Pushing for Clarity – Residence Halls Codes

By Dana Peterson and Theodore J. Weidner, Ph.D., P.E., AIA

A PPA’s Code Advisory Task Force (CATF) is active in putting proposals before standards and code setting organizations, with the goal of clarifying and coordinating conflicting standards, and to serve as a voice for, and advocate on behalf of, educational institutions on such matters. Among its most recent activities are efforts to achieve consistency between the differing views taken of student residence facilities between the National Fire Protection Association (NFPA) and the International Code Council (ICC), as they pertain to residence facility codes.

THE CONFLICTS

NFPA’s position relegates student residence halls to a status of housing that serves a continually changing population (without any of the hazards associated with cooking or individual space heating), which is a position that ties student housing under the same fire and life safety standards associated with hotel occupancy. The ICC, on the other hand, has a better understanding of educational housing facilities (specifically the nature, predilections, and average tenure of stay of today’s student residents) and classifies the buildings under “Group R-2.” In contrast, the ICC classification is akin to apartment houses and similar structures, where the occupants are primarily permanent in nature and are familiar with the housing layout and design.

These two conflicting views have, in some jurisdictions, placed educational facilities managers, designers, and developers in the uncomfortable, and oftentimes costly, position of obtaining compliance with both codes. Many jurisdictions across the country have situations where the state building code is built to the ICC requirements, but fire safety codes (particularly NFPA 101) are also enforced either as a separate code by local fire departments, or by authorities for operational purposes, or in lieu of certain sections of the ICC codes for design approval.

A CLASS OF ITS OWN

The CATF’s initial efforts at creating code uniformity were focused on a proposal to create an entirely new occupancy classification for student residence halls to stand on their own. A CATF proposal was submitted to the NFPA 101 Committee in 2011. The committee declined to recommend the change to the full membership for adoption and, despite an appeal mounted by the task force at the NFPA’s meeting last June in Boston, the proposal was defeated.

In its comments, however, the technical committee did express sympathy for the underlying rationale behind breaking out student residence facilities separately from the current code, as well as the plight of designers and administrators.

It was also noted by the technical committee that the task force’s appeal would be better substantiated had it proposed an entirely new code regulatory chapter from the ground up, rather than rephrasing language found within the existing code, producing virtually no significant differences between one and the other in the committee’s view. However, writing a new section of code entirely from scratch—including all of the cross-references to other related code passages—would require significant resources of volunteer time and funding not presently available to the CATF.

Therefore, the task force is now giving consideration to how it might bring NFPA’s classification of student housing more in line with ICC—assuming that this can be done in a way that will maintain, if not enhance, fire and life safety code requirements that ensure the well-being of our student populations.

PRACTICALITY

From a practical standpoint, residence halls are more like permanent residence facilities. Occupants do become intimately familiar with them, the layout, and means of egress, unlike hotels where the occupant likely only knows the way between the front desk and the room they are in. Furthermore, today’s residence halls are built with all types of fire safety concerns including cooking facilities and assembly spaces, and these concerns are not accounted for under the NFPA code.

Under the NFPA Life Safety Handbook, dormitories are lumped under hotels because it purports the view that students are “primarily transient in nature” and that student housing is “mainly used for stays of short duration.” The NFPA classification is “also based on the presence of hazards (such as cooking and heating equipment) in residential occupancies and the degree to which occupants are familiar with their living space. Occu-
pants might have little or no familiarity as is the case with transient residents in a hotel.” As educational facilities professionals, we know that this classification does not accurately describe campus housing structures, or the manner in which students occupy housing. This is particularly the case for newly built and remodeled student housing units, which rarely resemble either modern hotel accommodations or “vintage” dorm rooms from yesteryear.

**A NEW STRATEGY**

The CATF is now considering whether it should pursue a strategy that would seek a switch or changes (not full rewrites) to existing NFPA classifications that would simplify compliance and costs, without compromising existing fire and life safety. To this end, what are the true ramifications of switching or changing classifications? By way of example, while we might seek regulation of residence facilities under another classification that feels like a better fit, it is still an untested hypothesis that it would result in less expense. We say “untested hypothesis” and while largely true, the task force did test its assumption in a side-by-side comparison of how a generic residence hall would be viewed under both the “hotel” and “apartment” NFPA classifications for two of the most regulated and cost provoking systems: fire alarm and sprinkler systems. That analysis is set forth in the chart above.

As can be seen, while the requirements for these systems are similar in most cases, there are particular cases and situations where it would be a substantial advantage in building to the NFPA classification requirements for apartment buildings. However this is only a tiny slice of the overall code and its regulatory impact. A working group under the CATF is needed to take the time to research all of these various impacts and to fully assess whether this approach is in the best interest of our institutions, and more importantly, our students.

**OTHER CONSIDERATIONS**

One other assessment to consider is how would such a designation affect camps and conferences, and truly transient summer occupants? Camps and conferences are an important revenue stream for some higher education institutions to mitigate the total cost of a college education. Would such uses be prohibited? Or would institutions have to build residence halls that might be used to house summer camps under a different classification from those that serve their principal student customers? Questions such as these and ones yet to be asked need to be studied and articulated.

While the CATF considers whether a strategy to bring NFPA code more in line with ICC’s view is appropriate to pursue, the ICC code language is not perfect either. Its definitions for key terms and Group R occupancies could be clarified to eliminate confusion, and more strongly make the connection to the transient nature of the occupants. The task force has a proposal before the ICC this year to spell out the language in its code regarding the classification of dormitories and student residence facilities.

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**REQUIREMENTS FOR A RESIDENCE HALL UNDER:**

<table>
<thead>
<tr>
<th>International Building Code</th>
<th>NFPA 101 Hotels (Chapter 28)</th>
<th>NFPA 101 Apartments (Chapter 30)</th>
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</thead>
<tbody>
<tr>
<td><strong>FIRE ALARMS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke alarms outside each bedroom and on each level.</td>
<td>Single station smoke detectors in every guest room. Corridor smoke detection unless sprinklered.</td>
<td>Smoke detectors outside every bedroom and on every level.</td>
</tr>
<tr>
<td>Fire alarm system if greater than 2 stories or contains more than 16 dwelling units.</td>
<td>Fire alarm system shall be provided.</td>
<td>Fire alarm system if greater than or equal to 4 stories or more than 11 dwelling units.</td>
</tr>
<tr>
<td>Manual pull stations with alarm to front desk or central point under continuous supervision.</td>
<td>Annunciation and zoning required at location of emergency arrival unless 3 stories or less or 50 guest rooms or less.</td>
<td>Annunciation and zoning required at location of emergency arrival unless 3 stories or less or less than 16 dwelling units, and sprinklered.</td>
</tr>
<tr>
<td><strong>SPRINKLER SYSTEMS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required if greater than 2 stories (including basements) or having more than 16 dwelling units.</td>
<td>Sprinkler systems in all unless door opens directly to the outside.</td>
<td>Sprinkler systems in all.</td>
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</tbody>
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