How to Avoid Firestopping Liability

by Karen L. Pszanka-Layng

Every day, in this country and throughout the world, deaths result from fire in buildings. Accordingly, building designers, architects, engineers, contractors and other building professionals are increasingly concerned about their potential liability arising out of the firestop protection provided on a project.

For example, a headline in a Connecticut newspaper, the *Hartford Courant*, read: "Owners' Measures Lessen Impact of Vernon House Fire." Fire officials in Hartford commended two investors who recently had purchased the fire-damaged house and renovated it with up-to-date firestop and fire alarm systems. The fire officials stated that the firestops and fire alarms saved eight lives.

Building fires can turn even the smallest crack around a plumbing drain or the gap between slab and wall into a conduit for flames or deadly gases. Any in-service penetration of a fire-resistive wall or floor assembly compromises its ability to function as a passive fire barrier. In recent years, the greater awareness of the importance of firestopping and its life safety value has been reflected in more detailed state, county, local and regional model building codes and in the availability of new firestop products.

Questions arise, however, if a building designer chooses a firestop product not approved by an accredited third-party testing agency or a contractor fails to install the product according to the manufacturer's specifications. In either case, the designer or contractor could face significant liability for property damage and personal injury. Given the recent increase in construction litigation, it is likely that the insulation industry will face challenges in this area.

HISTORY OF FIRESTOPPING

Insurance companies spurred the impetus to develop firestop products as a means of limiting property loss, specifically in large industrial plants such as pulp mills. Fire separations were developed in the form of fire-resistive walls to isolate million-dollar machines from one another.

Knowledge of the legal issues concerning firestop work can diminish liability problems.

Firestopping can be defined as the use of building materials which prevent the spread of flames, heat or hot gases through penetrations in fire-rated walls, ceilings or floors for items such as pipes, ducts, conduits or cables. Firestop products range from those with a silicone or latex base, to sheet or strip materials, to putties and cementitious mixtures.

In turn, firestopping developed as a method to maintain the integrity of those early fire separations once penetrated for electrical wiring and plumbing services. With the advent of astronomical damage awards in personal injury lawsuits and the greater governmental awareness of personal safety, passive fire protection became mandated by building codes, thereby demonstrating that firestopping saved lives as well as property.

Once passive fire protection became mandated by building codes, the regulation of passive fire protection products emerged. Today, through-penetration firestop products are rated under a standard promulgated by the American Society for Testing and Materials and commonly known as ASTM E814-94b, a test protocol originally developed for nuclear power plants. Both the Standard Building Code and National Building Code firestop provisions mandate a builder use only ASTM E814 listed and tested firestop products.

In addition to, and in conjunction with, ASTM E814, Section 7270 of the National Institute of Building Sciences (NIBS) provides step-by-step guidelines for the installation of firestop systems. It also states that a contractor should use only ASTM E814 tested and approved materials which are dry and free of other contaminants, and explains when the firestop system requires the use of mineral wool or ceramic fiber backer or filler.

Section 7270 also requires the contractor to apply the firestop system in strict accordance with the manufacturer's instructions to provide the requisite temperature- and flame-rated seals. Also, prior to concealing the system, the contractor should notify the architect to inspect the system.

IMPORTANCE OF BUILDING CODES

Throughout the country, federal, state and local government units have adopted various rules which specify minimum requirements as applied to building construction. Some states adopt a uniform statewide building code, while others delegate code adoption to counties and municipalities within the state.

Most units adopt all or part of one of the three model codes published by various private organizations. Those

organizations include The Building Officials and Code Administrators International, Inc. (BOCA), which publishes the National Building Code; the International Conference of Building Officials (ICBO), which publishes the Uniform Building Code; and the Southern Building Code Congress International, Inc. (SBCCI), which publishes the Standard Building Code.

Governmental units throughout a given region generally favor one model code. For example, SBCCI's Standard Building Code is adopted by the states south of the Mason-Dixon line and east of the Mississippi River. In contrast, the Northeast and Central States prefer the National Building Code, while Western states rely primarily on the Uniform Building Code to establish their building codes. Further, during the past several years, the three model code organizations have been developing a common code format with the ultimate goal of a single national code.

Fortunately, the three separate model code provisions related to firestop safety are fairly uniform and straightforward. All three model codes require the firestop system chosen by the building professional to comply with the tested and listed standards of ASTM E814, and, more importantly, all three model codes require "F" and "T" ratings of at least one hour. In fact, the "F" and "T" ratings are probably the most important standards a building professional should consider in choosing and installing a firestop system.

The "F" rating is based on the amount of time the firestop system is able to prevent flames and hot gases from entering an adjacent space. The "T" rating measures the speed of heat transmission through a firestop system. Both ratings take into account the firestop system's resistance to water pressure from fire-hose streams.

From a liability standpoint, it is imperative that a building professional choose the appropriate "F" and "T" ratings in a particular firestop system and strictly follow the installation guidelines. Whether a building professional complied with the manufacturer's installation guidelines and whether the appropriate system was chosen are key facts which a court or jury will examine in determining whether a building professional is liable for some or all of the damage caused by a fire which spread rapidly due to defectively installed or omitted firestops.

CURRENT CASE AUTHORITY

No exact discussion of the liability which building professionals could face in negligent firestop protection cases is possible. To date, the law related to firestop liability, in the private party context, is almost completely undeveloped and focuses on a case-by-case analysis of the facts involved.

There are certain legal principles which can be gleaned from the few firestop cases; however, general negligent construction liability cases can also provide important guidance to building professionals.

In *American States Ins. Co. v. Hannan Constr. Co.*, an insurance company, as subrogee of the insured, sued a builder, a lessor and a lessee for damages to the insured's store resulting from a fire. The insurer's suit against the builder alleged that the builder failed to firestop an open plenum space above a false ceiling in the store which purportedly provided oxygen and up-draft causing the fire to spread rapidly throughout the store.

The court stated the general rule of law in Ohio with respect to negligent construction of buildings: a builder is charged with an ordinary duty of care to refrain from creating an imminently dangerous or imminently defective condition, concealed from and unknown to subsequent users of the building.

Specifically, the court found that the builder breached its duty of ordinary care by failing to erect and construct the building in conformity with the Ohio Building Code, thereby violating Section 1205.02 of the Ohio Building Code and Section 3781.06 of the Ohio Revised Code. Specifically, Section 1205.02(9)(f) of the Ohio Building Code requires wall partitions to be noncombustible or to have a fire resistance of not less than 3/4 of an hour, and Section 3781.06 of the Ohio Revised Statutes requires all buildings to be constructed in a safe manner and for the intended use and occupancy.

The court found that the builder reasonably should have anticipated that an imminently dangerous or defective condition would be created by failing to install fire-resistant partitions with a fire resistance of at least 3/4 of an hour, as required by the Ohio Building Code.

In a second firestop case, *Sunlake Apartment Residents v. Tonti Development Corp.*, an architect settled with apartment residents who had sued him for $442,000 in damages caused by a fire which destroyed their building. The architect assumed liability for the fire based on his failure to design the structure to include the requisite firestops and draftstops.

After settling his claim with the plaintiffs, the architect filed a third-party action against the state of Louisiana, Department of Public Safety, the Office of the Fire Marshal and the City of Kenner, Office of Regulatory Inspection (hereinafter collectively referred to as "Public Agencies") for contributions for the damages which he had paid.

The architect premised his third-party suit against the Public Agencies on the theory that the Public Agencies had a duty to detect the absence of fire stops and draft stops in the plans and construction of the building.The court ruled that the Public Agencies were not liable for failing to detect the absence of firestop protection because the Public Agencies' actions did not cause the plans and construction to lack such protection. Therefore, the architect could not seek reimbursement from the Public Agencies for liability arising out of his own negligent design.

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From the few firestop cases which do exist, certain important legal principles are evident. First, building professionals and all contractors should study the applicable building codes and be certain to include all requisite firestop measures. As *Hannan Construction* makes clear, a contractor or building professional's violation of firestop building code requirements will lead to liability in the event of fire damages.

Finally, building professionals should be aware that the *Sunlake Apartment* case demonstrates that reliance on governmental oversight and approval of firestop work to ensure compliance with building codes is misplaced. Therefore, building professionals should carefully perform and inspect their work to comply with all known codes and/or building standards.

NEGLIGENT CONSTRUCTION THEORIES

To the extent that firestop case law is undeveloped beyond the two cases previously mentioned, certain legal principles can be borrowed from general negligent construction law authority. Generally, building professionals and contractors can be sued under a myriad of legal theories both for property damage as well as for personal injury related to a construction project. Although many legal theories exist, three such theories are important to understand in the general context of negligent construction cases. In turn, these three theories can be analogized to the firestop negligence context.

First, building professionals and contractors may be sued for expressly or inadvertently violating the local building codes. Second, building professionals and contractors may be sued by owners if the building professional or contractor fails to adhere to the owner's plans and specifications. Finally, in certain contexts, building professionals may be held liable for property damage or personal injury even if they strictly complied with the plans and specifications.

Under those analogies or any other theory of negligent construction, a building professional cannot be held liable to any plaintiff unless the plaintiff first establishes that the building professional or contractor was negligent. To make a prima facie cause of action for negligent construction, a plaintiff must show that he or she sustained damages, that the defendant was negligent, and that such negligence was the proximate cause of the damages.

To prove negligence, a plaintiff must show that the building professional or contractor failed to use the care that a reasonably careful person would use under circumstances similar to those shown by the evidence in the case. Generally, a plaintiff is required to present expert evidence of the local standard of care to establish that a reasonably careful building professional or contractor would have used a more stringent standard of care than the defendant used.

However, courts will sometimes waive the requirement that a plaintiff present expert testimony to establish the standard of care if the plaintiff can show that the building professional or contractor violated an existing building code, or the defendant did not comply with the building plans and specifications or a manufacturer's instructions. Therefore, a violation of a building code or a deviation from a building's plans and specifications could significantly reduce the plaintiff's need to establish a prima facie case of negligence against the building professional or contractor.

Under these general negligence principles, building professionals or contractors can be sued for various acts or omissions. An example of such an act would be when a building professional designs or a contractor installs a defective firestop system. Defective firestop systems can arguably range from systems which are improperly manufactured to systems which are not tested and approved by an accredited third-party testing agency, to systems which are manufactured correctly and tested and approved but are not used for the purpose for which they were tested and approved.

The liability of building professionals or contractors will depend on whether the professional selected a tested and approved firestop system, whether the professional designed or the contractor installed the system for a use for which the system was tested and approved, and finally, whether the contractor properly installed the system. Of course, even if building professionals or contractors follow those steps, they cannot be certain that they will be absolved from liability.

For example, in *George B. Gilmore Co. v. Garrett*, the defendant-building contractor was found negligent for constructing a home on yazoo clay without warning the plaintiffs of the adverse effects. Due to the contractor's failure to warn the plaintiffs of the presence of yazoo clay, the plaintiffs were left with a structurally deficient house which could not be permanently repaired. The court found the defendant liable even though he strictly followed the plans and specifications, the Veterans Administration had approved the construction after it was completed, and the defendant did not violate any applicable building codes. The court reasoned that ample evidence existed to put the defendant on notice that soil tests should be performed at the time the defendant built the house.

According to the court, the jury was warranted in finding the defendant negligent in failing to warn the plaintiffs of the defect in the soil and in undertaking house construction without making a soil test. Importantly, the

court found that such failures alone or in combination proximately caused the damage to the house. Therefore, the court found the defendant liable even though he followed the plans and specifications, the applicable building code, and the industry standard.

DEFENSES TO LIABILITY

In the event that a plaintiff attempts to impose firestop liability against a building professional or contractor, the building professional or contractor has certain defenses against the liability as well as certain legal devices to apportion liability to other participants in the project who may have contributed to the negligence. One such defense is that the building professionals or contractors properly followed the plans and specifications.

In general, a building professional or contractor who takes detailed plans and specifications from the owner has a right to rely upon the professional judgment and experience of those (architects, engineers, or consultants) employed by the owner to develop those plans and specifications, unless a review of those documents shows glaring defects that a contractor of average skill and prudence would recognize as likely to cause injury. For example, in *Waddey v. Davis*, owners and tenants of a store damaged by fire sued the project architect for failure to install a sprinkler system.

The project architect filed a third-party action against the subcontractor consulting engineer for failure to include a sprinkler system. The court ruled that the architect could not maintain a suit against the subcontractor based on negligence because the subcontractor relied on the plans and specifications approved by the architect.

In reaching its decision, the court analyzed the following evidence:

- the architect never requested the subcontractor's opinion with respect to a sprinkler system;
- the consulting engineer didn't reside in the same state as the project site;
- the subcontractor consulting engineer never visited the site; and,
- the architect supplied information to the subcontractor that the owner did not want a sprinkler system.

Therefore, the court recognized a defense to liability against the subcontractor for negligent construction based on the subcontractor's compliance with the plans and specifications supplied by the owner.

In addition to the above defense, building professionals may also argue that they are not liable because they followed the industry standard or local custom in completing the project. However, building professionals should be aware that it is no defense to claim to have followed a negligent industry standard or a defective local custom.

The building professional can also diminish its liability by seeking contribution from other defendants for any damages that the plaintiff may be awarded. To determine the degree of fault assigned to each defendant, courts usually analyze five factors:

(1) whether the conduct resulted from inadvertence or involved an awareness of the danger;

(2) how great a risk was created by the conduct;

(3) the significance of what was sought by the conduct;

(4) the capacities of the actor, whether superior of inferior; and,

(5) any extenuating circumstance which might require the actor to proceed in haste, without proper thought.

Therefore, contribution issues will be wholly dependent upon the facts of each particular case.

In addition to contribution claims, in some jurisdictions, defendants may also seek to diminish their liability for damages pursuant to the amount of fault, if any, attributable to the plaintiff. For example, in *East Hampton Dewitt Corp. v. State Farm Mut. Auto. Insur. Co.*, a landlord, who also erected the building, sued its tenant, State Farm, for $820,000 worth of property and economic damages resulting from a fire at the building.

The landlord alleged that State Farm was negligent in failing to promptly notify the fire department of the situation; State Farm, on the other hand, denied negligence and alleged that the fire spread throughout the building due to faulty construction, namely that the building lacked two-hour firestops between the floors as required by the Syracuse Building Code. After assessing the evidence, the jury found that the fire caused $820,000 worth of damages, and that State Farm contributed to its damages in an amount of $120,000.

SUMMARY

It is important for building professionals to recognize the potential liability which they face for negligently installing or omitting a firestop system. Building professionals should remember to consult the local or model building codes applicable to the area of the project, to investigate, and to use common safety sense in assessing the building codes, local customs, and industry standards prior to undertaking any project.

If the project does not call for firestop safety, the building professional should raise the issue with the architect and owner, and, if possible, memorialize such discussions in writing. Overall, it is important to consider firestop issues before undertaking any such project and, if problems arise, to understand that methods do exist to diminish and possibly avoid liability in specific factual situations.

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