

# CODES & STANDARDS®

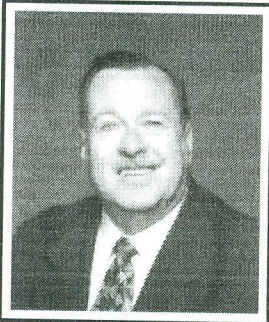
Monthly digest of recent events in model codes and standards affecting design professionals, code officials and industry.

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## **MASS NOTIFICATION SYSTEMS**

### The Facts, The Do's & Don'ts

Alarms aren't just for fire notification anymore. A visible and audio system are now available for Mass Notification. You may need to communicate to the building occupants for not just fire, but also

active shooter, weather, chemical spill and other potential emergencies. Our firm has already consulted for clients on these systems.

Though they may not required by code yet, there are four types of systems. The standard is *2010 NFPA No. 72 (National Alarm Code) Chapter 24 - Emergency Communications Systems*.

1. In-Building Audio Notification - The most basic form of alarm system for voice messages for in-building occupants.
2. In-Building Visual Notification - It does not consider hearing-impaired persons. Therefore, a visual alarm system is also needed. Large dome signal light systems are the most common method.
3. Wide-Area Mass Notification - Notifying all occupants within the building. But what about those not inside?
4. Distributed Recipient Mass Notification - Signal is sent via cell phones along with directions. Many persons may be on a large campus complex and not always in the building. This method of notification will ensure they also receive they are made aware of an emergency event.

These systems are not for notification or paging of non-emergency events. Remember when schools used the fire alarm system to page the janitor? The is not the intent of mass notification systems. Maintaining and periodic testing requirements are the same as any life safety alarm system.

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Ask Kelly...



QUESTION? - *“Is there a method of protecting a prospective building owner from knowing existing code violations exist before they purchase the property?”*

ANSWER: In most jurisdictions you can file an administrative lien on the property citing the code violations. This lien will appear before the buyer can get a clear title. Then it will become evident what code problems the buyer is aware of.

QUESTION? - *“Can fire sprinklers or water mist systems be used for complying with the extinguishing requirements of commercial cooking systems?”*

ANSWER: YES, in the *2018 International Building Code - Section 904.12* - fire sprinkler systems designed to *NFPA No. 13* and water mist systems using *NFPA No. 750* standard comply with the extinguishing requirements. Water on a grease fire? The design and pattern of the heads control the fire spread and delete the oxygen supply. Therefore the fire extinguishes.

QUESTION? - *“How do we determine if exterior wall cladding is combustible or noncombustible?”*

ANSWER: A material is noncombustible if it meets the criteria based on *ASTM E136 (Test Method for Materials in a Vertical Tube Furnace)*. If it doesn't meet this criteria, then it is considered to be combustible.

QUESTION? - *“At what temperature do pipes freeze?”*

ANSWER - With this current winter season, freezing pipes can lead to serious damage. In areas where freezing is the exception, such as the South, the alert threshold is 20 F. However, most houses found in climates prone to freezing the piping needs to be insulated and buried beneath the frost line. Section 1809 of the *2015 International Building Code* has the criteria for frost protection. To defrost existing pipes only, use electric tape wrap that is UL-listed for that purpose.

QUESTION? - *“Are fire sprinklers systems required in existing nursing homes?”*

ANSWER: The *2012 NFPA No. 101 (Life Safety Code)* requires fire sprinklers in all existing nursing homes. Prior editions of the code permitted equivalencies and trade offs in lieu of fire sprinklers. Not anymore! The Medicare and Medicaid Services (CMS) who sets code requirements has adopted the 2012 of NFPA No. 101. Compliance is required for medical facilities to be eligible in Medicare and Medicaid payment programs.

## CODE WATCH



**CHICAGO, IL** - Effective January 15, 2018 the city will require unrestricted fire pump testing, fire sprinkler testing, and accept third party management testing. The compliance requirements will be the *2017* edition of *NFPA No. 25*.

**CONNECTICUT** - Potty parity for bathrooms may be changed to include gender-neutral quotas. The 2018 edition of the state code may solve that problem by allowing buildings to count gender-neutral single-user bathrooms as opposed to multiple stalls and urinals.

**FLORIDA - HB 1061** would ease the fire protection requirements for older high-rise buildings. Previous condo buildings 75 ft. or taller and that were built before 1994 would require retrofit fire sprinklers. Under current law, local governments are barred from requiring retrofitting fire sprinklers before the end of 2019. The bill would push back the deadline to 2022. Also, it would permit condo residents to opt out with a 2/3 vote against fire sprinklers or engineered life safety systems. I guess the other third of the residents will be letting someone else determine their level of life safety. Many of these occupants are elderly and preservation of life during an emergency event could be critical.

**ILLINOIS** - The state energy conservation code will now be regulated by the state EPA. The energy section was removed from the IL Dept. of Commerce and Economic Opportunity.

**NEW HAMPSHIRE** - The State shut down two bills that would update the states outdated building and fire codes. **HB 92** would update from the *2009* to the *2015 International Codes*. Opponents cite 12% increased housing costs. Their concern was increased insulation costs. Stupid argument. Not considering the safety of their home buyers.

**INDIANA** - Carbon monoxide detectors can now be required in residential properties if cities and counties apply to the 11-member Fire Prevention and Building Safety Commission mostly made up of industry. CO detectors are not required in the statewide building code at this time.

**NFPA No. 3000** is a new proposed national standard that unifies active/shooter and hostile event response plans. It is divided into four sections: Whole community response, uniform command, integrated response and recovery starts today. The final document should be ready by April 2018.

\*\*\* FREE REPORT \*\*\*

**TOTAL COST OF FIRE IN THE UNITED STATES** - From NFPA Research - 7 pgs. FREE, just send me a request at: [codexperts@aol.com](mailto:codexperts@aol.com) and ask for "fire report".



**LAW REVIEW**

**NEW YORK** - A jury awarded \$2.375M in damages after finding the Village of Chester reneged on an agreement to rezone property.

**PENNSYLVANIA** - A property owner built a house and two carriage garages. The garages were supposed to be for storing a collection of cars. He did not live on the property. Instead the storage garages became a race car repair shop. Car transport carriers were also on the property. The owner claimed it was an "accessory use". The Court ruled that the repair shop does not qualify for such use and is a zoning violation.

*Reference: Di Mattia et all v. Zoning Board of East Whiteland, et all, NO 1163 2016 Commonwealth of Pennsylvania.*

**CRIME & PUNISHMENT**

**OREGON** - The Oregon State Building Codes Division is investigating complaints of private third-party inspection services over charging and not providing licensed inspectors. One company was fined \$15,000 and their certification revoked. One inspector personally profited from overcharging a health care facility. His fine of \$18,913.45 (was five times what he profited) and licensed revoked. The State has revoked 35 private inspection individuals and agencies.

*In Brief . . .*

- John Portman, legendary architect and developers of iconic hotels passed away in Atlanta at age 93. He started the high rise open atrium market.
- Weather disasters in 2017 cost the U S a record \$306 billion. That includes hurricanes and wildfires.
- 2018 will be a good year for home building for the single family market .Multifamily will stabilize after dropping sharply last year.
- Look for external defibrillators (AED) to be added to future fire and life safety codes. You already see them in large occupied areas such as assembly, airports and on planes.

⇒ Attached is our report on how the new tax laws will promote fire sprinklers.

*Kelly P. Reynolds*  
Kelly P. Reynolds

*"If You Don't Have Time To Do It Right, When Will You Have Time To Do It Over?"*

SPECIAL REPORT ON FIRE SPRINKLER INCENTIVES

**Fire sprinkler incentives**

• **Cost Recover Section 13201** - Previously sprinkler systems in commercial structures were depreciated over a 39-year time horizon and residential structures over 27.5 years. Under the new law any sprinkler system installed after Sept. 27, 2017 in either a commercial or residential structure until Dec. 31,

2022 will be able to be fully expensed. Therefore, the property owner will be able to immediately write off the full cost of the sprinkler system. After 2022 the ability to deduct the cost is as follows:

2023 - 80 percent

2024 - 60 percent

2025 - 40 percent

2026 - 20 percent

2027 - The depreciation schedule will revert back

to 39 and 27.5 years for commercial and

residential properties (respectively)

• **Small Business Section 179 Expensing** - Previously qualified small businesses were allowed to fully expense purchases such as computers, equipment and light duty vehicles up to an annual cap of \$500,000. Under the new law Congress has added fire protection as an eligible expenditure under section 179 of the tax code. Congress also increased the cap to \$1 million as the amount that a small business can deduct in a single year. This provision applies only to commercial structures and cannot be used for retrofitting sprinklers into residential structures. However, critical occupancies such as entertainment venues could easily be done under this provision. This change is also a permanent law and unlike section 13201 is not gradually phased out over time.

