reset or may not work as well as a result of repeated testing. And, hopefully, it will prevent persons that are not qualified from testing and inspecting fire doors.



A door is tested for its resistance to the spread of fire.



The use of labeled retrofit fire door operators is specifically allowed to replace existing fire door operator, governor and automatic closing systems as long as they are installed in accordance with installation instructions and listings and are acceptable to the Authority Having Jurisdiction.

### Retrofit Fire Door Operators

The use of labeled retrofit fire door operators is specifically allowed to replace existing fire door operator, governor and automatic closing systems as long as they are installed in accordance with their installation instructions and listings and are acceptable to the Authority Having Jurisdiction.

A retrofit fire door operator can be provided by a manufacturer other than the manufacturer of the fire door being retrofitted, provided the

operator's listing allows it to be used on that manufacturer's door.

While repair parts must still be obtained from the original door manufacturer, this will prevent at least some doors from needing to be replaced that are in otherwise good condition but have failed operating/closing systems with parts that are no longer available or where there is a desire to upgrade a traditional closing system.

### Contents reorganization

Definitions move from Chapter 1 to Chapter 3.

General requirements move from individual chapters to Chapter 4.

Care and maintenance moves from Chapter 15 to Chapter 5.

Rolling steel (fire) doors move

from Chapter 6 to Chapter 11.

Fire shutters move from Chapter 10 to Chapter 12.

Service counter fire doors move from Chapter 11 to Chapter 13.

Additional changes addressing such topics as wall and sill construction, performance-based test options and alarm-activated closing functions will have potential impact on others in the fire door community, including architects, contractors, owners and manufacturers.

A sister document, NFPA-105 Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives, is also published for 2007 and contains similar changes.

New editions of NFPA-80 and NFPA-105 can be purchased from the

National Fire Protection Association on its website, [www.nfpa.org](http://www.nfpa.org), or by calling 800-344-3555. 🔥

**Steve Hahn** is Product Manager for Los Angeles-based Lawrence Roll-Up Doors, Inc. He has been in the rolling door industry for more than 30 years, is a member of the NFPA-80 Standard for Fire Doors and Fire Windows Technical Committee and serves on three UL Standards Technical Panels. Contact Steve at [shahn@lawrencedoors.com](mailto:shahn@lawrencedoors.com)

### Notes

1 Fabric fire safety curtains are installed on openings in proscenium walls separating a theatrical stage from an audience.

2 Dampers covered by this Standard are those installed on openings in walls, floors or ceilings.

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# More Lessons Learned How Firestopping Matured Contractors at Toronto's Airport

by Barclay Myers

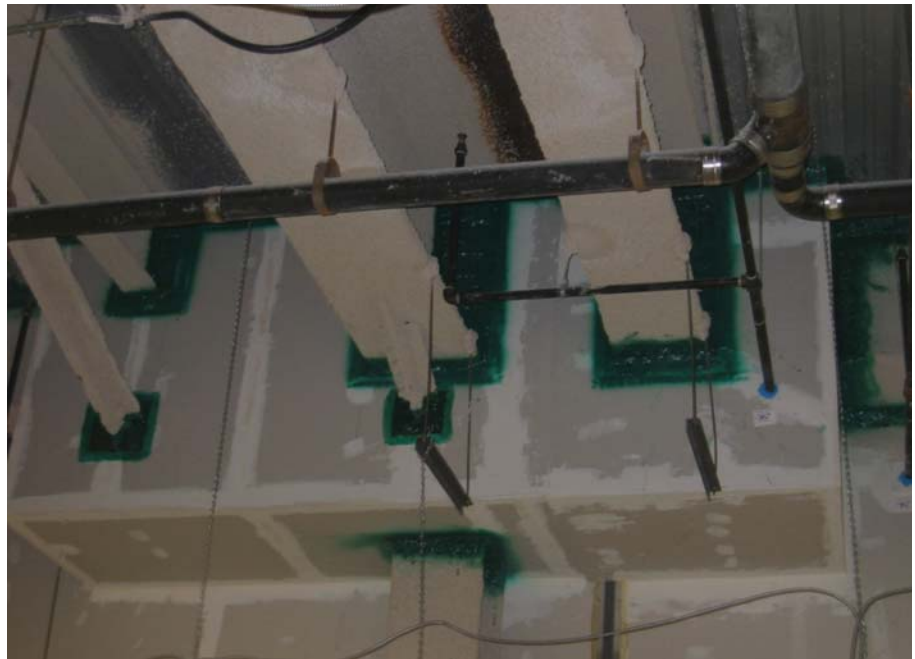
The first article of this series introduced you to one of the world's largest firestopping projects ever, the New Terminal 1 building at Lester B. Pearson International Airport in Toronto, Ontario, Canada. If you want a refresher, read Part 1 posted at <http://www.fcia.org>, in the June Issue of Life Safety Digest. By now, you know a little about the scope and complexity of the project, who the players are and even some of the challenges that faced the contractor team in delivering a "turn-key" firestop package.

Now that the stage is set, it's time to explore the evolution of compartmentation, structural fire protection and firestopping on the project.

## Firestopping and Compartmentation

Compartmentation has been around in one form or another since 1666 when city fathers decided to rebuild after the Great Fire in London with stone and brick instead of the wood and plaster that were most common in the city prior to the conflagration. They even enshrined the use of stone and brick in a "building code" in an attempt to mandate the use of compartmentation. This means that compartmentation measures had been in building codes for almost 200 years before the invention of automatic sprinklers, fire detection and alarm systems.

With its long history one would think that compartmentation (fire resistance-rated boxes in buildings)



Planning resulted in correct structural steel penetration firestopping. (Photos courtesy of Custom Insulation)

would be well understood and installed in the field. However, this has not been the case for all aspects of compartmentation, particularly firestopping.

Unlike its active cousins sprinklers and detection / alarms compartmentation is installed by a multitude of trades people. Drywall, masonry and concrete forming companies erect fire separations (walls and floors); heating, ventilating and air-conditioning contractors install fire dampers; millwork installers work with fire-resistance-rated doors; and a firestop contractor seals everything tight. Depending on the project, more than a dozen trades may install their own firestops. And, a separate fireproofing contractor may be hired for structural fire protection (struc-

tural fire protection of columns, beams, floors)

With the 'he who pokes the hole fills it' method of procuring firestopping, it's easy to see how co-ordinating firestopping can easily get out of hand. Add to this the myriad ways that firestopping is specified, and the lack of formal firestop training trades receive, and it's a wonder that structural fire protection and firestopping gets done at all. Without clear direction on the "global" compartmentation and structural fire protection goals for a project, it's left to luck to ensure things go right.

## A Practical Approach

Is everybody ignoring the problem, or are people intentionally creating problems?

The vast majority of construction professionals think they are doing the right thing but are unaware how their actions can affect the compartmentation and firestopping measures designed into buildings.

In the last article, we gave the example of electrical conduit installed through the gap at the top of a fire-rated masonry wall (Fig. 1) and stated "this condition presents a difficult situation for the firestopping contractor, as there were no tested and listed systems for the application." The conduit may have been installed in accordance with all the applicable building codes, project specifications and good trade practices. However, this condition creates multiple problems from a firestopping and compartmentation

standpoint.

First, most masonry walls are constructed with a prescribed gap between the top of the wall and the underside of the floor system above it to allow for deflection of the floor assembly. By placing a conduit through the top-of-the-wall gap the space may become filled solid again, potentially transferring damaging pressures to the wall during compression. The result can be a weakened structure, with impaired ability to withstand the effects of a fire, or even simple movement.

Second, as the "conduit in the gap" condition is not supposed to exist, firestop material manufacturers have limited laboratory testing of the condition. There may be no way of

firestopping these conditions with a tested and listed firestop system that meets building and fire codes and standards.

Another example of trades complying with their particular guidelines but causing difficulty for the firestopping contractor is the use of the "any available hole" method of routing services throughout a building. Mixing disparate types of pipe and cable in the same opening can require expensive and complex firestop materials to ensure a fire resistance rating. Running pipe, cable or conduit through an opening with a fire damper (Fig. 2) is another common mistake that compromises damper operation and doesn't conform to any tested and listed firestop

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system available to the firestop contractor.

Installing hangers and supports too close to floors and walls, grouping large numbers of pipe and conduit together, placing service piping and cable items close to structural members and separations are ways the piping, ductwork and cable trades can be in compliance from their perspective, while making it all but impossible to firestop with any assurance of integrity and quality.

I want to emphasize that, although these situations occur on countless construction projects, they are not wilful acts. Most construction professionals take pride in their work and respect the work of others. So why does it happen? The answer is simple: awareness, education and leadership.

### A Recipe for Success at the Airport

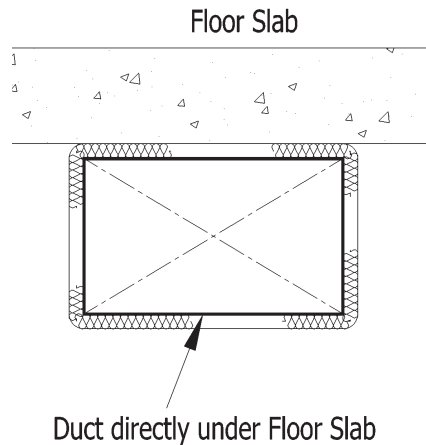
In Part I of the series we explained one of the more unique aspects of the project: A private firm was engaged to act as the Authority Having Jurisdiction.

LMDG Building Code Consultants, Ltd. brought with their presence the first ingredient: awareness.

LMDG made proper compartmentation and opening protection a priority and, by way of their position as AHJ, were able to mandate proper firestopping installation. In effect, they started the change in attitude towards compartmentation as a whole.

No longer was compartmentation approached from the bottom up by individual contractors concerned with their small part, but from the top down as a collection of professionals working towards the same goal: complete and verifiable fire and life safety compartmentation.

This awareness was driven through the project team to the indi-



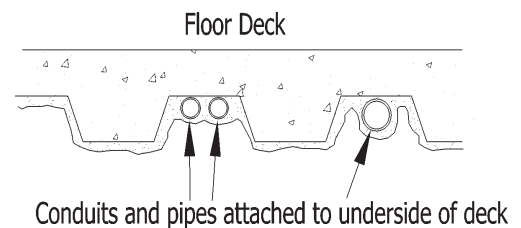
Ductwork at ceiling is difficult to firestop...and maintain.

vidual trades on the project. From project manager to labourer, everybody learned how he or she impacted firestopping, both positively and negatively.

The education ingredient was achieved mainly through the efforts of the firestop contractor, Custom Insulation Systems. CIS, with the designers' and construction managers' help, implemented tracking and educational programs to increase awareness of firestopping requirements and its effect on the total project.

Over the more than four years CIS has been on the project, it has spent hundreds of hours educating onsite partners about proper installation methods while working together to identify and solve potential problems before they arise. CIS was represented at every construction meeting, whether it involved trade co-ordination, design or planning and scheduling. It was highly important for CIS to be visible and vocal to keep awareness of firestopping high while viewing each meeting as an educational opportunity.

As compartmentation and



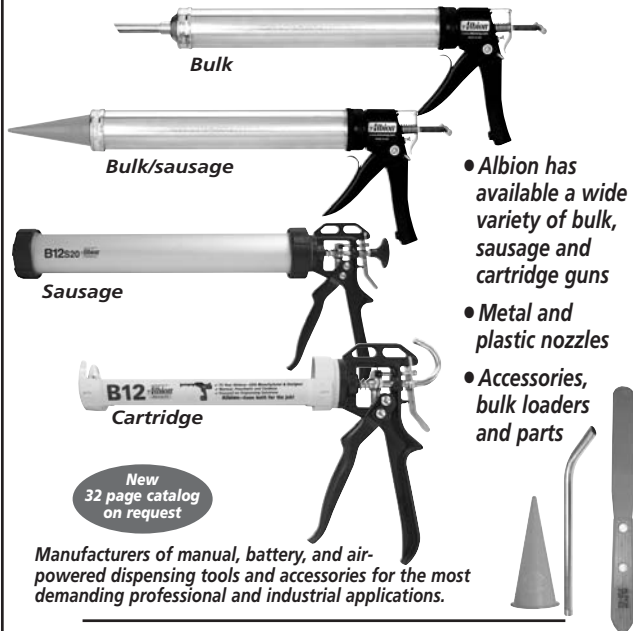
Lack of pre-planning means conduits in gaps.

firestopping awareness improved, other trades began to coordinate activities and ensure that their actions didn't prevent CIS from installing the proper firestops.

Some might see this as an additional burden on the trades that would increase the cost of construction, create conflict and lower quality. However, experience proved just the opposite. By being aware of firestopping requirements, trades were able to perform work correctly the first time, avoiding the delays and costs associated with rework experienced on Phase One. Also, the mechanical, electrical, plumbing, fireproofing and other trades found that by planning the routing of structural, piping and cabling systems, rework was reduced significantly while constructability of details, regardless of trade, became doable, instead of impossible.

The zero-tolerance quality inspections for firestopping became a tool for finding other types of non-life safety deficiencies while fostering an environment of continuous improvement that ultimately led to a better, faster and more cost-effective build-

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ing being constructed in Phase Two.

The third ingredient needed for a successful firestop project is leadership.

In many ways leadership could have been the first ingredient, but leaders know how to follow, so we left it for last.

Much study has been made of leadership, including hundreds of books, thousands of articles and countless seminars. We'll stick with the dictionary definition: "The capacity to lead, to be able to guide the behaviour or opinion of."

When CIS started on the project, it was like any other firestop job with everybody doing their own thing, expecting the firestopping contractor to "put some goop in the hole" and not really paying attention to the firestop systems installation protocol, and how it went about its business with regards to firestopping.

Some contractors were even installing firestops when it wasn't in their contract. Why? Because they expected it to be like other projects, in which firestopping was an afterthought, and, although bought and paid for in the construction documents, nobody really cared about following the rules regarding installation.

This was because most people outside the design team hadn't been given the first two ingredients yet: they weren't aware of firestopping and they weren't educated enough about it. The arrival of CIS as the full-time firestopping presence changed that. By becoming a bridge between the officials and designer on one side and the trades on the other, CIS was able to start things moving toward the intended goal: a verifiably complete firestop package.

One of the most gratifying aspects of the project was that, as each new level of personnel was brought into the loop, they quickly began to see

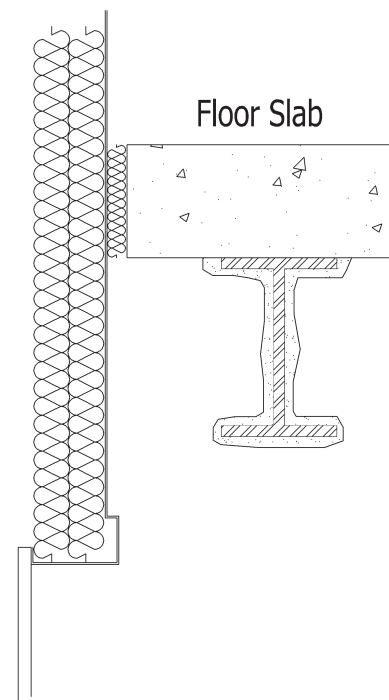
the need for firestopping and its importance to the overall success of the project. From project manager, superintendent, foreman and craftsman, all eventually became aware of firestopping because it brought value to their particular trade's operational efficiency.

With the above being said, we can only wish everybody became fans of firestopping. That only happens in dreams. Some came completely onboard with the program and became advocates of CIS and the design team's objectives. Others only complied because they had to.

For the non-believers, it was still important that they were made aware of firestop requirements and how to fulfill them, ensure compliance with a comprehensive quality assurance program and find deficiencies made by the firestop contractor or another trade.

By setting a higher standard for firestopping accountability and ensuring compliance, LMDG showed leadership. The design consortium (AAC) led by developing higher standards into specifications and procedures that provided the early framework from which the project grew. By being open to the idea of higher standards and accepting a new delivery model for firestopping, the PCL/Aecon construction management team led by example and helped more than anyone to bring this installation protocol to all the trades on the project. Finally, CIS and its manufacturer partner, 3M, led by developing new systems and procedures to deliver a final product that exceeded the goals of the AHJ.

Join us next quarter as we lay out a firestop plan from concept to completion for your next firestopping project. We will point out resources and provide further insight on how



Curtain wall means access to fireproofing structural beam limited.

you can achieve complete and proper compartmentation on your firestop projects. 🔥

**Author's note:** Members of the Firestop Contractors International Association have contributed to this article with the help of other trade contractors who participated on the Terminal 1 project. Some of the information was provided by members of the design and consulting teams. Custom Insulation can be reached at [jim.smiley@nexlevel.ca](mailto:jim.smiley@nexlevel.ca)

**Bardlay Myers** is Director of Business Development for Tonbridge Environmental Group; he was project superintendent for Custom Insulation Systems during phase one of the Terminal 1 project. He can be reached at [bmyers@tonbridge.ca](mailto:bmyers@tonbridge.ca).

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## Code Corner

## Industry News

### The ICC 2006/2007 Code Cycle Starts

The International Code Council's (ICC) code development process started with code change proposals, submitted March 24. Changes were heard at committee meetings, Sept. 17 to Oct. 3, 2006, in Orlando, Fla.

The committees represent various disciplines from Fire Safety, Means of Egress, Energy, General and other categories. Consisting of about 20 people, code change committees include industry representatives, building officials and fire marshals.

The committee hearing process is dynamic. Each committee hears a proposal from an individual or organization for two minutes, testimony in support of the proposal for one minute, testimony in opposition for one minute, then rebuttal and re-rebuttal if needed. After the committee discusses the proposal and shares information with the assembly, a vote is taken to approve or disapprove the proposal.

A floor vote can be called if there is disagreement with the committee's decision, with all in attendance allowed to vote.

Public comments can be submitted if an individual or group disagrees with a committee action on a particular proposal. Public Comments are due Jan. 24.

After being published in manuscripts available at ICC's website, at <http://www.iccsafe.org>, the public comments are debated publicly at Final Action Hearings May 19-27 in Rochester, N.Y.

The debate takes place in front

of the complete assembly of building officials, fire marshals, and the industry. However, only building officials and fire marshals are allowed to vote.

Successful code change proposals become part of the 2007 supplement. The next code change cycle starts with proposals due Aug. 20.

### ICC Code Change Hearings

In the compartmentation industry, there were several code changes proposed to make the building and fire codes better.

The National Association of State Fire Marshals, ICC Code Chapters throughout the country, California Fire Chiefs, International Association of Fire Chiefs, International Union of Fire Fighters, and those industries affected by code change, were all present in Orlando, Fla. Sept. 20 - Oct. 3.

### NASFM Corridor Code Change Proposal

The National Association of State Fire Marshals (NASFM) submitted a code change that called for returning fire-resistance-rated corridors as they were in the Uniform Building Code (UBC).

In code change E-128 during the Means of Egress debates, NASFM's Bert Polk proposed that all corridors in Table 1017.1 become at least one hour fire-resistance-rated systems and assemblies. This would provide safer egress for building occupants, while allowing firefighters protected access into the building fire area, regardless of where it was located in the building.

Testimony in support came from the Lorin Neyer of California's

Office of Statewide Health, Planning and Development (OSHPD). FCIA's Bill McHugh also testified with statistics showing that both sprinklers and compartmentation are needed in buildings to support total fire protection. The committee voted against the code proposal.

In a related change, Neyer submitted the same type of change, but in only healthcare occupancies, rather than all occupancies. This proposal was also voted down.

FCIA submitted nine code change proposals focused on three things—a definition for compartmentation; proper design, installation, inspection and maintenance; and systems in the building and fire codes. FCIA requested a definition for compartmentation, used language from Chapter 9 Sprinkler Fire Protection asking that compartmentation be “properly designed, installed, inspected and maintained” in the first set of changes. The third code change was simply to add the word systems to Fire-Resistance-Rated construction Chapter 7, reflecting what the real world refers to our industry, which is tested and listed systems.

All three concepts were supported by NASFM, California Fire Chiefs, International Association of Fire Chiefs, Door Safety Council, Door and Access Systems Manufacturers Association plus the Door and Hardware Institute and Door Safety Council. FCIA's code change proposal for adding “systems” concept to the code was successful and passed through committee.

## Code Corner

### FCIA Supports IFC Code Change

FCIA was pleased to partner with the FCIA manufacturer members who are part of the International Firestop Council (IFC), to develop ASTM E 2174 & ASTM E 2393, Standards of the Inspection of Penetrations and Joint Systems. The IFC proposed these standards be added to the International Building Code, Chapter 35, but were voted down this cycle because the assembly didn't believe they should be mandated.

Another code change from IFC attempted to add identification systems to fire and smoke resistance rated compartmentation with signs or stenciling in a manner acceptable to the building official. The committee disapproved the code change, stating that there is no good reason to add them.

### Height and Area Table Debate

There were several code change proposals by vari-

## Industry News

ous groups to change the ICC Height and Area Tables in Chapter 5 of the International Building Code.

In a move to try and consolidate the proposals and attempt to develop a single multi-party code change public comment, the proponents agreed to meet separately as a study group under the ICC Code Technology Committee as the Height and Area Study Group. More on this in January 2007 as the group wraps up its study.

### NFPA Code Change Cycle Starts

FCIA Lifetime Member Kathy Taraba, attended the NFPA Fire Protection Features Meeting to participate in the NFPA "Report on Proposals" process in Ft. Lauderdale, Fla., Nov. 1 to 3.

Taraba supported proposals by the FCIA Members who are part of the International Firestop Council to add requirements for ASTM E 2174, ASTM E 2393, Standards for Inspection of Penetrations and Joint Firestop Systems, to the NFPA 5000 and 101 Annex Chapter. ASTM E 2307 was added to the Annex as well. Another proposal to bring smoke-resistance-rated construction a quantifiable "L" Rating of <5cfm/sf opening area was disapproved by the committee.

### NFPA Report on Comments (ROC) Process

Public comments on these proposals also take place in a unique process.

After the NFPA ROP has received the necessary approvals, there is a 60-day comment period, during which time anyone may submit a comment on the proposed changes in the ROP. The committee then reconvenes at the end of the 60-day period and decides how to act on all comments.

Once again, the meeting is open to anyone who wishes to address the committee on a particular public comment. A two-thirds approval vote by letter ballot of the members of the committee eligible to vote is again required for approval of actions on the comment, and the committee must again publish reasons for revising or rejecting any public comments in a new report. This report is called the Report on Comments (ROC) and is available to anyone for review for a seven-week period.

Visit NFPA's website <http://www.nfpa.org> to learn more about the process.

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## Industry, Testing & Qualification News

### New UL QFC Program Coming Alive

Underwriters Laboratories Inc.'s Betsy Titus announced the schedule for formal introduction of the UL Qualified Firestop Contractor Program at the FCIA Firestop Industry Conference and Trade Show, Charleston, S.C.

Titus commented, "UL is pleased to bring a new management process model to the construction industry." The program, similar to ISO 9000 in the manufacturing industry, has been specifically designed with the construction industry in mind.



Additionally, FCIA has developed an education partnership with UL to teach Designated Responsible Individual (DRI) Candidates, firestopping inspectors, architects, engineers, specifiers, fire marshals and building officials about effective compartmentation and firestopping. The first seminars start in early 2007.

### FM 4991 Gaining Ground

Jeff Gould, FM Approvals' Manager for FM 4991, Standard for the Approval of Firestop Contractors, reported that the number of approved contractors now covers major cities in the U.S. and Dubai, United Arab Emirates. "FM has been pleased to lead the

way in construction quality programs through FM 4991 Approval of Firestop Contractors", stated Gould.

### FCIA Firestop Industry Conference and Trade Show

FCIA's attendance at this event grew to more than 100. With a record number of attendees from contracting, manufacturers, associates and firestop consultants, excellent education was received by all.



**Randy Bosscawen, Multicon Fire Containment, and Rob Hlady, Affinity Firestop Consultants,** presented the details of ASTM E 2174 & ASTM E 2393 Inspection Standards. **Barry Anderson and Steve McIntyre, of Safe Check, Inc.** spoke on fire and smoke damper maintenance and infection control.



**Dennis Hall, FAIA, FCSI, Hall Architects,** delivered reasons why contractors submit substitutions and architects possibly give in.

His message for supporting construction documents was clear. Well-

prepared, well-executed construction documents result in higher quality, better buildings.

**Bert Polk, National Association of State Fire Marshals** delivered great perspectives on the code development process, and the leadership qualities needed to stay on course through positive attributes of systems instead of criticism of alternative systems. "All facets of Total Fire Protection are needed", stated Polk.

**George Mills** educated FCIA about the Joint Commission on Accreditation of Healthcare Organization's view on fire barriers, and Type 1 violations for fire doors, fire dampers and firestopping.

**Jerry Heppes, Door and Hardware Institute CEO,** brought us the DHI Door Inspection Process which implements requirements in NFPA 80, which is a potential model for the firestopping industry.

At the annual awards banquet, **Charleston Fire Marshal Rusty Thomas** brought enthusiasm for his and our profession, plus invitations to visit one of the oldest firehouses in the U.S.

### State Firestopping Apprenticeship Standard

**FCIA Member Bob Hasting, Specialty Firestop Systems, Inc.,** has successfully formed the first state firestopping apprenticeship committee in Washington.

The apprenticeship initiative for firestopping has brought an O-Net Classification for Firestop Containment Worker, 47-2131.00, which sets the stage for local jurisdic-

dictions to establish Davis-Bacon Wage Rates. It also sets the stage for states to enact legislation for firestopping trade specific licensing.

This is one of many moves by FCIA to make firestopping a stand alone "trade."

### ASTM Committee E 06 Meets

FCIA Board Member and Standards Chairman, Randy Bosscawen attended the E.06.21.17 - Inspection Standards meetings for E 2174 & E 2393 Standards for the Inspection of Penetrations and Joints. Bosscawen and Bill McHugh of the FCIA, with Michael Jaycox, a principal at an inspection firm from New York, are co-chairmen of the ASTM Task Group. FCIA manufacturer members typically attend these meetings, with a few contractors and many consultants involved.

FCIA also met with members of the E 06.21.16 Inspector Qualification Standard task group. The group decided to move language from section 6 of the Inspector Qualification Standard and input it directly into the E 2174 / E 2393 standards rather than having separate standards. Ballot results will be available in the near future.

In another area, FCIA was invited to attend the Standard for Cost Effective Building Risk Mitigation group's meeting. Members of the committee include representatives from the National Institute for Standards and Technology (NIST), Construction Specifications Institute (CSI) and others.

The group discussed a newly developed software tool from NIST for cost-effective, economic calculations of risk mitigation strategies.

FCIA offered input from the effective compartmentation industry to facilitate cost-effective risk mitigation in buildings.



## Life Safety Digest 2006 Industry Calendar

### March 28 to 31

National Insulation Association Annual Convention, Phoenix

### April 2007

FCIA Education and Committee Action Conference

### May 3 to 5

American Institute of Architects National Convention and Design Expo, San Antonio

### May 18 to 26

ICC Codes Forum & Final Action Hearings, Rochester

### May 23 to 27

Construction Specifications Canada Conference, Vancouver, British Columbia, Canada

### June 3 to 7

NFPA World Safety Conference & Expo, Boston

### June 20 to 22

Construction Specifications Institute CSI Show, Baltimore

### July 21 to 24

BOMA North American Commercial Real Estate Congress and the Office Building Show, New York

### Aug. 23 to 25

Fire and Rescue International (IAFC), Atlanta

### Sept. 10 to 12

Glass Build America, Atlanta

### Sept. 30 to Oct. 4

ICC Annual Educational Conference, Grand Sierra Resort, Reno, Nev.

### Oct. 4 to 7

Insulation Contractors Association of America Annual Conference

### Oct. 15 to 20

Door and Hardware Institute DHI Conference & Exposition, Nashville, Tenn.

### Oct. 15 to 19

Society of Fire Protection Engineers Professional Development Conference and Exposition, Las Vegas

### Oct. 21 to 25

SMACNA Annual Convention, Phoenix

### Oct. 31 to Nov. 2

Design Build Institute of America - Design-Build Conference and Design-Build Expo, Dallas

### Nov. 2007

FCIA Firestop Industry Conference and Trade Show





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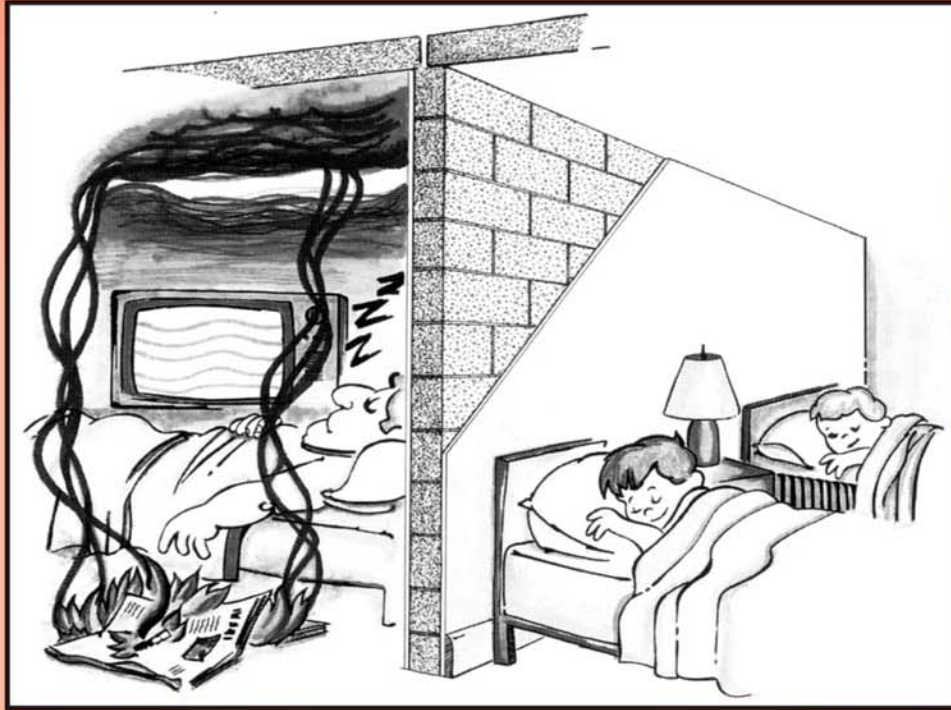


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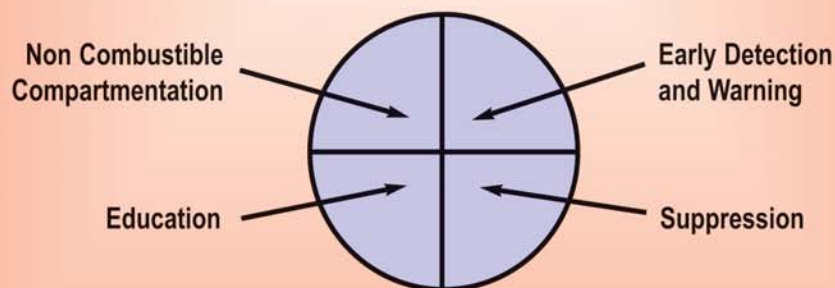


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