

STEVE SCHWARTZ (Consolidated Fire Protection)

Q-01 NFPA 72 Chapter 18 Section 18.4.2.4, The standard evacuation signal shall be synchronized within a notification zone.

We have been taught that a floor is a zone, so in a hotel when you use FA system 520 HTZ sounder bases as a notification appliance in the guest rooms and regular horn /strobes notification appliances in the common areas, when the alarm is activated you can hear the 520 HTZ sounders in the guest rooms and they do not sync with the temporal code from the common area notification devices.

We were told by the manufacturer of the equipment that their equipment is not able to make the sounders synchronize.

Does the code need to be re-written?

MARK McQUAID (CA Gamble)

Q-02. During a recent benchmark test for an ERRCS system, when we submitted the FCC licensed contractors benchmark test, the local AHJ said that they wouldn't accept it since one of their staff didn't attend the test.

Is this the intention of the code? 2016 CFC 510.1 and 510.4.1.

MARK McQUAID (CA Gamble) & TONY LOCATELLI (Cupertino Electric Inc)

Q-03. When is the best time to conduct a benchmark test, and would it be a good idea to establish this as a state standard?

TONY LOCATELLI (Cupertino Electric Inc)

Q-04. What is the states' interpretation of 2016 NFPA 1221 Section 9.6.13.2 Dedicated function panel?. "...A dedicated function control panel shall be provided within the FIRE COMMAND CENTER.."

What if we are dealing with a structure that doesn't contain a FCC?

Is this Dedicated function panel necessary, and if so, where is the optimum location?

Q-05. 2016 NFPA 72 Section 24.8.19 states the cable for the 2-way system shall meet survivability of 24.3.13.7.

24.3.13.7 states the circuits need to be level 2 unless the building is less than 2-hour fire rated construction.

Do these sections apply to the phone line between the master station and the phone lines located in the MPOE?

Q-06. Can you define how to determine the process of determining if a building is less than 2-hour rated?

Does this mean if there are no 2-hour rated stairwells or elevators it isn't 2-hour rated?

Does it apply to exterior walls? Core, etc?

TONY LOCATELLI (Cupertino Electric Inc) - continued

Q-07. There seems to be a trend on buildings getting built with a HVAC design that avoids using large HVAC units on the roof, and going to multiple small units on the floors.

For example, let's say there are 25 fan coil units on a given floor, and they range from 700 CFM to 2100 CFM. Some feed shared open areas, some small units less than 2000cfm feed dedicated conference rooms.

What is required of the fire alarm system in this situation?

TONY LOCATELLI (Cupertiono Electric Inc) - continued

I would either provide a duct detector on all units with individual shutdowns, or provide complete area detection on the floor with either individual shutdowns or a shunt trip of the electrical panel that feeds all the units on the floor. Either way we have a global shutdown.

The question is whether or not we need to treat the small units (less than 2000cfm) in a segregated conference room with detection and shutdown.

Q-08. 2013 CBC Section 3006.4.1. – 1. Approved smoke detectors shall be installed in the elev. hoistway, machine room, machinery spaces, control spaces, or control rooms...”

Now, no matter whether the hoistway has an automatic sprinkler system or not, there will be a smoke detectors at the top of the hoistway.

Correct?

JAY LEVY (Saf-Com Supply)

Q-09. Why does the CSFM website link change every year? The manufacturers need to update their website due to the change of link address.

Q-10. Can the links to the new website locations be released earlier so manufacturers can prepare better?

Q-11. Can the BML CSFM site be modified to be searchable by part number or model number?

JOEL REITZ (Siemens)

Q-12. 2016 CBC Section 2-way comm. Section 1009.8.1 states that “..where the central control point is not constantly attended, a two way comm. system shall have a times automatic telephone dial out capability to a monitoring location....”

We have recently been required to provide two-way communication from the call station, to not only the master station down in the lobby, but all the way through to the central monitoring station.

Where is this code section; does it state two-way communication is required to the central station?

The code only says two-way is required at the master comm. station downstairs.

Why isn't an automated message to the central station good enough to get a response to the facility?

DREW TURNER (Edwards)

Q-13. E Occupancy – Is it the intent of the code to provide the microphone at the admin office?

JOSEPH CERVANTES (Space Age Electronics)

Q-14. Low frequency sounders – In an R Occupancy, what is considered a sleeping unit? Does the living room qualify?

TODD SIMS (SimplexGrinnell)

Q-16. Background: approximately two years ago, California State Fire Marshal plan review was consolidated to Sacramento, ending project reviews in Monrovia, California.

With the State economy strongly recovering, may our industry look forward to re-establishing review process services in Monrovia, California?

SAGIV WEISS-ISHAI (San Francisco Fire Dept)

- Q-15. Is it required by code (which code?) to connect a hood and duct (ANSUL) system to:
- a. Code required Building FA system
 - b. Voluntary / non-required Building FA system
 - c. Sprinkler Waterflow and supervisory
 - d. Elevator recall and supervisory system
- Q-16. Is it required to connect new or modernized elevators recall detectors to:
- a. Code required Building FA system
 - b. Voluntary / non-required Building FA system
 - c. Sprinkler Waterflow and supervisory system
 - d. Elevator recall and supervisory system
 - e. If the answer to item (a) is YES and the existing building FA system does not have the capacity to include the new recall detector, is it acceptable to connect the detectors to a NEW sub FACU which will be tied into the main existing FACU?
 - f. Can the recall smoke detectors be connected to the same zone on a conventional FACU?
 - g. Is it permitted to connect the recall detectors to a Sprinkler waterflow and supervisory FACU?
 - h. Is it permitted to connect duct detectors for AHUs and FSDs to an elevator recall and supervisory system?
 - i. Are duct detectors required to generate supervisory signals at the FACU and off-site supervising stations or can they generate an alarm signal and trigger building evacuation?
- Q-17. Is a bypass means (switch or button) on the FACU permitted to bypass the elevator Phase I recall function?
- Q-18. Which code or standard per CFC or CBC 2016 governs the installations of ERRCS in CA?
- Q-19. Which code or standard per CFC or CBC 2016 governs the installations of Elevators in the state of CA?
- Q-20. Are ERRCS floor antennas required by code to be monitored for integrity?
- Q-21. Are ERRCS system wires required to run in metallic raceways?
- Q-22. Is the ERRCS dedicated annunciator required to be a part of the building FA system, if provided? Or could it be a part of the ERRCS system itself?
- Q-23. Are ERRCS system components required to be CSFM listed?
- Q-24. Are Two Way Emergency Communication systems required to be CSFM listed?
- Q-25. If the building is provided with a horizontal exit and the elevator is installed only on one side of the horizontal exit, is an additional 2-way ECS required at the non-elevator side of the horizontal exit?
- Q-26. Where is the required location of the master control unit of a two-way ECS in a high-rise and low-rise building?
- Q-27. Is an emergency generator for a low-rise building required to be monitored by the building FA system, if provided?
- Q-28. Same as Q27 but for high-rise building?
- Q-29. Are low-frequency audible notification appliances installed in sleeping areas of low-rise residential building required to have a synchronized sound with the non-LF audible appliances installed in the common (non-sleeping) areas of the building?

Q-30. Are LF sounders required to be installed in the living space of a dwelling unit?

Q-31. If an EVACS is provided on a voluntary basis for a low-rise residential building, is it required to generate pre-recorded voice messages and have a microphone? Or can it just generate the Low-Frequency temporal-3 tone?

Q-32. Is it required to have the word 'FIRE' on strobes used for new or existing FA systems with NO voice capabilities? Or can the strobe have no labeling?

Q-33. In a high-rise relocation building, is it required to have a steady tone or a temporal 3-tone before and after the pre-recorded message?

Q-34. Are pre-recorded messages on a new EVACS installed in CA required to generate messages in the English language?

Q-35. Is a smoke detector (or a heat detector) required to be installed at the location of a dedicated functional FACU?

REX STOUT (Cosco Fire)

Q-36. Duct detector for control of a smoke fire damper(s).

When using a duct detector for the control of a smoke fire damper, is the fire alarm system required to monitor the status of the associated air handler/fan units?

Since a typical duct detector being used to control a smoke fire damper is typically not listed to operate between 0 to 100 feet per minute, and requires a minimum velocity to operate, is the fire alarm system required to monitor the status of the associated air handler/fan units in order to close the associated smoke fire dampers(s) when the air handler/fan units is off as required by CBC 2016 717.3.3.2 below:

CBC 2016 717.3.3.2: Smoke damper actuation. The smoke damper shall close upon actuation of a listed smoke detector or detectors installed in accordance with Section 907.3 and one of the following methods, as cable:

1. Where a smoke damper is installed within a duct, a smoke detector shall be installed inside the duct, or outside the duct with sampling tubes protruding into the duct. The detector or tubes within the duct shall be within 5 feet (1524mm) of the damper. Air outlets and inlets shall not be located between the detector or tubes and the damper. The detector shall be listed for the air velocity temperature and humidity anticipated at the point where it is installed. Other than in mechanical smoke control systems, dampers shall be closed upon fan shutdown where local smoke detectors require a minimum velocity to operate.

TERRY SZALAI (Blakeslee Electric)

Q-37. 2016 CBC 907.3.2.2 Detection for delayed egress devices.

907.3.2.2 For Group 1 and R-2.1 occupancies. Smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces of smoke-compartments where delayed egress devices are installed. Additional detectors are required in adjacent smoke-compartments where occupants of those compartments utilize the same means of egress.

Would the following rooms require a smoke detector:

- a. Restrooms Inside Patient Rooms
- b. Janitor Closet
- c. Storage Room

Q-38. If a sprinkled room has adverse conditions for smoke detectors – such as a patient shower room or a kitchen – is a heat detector required to be installed or could sprinkler waterflow substitute for individual heat detectors?

TERRY SZALAI (Blakeslee Electric) - continued

Q-39. OSHPD Code Application Notice 2-102.6 Existing conditions

Is there a rule of thumb when existing conditions are reviewed for areas not specifically being remodeled as part of the scope of a project?

- a. For example, if a project in a hospital or skilled nursing facility contains remodeling of patient rooms, do issues in the adjacent corridor become reviewable by OSHPD, such as non-synchronized strobes or improper strobe spacing, pull-stations not within five feet of exit doors, locations of smoke detectors not within 36" of peaked ceilings, magnetically-held doors of non-remodeled rooms without smoke detection inside the rooms, etc.?
- b. Would OSHPD expect that issues like the above be corrected in projects that also included replacement or upgrade of the fire alarm control panel?

(<https://www.oshpd.ca.gov/fdd/regulations/cans/2013/2-102.6.pdf>)

6. Adequate Fire Protection Systems Provided

Projects must be evaluated for adequate fire dampers, smoke/fire dampers, and fire systems including smoke control, fire sprinkler and fire alarm systems.

See CBC Chapters 3, 7, an 9 or an approved Alternate Means of Protection, CBC Section 104.11

Fire Protection systems are considered to be adequate when they are in compliance with the current California Building Standards Code, or are in compliance with the applicable code when they were installed.

7. Provide Fire Protection Systems per Code

If determined that adequate fire protection systems are not provided, systems must be provided in accordance with the California Building Standards Code or an approved Alternate Method of Compliance in accordance with CBC Section 104.11

DAVID SECODA (Jensen Hughes)

Q-40. CBC Section 915.1 required carbon monoxide detection in new *and existing* buildings. CBC Section 915.1.1 requires Group E occupancies to be provided with carbon monoxide detection. CBC Section 915.4.1 requires the power source for carbon monoxide alarms to be from permanent wiring. HSC Section 1596.954 requires every licensed daycare center to have one or more carbon monoxide detectors in the facility that meet the standards of HSC Section 13260. HSC Section 13262(a)(2) defines a carbon monoxide device as "A device that is battery powered, a plug-in device with battery backup, or a device installed as recommended by Standard 720 of the National Fire Protection Association that is either wired into the alternating current power line of the dwelling unit with a secondary battery backup or connected to a system via a panel."

- a. Are the power source requirements of CBC 915.4 applicable to an existing Group E Daycare occupancy, licensed per the HSC, not undergoing alterations or additions? Or, is it the intent of the codes to allow the use of a carbon monoxide device that is battery powered or plug-in with battery backup?
- b. Are the power source requirements of CBC 915.4 applicable to any other existing community care facility, licensed per the HSC, not undergoing alterations or additions? Or, is it the intent of the codes to allow the use of a carbon monoxide device that is battery powered or plug-in with battery backup?
- c. Are the Exceptions to Sections 915.1.3, 915.1.4 and 915.1.5 applicable to the locations specified for Group E occupancies in Section 915.2.3? The exceptions to the conditions seem out of place. CBC Section 915.2.3 states that carbon monoxide detection shall be installed in classrooms.
- d. In accordance with the requirements of CBC Section 915.1.3, is the school's main office an "approved location" as cited in the Exception?
- e. Where repairs or alterations to an existing building on an existing public school campus are

planned, and carbon monoxide conditions exist, is it the intent of CBC Section 915 to require carbon monoxide detection within the area of repairs or alterations?

1. Are the power source requirements of Section 915.4 applicable if planned repairs or alterations do not result in the removal of interior wall and ceiling finishes exposing the structure in areas/spaces where carbon monoxide alarms are required: Or, is it allowed to use battery powered or plug-in with battery backup type devices?

f. Are the power source requirements of Section 915.4 applicable to schools built before the adoption of the 2016 California Building Standards Code? Assembly Bill No. 56 states that schools built before the adoption of the 2016 California Building Standards Code *are encouraged* to have a carbon monoxide device installed in the building. If a school district is considering voluntary provision of carbon monoxide devices, are battery powered or plug-in devices with battery backup allowed?

CBC Section 915.5 states that a carbon monoxide system complying with NFPA 720 is an acceptable alternative to carbon monoxide alarms. Referenced Standard NFPA 720 2015 edition, Chapter 6 requires carbon monoxide detection systems to provide audible and visible occupant notification. Referenced Standard NFPA 72 2016 edition Section 18.3.3.2 requires that notification appliances used for signaling other than fire shall not have the word FIRE, or any fire symbol on the appliance.

DAVID SECODA (Jensen Hughes)

g. In new construction, where a school's in-building fire emergency voice alarm communications system is also used for carbon monoxide detection and occupant notification, is it the intent of the codes/standards to use notification appliances with no marking or marked ALERT?

h. If carbon monoxide devices are connected to an existing fire alarm system, in an existing school building, do the notification appliances need to be changed or modified to have no marking or marked ALERT?

JOHN SULLIVAN (EMS)

Q41. In 2016 CMC Section 608, the charging statement is "upon detection of smoke in the main supply-air duct served by such equipment". Exemption 5 states: "Smoke detectors that are factory installed in listed air-moving equipment shall be permitted to be used in lieu of smoke detectors installed in the main supply-air duct served by such equipment".

Do factory installed detectors on the return side of the air-moving equipment satisfy this requirement, or must the detectors be factory installed on the supply-air side of the unit?

Q-42. The 2016 CFC Chapter 2 defines "Common Use" in the following terms: "Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people."

2015 ICC Code Commentary under "Common Use" lists "copy areas, break rooms, toilet rooms, or circulation paths" as examples of common use areas. They do not list private offices.

CFC Table 1004.1.2 "Maximum Floor Area Allowances Per Occupant" shows 100 gross square feet per occupant in a Group B occupancy.

Please clarify that use by two or more people would require a minimum of 200 gross square feet, and that private offices are not included in this section.

DANIEL TATE (INTREPID ELECTRONIC SYSTEMS)

Q-43. Do the past California State Fire Marshal Code Interpretations remain applicable as the code cycle updates?

For example: Code Interpretation # 11-007 was re-asked and answered that it applied to 2010. Does this response also apply to 2013, 2016, and future? ?