College Residence Hall Safety: Is the Code Enough?

by John Antonucci, B.A.

As someone who has been in the fire protection field for more than 30 years, 18 of them as a Fire Chief, I am used to putting out fires, so I am not going to dive headlong into a code dissertation, citing chapter and verse of all applicable codes as they relate to residence hall safety. It would serve our purpose better if I discuss the global sense of a few codes affecting residence halls and beg the question, "Is the code enough?"

The other day I sat in yet another committee meeting, this one addressing safety in residence halls, discussing a university's elevated bed, or loft policy. We talked about height, width, configuration, and anything else that could be even remotely related to elevated beds or lofts. This may seem reasonable to you, the reader, but to me the committee member, it is another 30 minutes of my life that I can never get back; 30 minutes that could have been better spent on fire prevention and saving lives. That particular institution has a student handbook that contains all student policies including those concerning elevated beds and lofts; these policies have been in existence for at least the past ten years. The university has multiple residence halls, more than half of which have pre-engineered and installed modular furniture systems. The remaining rooms have standard room furniture, and may be config-

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ured into lofts, providing the lofts are constructed in accordance with university guidelines and that a permit has been issued. Since the policies have existed for some time, it seemed that there was nothing to discuss.

After much waiting and biting my tongue, it was my turn to discuss fire drills—life safety issues—and the need to establish a written evacuation policy for residence halls that is not included in the student handbook. Whereas the structural safety issues of elevated beds had been a part of the student handbook for several years, the handbook did not contain a similar statement of policy to address this vital life safety issue. Policies for fire drills and evacuation have the potential to prevent life threatening danger for far more residents than does a loft policy. One of the committee members immediately asked, "Who says we have to have fire drills?" How do you even begin to answer that question? Often times, our automatic response to such a question is, "it is in the fire code," or "it is in NFPA," or "it is in the building code." Any of these is supposed to be a sufficient answer,

after all, "the code" is what keeps us all safe, isn't it?

What is the code? Is it the absolute, is it a baseline for owners to build upon, or is it the minimum standard that we all tend to stand on from time to time as do most defense attorneys? Does it represent the ultimate protection? Consider NFPA 72 as it relates to residence hall fire alarm systems. Does providing detection in common areas and corridors afford adequate protection or adequate warning?

The same code applies to many different sizes and types of buildings with a variety of different occupant categories. Do systems installed per NFPA 72 provide acceptable levels of sound via signaling devices for application in residence halls? As construction techniques and materials improve, what is the acceptable decibel reading above ambient room noise in a sleeping compartment? We must keep in mind that the signal must be loud enough to rouse persons from a sound sleep and then cause them to take the prescribed action. If we follow the codes to the letter, will the alarms be sufficient to alert residents to danger in time to save lives? What level of signaling is required to do the job in this setting?

When considering R-2 occupancy, the International Building Code states that if an automatic sprinkler system is installed, the system shall conform to the outlined code provisions. The key words missing are "required system". Many lives depend on these few words. While it is true that certain local jurisdictions have enacted measures requiring sprinklers to be installed in residence halls, these measures always seem to follow catastrophic events.

Take into account the Boland Residence Hall fire at Seton Hall

In 1979, Notre Dame University's St. Edwards Residence Hall caught fire while undergoing an extensive renovation.

Today, Notre Dame is protected by a full-time career department.

Workers were installing a sprinkler system in St. Edwards Hall when this fire started. Unfortunately, the sprinklers were not functional yet.

University in 2000, in which three students died and 58 were injured. Most people remember that fire, but do we remember the Aquinas Residence Hall fire at Providence College in 1977, which claimed the lives of ten students? How far did we come in 23 years? Code may not require sprinklers, but how many more people must die before residence halls with sprinklers become the norm rather than the exception? How many grieving parents were satisfied to know that the residence hall in which their child died met the code?

Today's changing legal climate may begin to affect more immediate change in the level of protection provided in university residence halls. In a recent 2004 court case, a defendant stood upon code compliance while defending liability litigation. The campus facility was in compliance with an earlier code that had been in effect when the building had been constructed. Both the state court and state supreme courts upheld findings that the defendant had a minimal responsibility to provide a safe environment for all occupants. The courts further ruled that the defendants were responsible to remedy any dangerous situation that was reasonably foreseeable.

University residence hall safety is not only being scrutinized in legal circles, but also in peer group circles. All universities like to point to their respective ratings in academics, research grants, endowed faculty chairs, athletics, and anything else that can be used as a marketing tool. The *Princeton Review* has developed a rather telling survey that has 23 questions that rank a university based on the degree of safety provided for its students. You can find the survey at www.princetonreview.com (you will need to register to access the data at this website). It would be interesting to see how we would all fare after having answered the questions.

Three days after the Seton Hall disaster, the University of Notre Dame questioned its current level of protection provided in residence halls. Given Notre Dame's national reputation and an endowment comparable to some of those found in the Ivy League, the university seemed to be in an indefensible position. In February 2000, Notre Dame made the choice to be proactive and embarked on one of the most aggressive retrofit programs during that period.

The university's 27 residence halls each were equipped with code compliant fire alarm systems, and some degree of automatic sprinkler protection. Twelve residence halls were fully outfitted with sprinklers, leaving 15 facilities to be retrofitted. The university mandated project completion by August 2001 working only during summer and winter breaks. The project encompassed the installation of 8,500 sprinkler heads between May and August 2000, December 2000 and January 2001, and May and August of 2001.

Perhaps not every university is able to conduct such an aggressive retrofit project. Funding such a project becomes increasingly more difficult as economic pressures impact all facets of university management. We can however, become more vigilant in searching out those situations that may pose dangerous risks for our students, faculty, and staff. We can be *proactive* in our efforts. Standing on code compliance may no longer provide a defensible position. Is the code enough? Was the code enough at Providence? Was the code enough at Seton Hall? If you were a student living in a residence hall on your campus, would the code be enough for you? ♨