The Fire Equipment Manufacturers’ Association (FEMA) announces the continuation of its successful balanced fire protection state fire code effort aimed at protecting the installation of fire extinguishers in sprinklered buildings. In just two years of code relations outreach, FEMA has participated in leading Georgia, North Carolina, Idaho, Nevada, Virginia, Ohio, South Dakota, Alaska, and California to amend their fire codes embracing balanced fire protection and protect fire extinguishers in sprinklered buildings.

FEMA’s ongoing code effort reaffirms its commitment to programs promoting balanced fire protection to save lives and protect property. One of FEMA’s recent initiatives is aimed at removing a trade-off found in the International Fire Code (IFC). The IFC is the nation’s most widely adopted fire code and has been adopted in one form or another in more than 40 states. Overall, the IFC is an excellent Code and in some cases, requires more fire extinguishers in more circumstances than other comparable Codes. However, Section 906.1, Line 1 exception, of the 2006 IFC grants a trade-off in favor of quick response sprinklers in schools, businesses and places of public assembly at the expense of fire extinguishers. Section 906.1, Line 1 exception states: “In all Group A, B and E occupancies equipped throughout with quick-response sprinklers, fire extinguishers shall be required only in special-hazard areas.” FEMA, through its Government Relations Committee, has been working in cooperation with distributors in targeted states to help remove this exception and embrace balanced fire protection. This effort complements FEMA’s full time Code Consultant activity work and continued marketing campaigns.

As you and many industry professionals know, fire extinguishers and sprinklers are completely different fire protection devices designed for different roles in the chain of survival. Both types of equipment are proven instruments of life safety, however, each type has a very distinct role in helping to achieve a balanced fire protection design.

Fire extinguishers not only can successfully extinguish a fire at its initial stages, but when available and used properly, extinguishers also can provide individuals with assistance to allow them to rescue, escape or evacuate a fire safely. This additional time can be the difference between life and death.

When it comes to fire, every second counts. A fire doubles in size every minute. Fire extinguishers are a first line of defense to provide a primary means of protection during the initial incipient stage of a fire (generally the first two minutes)—long before sprinklers are even activated. The importance of fire extinguishers cannot be understated and it is discouraging that they are being overlooked and, ultimately, possibly eliminated.

The National Fire Protection Association (NFPA) states “Safety to life does not depend solely on any single safeguard.” The reality is that all the necessary components of a balanced fire protection plan must work together to create a building that can achieve a consistent, cohesive, and redundant design that can succeed despite any human error or mechanical failure of a system. The Fire Equipment Manufacturers’ Association strongly believes that multiple safeguards are critical in designing and creating an effective fire protection plan—one system is simply not enough.

Here are some key facts and statistics which further support the removal of the IFC proposed trade-off in favor of quick response sprinklers in several occupancies against fire extinguishers. Consider this:

Data shows that fire extinguishers are effective 94 percent of the time when used to put out the fire. The fire is extinguished typically within the initial two minutes.

Sprinklers, quick response or otherwise, require an enormous amount of heat to be activated which occurs after any opportunity to use an extinguisher.

Georgia, North Carolina, Idaho, Nevada, Virginia, Ohio, South Dakota,
Alaska, and California have all removed the 906.1, Line 1 exception. Three more states are in the process of removal and adoption.

As mentioned earlier in the article, NFPA states “Safety to life does not depend on any single safeguard.”

The “flight-not-fight response” can be a flawed assumption as studies have shown repeatedly that the natural human response is to try and extinguish a small fire! If extinguishers are not present, statistics indicate that occupants will use makeshift methods. Using makeshift methods for extinguishing fire greatly increases the likelihood for injury.

NASFM (National Association of State Fire Marshals) supports removal of the exception. NASFM states “We know of no scientific justification for abandoning the central principle of fire protection redundancy.” NASFM has advocated to Legislative and Regulatory bodies across the country on the importance of having fire extinguishers in buildings even if those buildings have sprinklers, citing the importance of redundancy in fire protection.

In addition, Section 906.1, Line 1 exception, is contrary to the just released 2007 edition of NFPA 10, Standard for Portable Fire Extinguishers. Section 1.1.1, which states: “the selection and installation of extinguishers is independent of whether the building is equipped with sprinklers.” Section 5.4.2 states: “Fire extinguishers shall be provided for the protection of both the building structure and the occupancy hazards contained therein regardless of the presence of any fixed fire suppression systems.”

Another issue to consider is that without removal of the exception there could be additional unintended consequences leading to the lack of or even removal of extinguishers presently installed. This trade-off endangers building occupants and counteracts the industry’s widespread efforts towards achieving a balanced fire protection plan in commercial occupancies.

The Fire Equipment Manufacturers’ Association strongly believes in the life safety value of portable fire extinguishers and fixed fire suppression systems working within the context of a balanced fire protection plan. However, we are in full agreement with NFPA 10, which states that extinguishers are independent of whether the building is equipped with sprinklers. Fire extinguishers and sprinkler systems have very critical—yet distinctly different roles in fire protection and therefore, trading one system in lieu of another is not good balanced fire protection.

NAFED and its members should embrace the FEMA campaign to support the removal of Section 906.1, Line 1 exception, of the 2006 IFC, which grants a trade-off in favor of quick response sprinklers in several occupancies against fire extinguishers. This dangerous trade-off weakens redundancy and jeopardizes balanced fire protection—both of which are vital to fire and life safety.

The Fire Equipment Manufacturers’ Association is a non-profit trade association dedicated to saving lives and protecting property through balanced fire protection education. For more information about FEMA or portable fire extinguishers, visit www.femalifesafety.org.

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