High-rise fire safety: Part 1 of 3

High-rise residential buildings create a whole host of challenges for the fire department during a fire. As in most fires, making sure that the building’s occupants are accounted for is the primary concern. So, proper actions by the building’s occupants is essential. An emergency plan is necessary for all high-rise buildings, providing occupants with instructions on what to do during a variety of emergencies – and specifically how or when to evacuate during a fire.

Placing college students in a high-rise building can present the FD with additional evacuation challenges. It is not uncommon for students to ignore the fire alarm when it sounds, this is typical in any use group. Unlike high-rise buildings located on-campus that may be a little easier to control; due to required evacuation during alarms, staff-controlled fire drills and daily maintenance to name a few. The university can also place sanctions on students who fail to evacuate for fire drills, thus compelling evacuation for all alarm activations. Once the student moves off-campus, this incentive is removed.
Tampering with smoke alarms, propping fire doors, knowing the proper use of a fire extinguisher and the lack of sprinklers also exist. These concerns are like most other types of student housing, but the number of occupants and the vertical challenges in access can make these buildings much more dangerous.

Fortunately, modern high-rise buildings have redundancy built in to the design to limit or contain the fire. This may include fire separations between the apartments, a self-closing and fire-rated door, stairway pressurization, sprinklers and a voice evacuation system as part of the fire alarm.

Aside from the built-in features, or the lack thereof, proper actions by the building occupants during an emergency make the difference of survival, or not. Having an emergency plan will address many of the emergencies that may arise. Adopted fire codes will also require such an emergency plan to be developed and provided to all occupants. What does this plan look like? What topics are included?

The next couple articles in this column will examine the required elements of such an emergency plan and take a closer look at the fire protection and means of egress systems that also apply.
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