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## A HOT TOPIC

Firestopping Comes of Age

• Legal Issues in Firestopping



# Firestopping Liability

## The Debate Heats Up

An analysis of potential legal issues in the firestopping industry

By Karen P. Layng

The debate surrounding who is responsible for firestopping and the potential liability arising therefrom continues as more stringent national standards and state, county, local and regional model building codes are promulgated, and new and more sophisticated firestop products become available. "Firestopping," or the use of building materials in items such as pipes, ducts, conduits or cables that prevent the spread of flames, heat or hot gases through penetration of fire-rated walls, ceilings, or floors, has gained greater attention, particularly through the efforts of the Firestop Contractors International Association (FCIA). This article analyzes liability issues which arise from firestopping design specification, manufacture, and installation and concludes that liability for firestopping is still, an unsettled issue.

### Background

Fires cost the United States hundreds of billions of dollars each year. Insurance companies and owners have increasingly sought to pass the risk of loss to the construction and related industry parties. This is due in large part to the the increased exposure, videotaped evidence and media coverage, in instances of high profile fires involving deaths and significant personal injuries, as well as the increase in rates of property loss damages and fire insurance premiums.

Although, in the past, all firestopping was either performed by each trade responsible for creating the through-penetration, and the architect prepared all construction contract documents including specifications for such firestopping, this design work (and the corresponding errors and omissions liability) is increasingly being delegated to firestop contractors. These contractors must confirm that they have professional liability insurance coverage if they undertake the design of the fire protection system, as opposed to preparation of shop drawings for the architect's review and approval, and that they incorporate approved firestop products, pursuant to all the manufacturer's specifications.

Indeed, because true firestop products, which through "F" and "T" ratings measure the time and speed of the fire through a construction component (and not just caulks or foam) are classified as regulated construction products, they must be tested by an accredited third-party testing agency. The E814-94b testing method, set forth by the American Society for Testing and Materials (ASTM), is meant to assist others in determining the suitability of through-penetration firestops where fire resistance is required. Section 7270 of the National Institute of Building Sciences (NIBS) also provides step-by-step guidelines for the installation of firestop systems. Prior to concealing the system, the contractor should also notify the architect to inspect the system, even if designed by the contractor. Failure to comply with said standards, can result in significant liability.

### Liability Starting Points

Any of the contracting entities involved in a given construction project or building fire, no matter how tenuous the link, may be held liable for a firestop system, or lack thereof. Owners, archi-

itects, design engineers, consultants, contractors and suppliers can all be held responsible for bodily injuries or property damages arising out of or related to the installation, design, or lack of a firestop system. Indeed, it's likely that the litigation expenses surrounding the issues of responsibility and negligence, before even reaching the question of apportionment of the damages, will far exceed the costs of construction, let alone of the installation of the complained-of system.

Among questions the courts will ultimately ask are: (i) did the building professional or the subcontractor's agreement or did a governing building code require the installation of a particular firestop system and was this code followed; (ii) if the code wasn't followed, was the violation of the code the proximate cause of the fire; and (iii) who was responsible for the design and installation of the system and the supervision of the construction? It's note-

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worthy that in certain states, failure to comply with a statute, rule, ordinance or regulation (including local building code requirements) allows a presumption of negligence that the defendant did not use due care.

The actual starting point of review is, therefore, the contractual agreements on the project. The American Institute of Architects forms (the AIA Document A201-1997 General Conditions of the Contract for Construction for example), are the source documents for many projects and include numerous provisions which govern firestop liability. For example, on all projects, the contractor is required to field verify and inspect the project to conform with the Contract Documents and to notify the Architect of any omissions (i.e., failure to detail a firestop system). Clause 3.2.1 states that ". . . any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Architect as a request for information" and requires the Contractor warrant that all work will be "free from defects not inherent in the quality required or permitted" (Clause 3.5.1).

Clause 3.2.2 goes on to provide, however, that "[a]ny design



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errors or omissions noted by the Contractor during this review shall be reported promptly to the Architect, but it is required that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents" (emphasis added). Accordingly, if the project specifications delegate the design of the firestop system to the contractor, this provision mandates the contractor's attention to any errors or omissions in the contract documents, rests squarely on the contractor's shoulders any costs arising out of a change in the specifications to comply with any governing codes, and potentially exposes the company to liability for any damages arising from an improperly designed and/or installed system.

The A201 document also explicitly states that "Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents" (Clause 3.12.4) and requires the architect to make on-site inspections to generally determine that the "Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents" (Clause 4.2.2). These provisions all include significant responsibilities to ensure that the designed and installed system complies with all governing rules, regulations, codes and standards.

Although, not surprisingly, most firestopping cases akin to construction litigation, in general, result in settlements without reported decisions. However, certain recent cases are instructive to the firestop industry. The vast majority of firestop cases arise out of insurance coverage or building code disputes. *Insulation Outlook's* May 2001 issue includes this author's article on firestop

cases current as of the date of that writing. More recent decisions include the Missouri Court of Appeals of Missouri's ruling concerning the St. Louis plumbing code requirement that only licensed plumbers be allowed to perform installation, removal, alteration or repair of plumbing. While the court reversed the decision of the County Board of Appeals, it seemingly encouraged the promulgation of such a code section, stating: "[a]lthough we recognize the need to regulate firestopping for the health, safety and welfare of County's residents, we do not read the current plumbing code as requiring only licensed plumbers to perform firestopping around plumbing system pipes."

## Court Rulings

The Fifth District Court of Appeals ruled in a February 2003 decision that the Orlando (Fla.) Fire Code's regulations to prevent fire and explosion through the incidental regulation of structural building conditions which could cause fire or explosion (such as the lack of firestops in a structure housing a fireworks company) were validly adopted by the city.

In another decision, the Ninth Circuit Court of Appeals affirmed the district court's ruling that the insurer had no duty to defend the insured contractor for damages arising out of its failure to install firestops and insulation in a project. The court found that the "your work" exclusion of the insured's policy precluded it from recovering the repair and replacement costs of its defective work as to the lack of a firestop system.

Although not a firestopping case, a recent California court decision is instructive. There, the court extended the economic loss rule allowing a plaintiff to recover in strict product liability in tort when a product defect causes damage to "other property," i.e. property other than the product itself. In that decision, the homeowners sued a window manufacturer for windows installed in mass-produced homes on claims of negligence and strict products liability in tort. The homeowners recovered damages for physical damage caused to other parts of the home by the defective windows. One could argue that, under this theory, any resulting damages to a building resulting from a defective system could be the responsibility of the contractor if the contractor was found liable for the assembly.

Despite the limited published firestop cases to date, certain legal principles are established and the importance of expert testimony in proving firestop liability is clear. For example, a Louisiana appellate case held that the question of liability surrounding the lack of firestops depended on the electrical engineer and the chief electrical inspector's analysis and evidentiary proofs. The experts concluded that the fire was so rapid that firestops wouldn't have saved the plaintiff's property and, therefore, no liability existed.

Further, in another decision, the Texas Court of Appeals overturned a jury's verdict in favor of a homeowner's cause of action against the general contractor and electrical sub-contractor for breach of warranty in connection with a fire that destroyed the appellees' home. The appellate court found that although the homeowners' experts' testimony was relevant and reliable under Daubert, the federal court decision requiring a pre-trial qualification of proffered expert testimony, it was, nevertheless, insufficient to support the jury's verdict.



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## How To Avoid Firestop Liability

In the firestopping context, liability can arise out of contractual relationships such as for breach of contract, or non-compliance with the project documents or specifications, breach of warranty, failure to warn, or negligence theories. Multiple parties can also be found to have contributed to the losses or damages. There are several avenues, both prescriptive and remedial, that all construction parties can use to limit or avoid such liability.

## Preventive Measures

Section 703 of the Building Officials and Code Administrators' National Building Code calls for construction documents for all buildings. These documents "shall designate the type of construction and the resistance rating of all structural elements as required" by the code. Owners and architects are increasingly specifying that firestop assemblies or systems be installed by certified firestop contractors such as those designated responsible individuals by Factory Mutual Research—the qualified testing agency for certification by the FCIA. Under such applicable codes or specifications, contractors must submit documentation or supporting data substantiating all required firestop ratings.

Second, contractors must seek, through requests for information or otherwise, that architects specify firestop systems in conformance with the appropriate codes, and ASTM standards for the use for which the products were manufactured. Further, in projects that involve renovation and/or additions or modifications to existing construction, the parties should be provided a survey or as-built drawings detailing the firestop systems currently in place to ensure that the project, when completed (including any construction in-place), conforms to the existing codes.

Next, design engineers should include evaluation reports of any contemplated firestop product. If the installer's contract did not mandate installation of a particular firestop system, an architect can still later be found responsible if, in its inspections of the site, it did not identify that the installed firestop system failed to comply with all applicable code; this is particularly true in instances where the contractor sought and received an improper (i.e., oral) field engineering judgment approving an untested system/application. The architect should, therefore, provide detailed specifications and include drawings and specification review requirements. Finally, the architect should also require that the manufacturer's printed installation instructions for all prefabricated devices, as well as product data sheets, and any needed engineering judgments be retained on the site.

Firestop manufacturers, in turn, must be on notice that any potential plaintiff may assert claims of strict product liability and allege the manufacturer supplied defective firestop products. In addition, all construction parties, and particularly the manufac-

turer's representatives, when called upon to provide the same, must precisely follow the basic engineering judgment requirements promulgated by the International Firestop Counsel.

Beyond familiarizing oneself with all applicable codes and standards, the building professional should follow developments in code regulations and industry standards and must keep abreast of legal developments in firestopping and general construction negligence cases. The building professional must also maintain insurance and investigate available products, for coverage of the installation and design of such systems. He must also obtain, from the company's risk manager or insurance broker, periodic updates on all relevant cases wherein courts interpret the contractual indemnification and "hold harmless" provisions which may seek to limit construction liability, and can include the right to recover attorneys' fees, and any potential limits or gaps in the professional's coverage.

Manufacturers and distributors should include "suitability for use" statements and prohibit sales of products for unauthorized applications. If asked to give an engineering judgment for an unanticipated construction application, manufacturer's representatives must consult with the company's qualified technical personnel to obtain a written engineering judgment based on proper test results.

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Finally, owners should demand that only licensed firestop contractors install the firestop systems and that said contractor include tags or stickers, which are permanently affixed to the work, containing the manufacturer's name, the testing agencies' assigned listed systems design number, the installation contractor's name and address, and the trade qualification certificate number of the installer. When renovation or any subsequent work is completed at the site, or where an owner purchases a pre-code, non-firestopped or sprinkled building, the owner must take extreme care to investigate and then install appropriate firestop systems.



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## Defenses to Liability

Certain defenses and legal devices exist to apportion potential liability amongst the participants in the construction project who may have contributed to the negligence. One well-established rule is that building professionals aren't generally liable for the firestop products themselves. This is because contractors and designers aren't considered sellers, and, therefore, aren't strictly liable for any component parts they may supply in compliance with the performance of a contract.

Second, a building professional who receives detailed plans and specifications from the owner, generally has a right to rely upon the professional judgment and experience of those (architects and engineers) employed by the owner, who developed the same, unless a review of the documents shows glaring defects which a contractor of average skill and of ordinary prudence would know would likely cause injury. In addition, building professionals may argue that they are not liable even if completing their own design because they followed the industry standard or local custom in completing the project and mandated that only specialty firestop contractors certified to comply with FM 4991 install the system. However, building professionals should be aware that it's no defense to claim to have followed a negligent industry standard or an inappropriate local custom.

## Conclusion

Given the significant increase in the number of construction claims and insurance coverage disputes surrounding

such claims, all entities engaged in the manufacture, sale, specification, design and installation of firestop products and/or systems, as well as those who purchase and insure buildings, must recognize they face potential liability under products liability, negligence or breach of contract theories, among other claims. Building professionals should remember to consult FM 4991 and any local or model building codes applicable to the project, to investigate, and to educate code officials in the necessity to inspect and assess code requirements, as well as industry standards.

If a project doesn't specifically call for firestop installation, the building professional should raise the issue with the architect and owner, and, if possible, memorialize such communications in writing. Overall, it's important to consider firestop issues before undertaking any construction project, or purchasing any structure built before sprinklers or firestops were required by applicable codes, and if problems arise, to understand that methods do exist to limit liability, in specific factual situations. ☺

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