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CODE APPLICATION NOTICE (CAN)
H&S Code §129851

SUBJECT

Patient and Client Room Smoke Detectors

CAN: 9-907.2.6.2.2

Effective: 01/13/2021



CODE SECTION

Section 907.2.6.2.2, Item 1
2019 California Fire Code (CFC)

907.2.6.2.2 Automatic fire detection. *Smoke detectors shall be provided in accordance with this section.*

- In patient and client sleeping rooms. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located and shall cause an audible and visual alarm at the respective nurses' station. A nurse call system listed for this function is an acceptable means of providing the audible and visual alarm at the respective nurses' station and corridor room display. Operation of the smoke detector shall not include any alarm verification feature.*

Exception: *In patient and client rooms equipped with existing automatic door closers having integral smoke detector, the integral detector is allowed to substitute for the room smoke detector, provided it meets all the required alerting functions.*

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PURPOSE

The California Fire Code (CFC) and the California Building Code (CBC) require smoke detectors to be installed in all patient and client sleeping rooms of hospitals and nursing homes constructed or altered on or after August 14, 1992. There are numerous methodologies and technologies available to achieve the objectives described in CFC Section 907.2.6.2.2, Item 1. The following is intended to clarify and describe certain performance criteria and technical requirements.

INTERPRETATION

For the purposes of this interpretation, patient and client rooms are defined as spaces with beds that are licensed by the California Department of Public Health (CDPH), Licensing and Certification Program (L&C).

Smoke detection devices shall be California State Fire Marshal (SFM) approved and listed and shall meet the requirements of UL 268 (Smoke Detectors for Fire Protection Signaling Systems). Smoke detection devices shall also be installed in accordance with

their listing, with the CFC, and with NFPA 72, The National Fire Alarm and Signaling Code as amended.

The provisions of CFC, Section 907.6.2.2, Item 1 that require a nurse call system be listed are related to the activation of a corridor visual display and an audible and visual alarm at a nurses' station. While it is not mandatory for the patient room smoke detectors to be connected to a nurse call system, when a nurse call system is used to provide the visual and audible notification required by this section, the nurse call system shall be listed in accordance with ANSI/UL 1069, Safety Standard for Hospital Signaling and Nurse Call Equipment, 7th edition or later, and shall be installed in accordance with the California Electrical Code (CEC). A nurse call system listed and installed in accordance with these requirements will comply with CFC, Section 907.6.2.2, Item 1.

A patient/client room smoke detector sequence of operation and alerting function shall be as follows:

1. In accordance with CFC, Section 907.2.6, activate the fire alarm.
2. Activate a visual display above the patient room door located on the corridor side within 12 inches of the corridor door, or where patient room doors are recessed, within 12 inches of the plane formed by the corridor walls. Such visual display shall be clearly visible from a standing position in the corridor.
3. Produce a distinct audible and visual display, different than that of the building general alarm, at the responsible nurse station indicating activation of a patient room smoke detector.

The installation and performance of a device installed for the purpose of alerting health care facility staff of the activation of a patient/client room smoke detector shall be in accordance with the following:

1. The visual display located in the corridor above the patient room door shall be listed by the SFM *unless* the device and method of installation complies with Title 19, California Code of Regulations, Division 1, Chapter 1.5, Section 208(b)(3). To meet this criterion:
 - a. The electrical design of the device shall not be integral to the internal circuitry of the fire alarm system, and
 - b. such devices shall be served by a power supply independent of the power supply necessary for the function of the fire alarm system, and
 - c. such devices shall be connected to the fire alarm system by relays or switching devices which will provide electrical isolation from the fire alarm system to prevent interruption or interference of the normal or intended function of the fire alarm system.

Visual devices that receive their power from the fire alarm system or are installed in a manner inconsistent with the criteria listed above shall be electrically supervised and shall be SFM listed as a fire alarm device.

2. A dedicated lamp in the nurse call system “light tree” located in the corridor outside of the patient room may be utilized for the visual display as long as the power supply for the lamp circuit is energized from a branch of an essential electrical system in accordance with Article 517 of the CEC, and the visual indicator is a unique color lamp or lens not used for any other purpose in the nurse call system.
3. For a visual display over a patient room door to be considered “clearly visible” it shall be contrasting in color to any other nurse call display and shall be of intensity sufficient to be visible from a minimum of 90 feet from the responsible nurse station. Visual displays should not be located in alcoves where patient room doors are recessed from the corridor.
4. Fire alarm notification devices (i.e., strobes) are permissible as long as the color of the lens/lamp is significantly different from those used in the fire alarm system notification appliance circuit.
5. The visual and audible display at the nurse station shall not be a fire alarm system notification device with characteristics similar to the building fire alarm system general alarm. The visual device (light, strobe, etc.) and the audible sound (horn, buzzer, piezo, etc.) must be sufficiently dissimilar to the fire alarm system notification devices so as to avoid confusion between the two. A sign on the wall adjacent to a standard chime/strobe is not sufficiently distinct, however; when a distinctly different fire alarm device is used to provide the nurse station audible and visual alarm, a sign having minimum 1 inch letters on a contrasting background shall be provided adjacent to the device stating “Patient Room Smoke Detector.”
6. The fire alarm visual signal at the nurses’ station shall be apparent and obvious. A fire alarm system remote operator control panel or a remote alphanumeric display located at the nurse station will not satisfy this criterion, however; a fire alarm annunciator panel may suffice provided it is noticeable and capable of calling the attention of the nursing staff to the activation of a smoke detector in a patient sleeping room.
7. The nurse call system master alarm station located in the nurse station may be used for the required visual and audible signal in lieu of an independent fire alarm notification device, provided the “fire alarm” component of the nurse call system meets the following criteria:
 - a. Is not used for any other function of the nurse call system.
 - b. The display has priority over all other nurse call alarms.
 - c. The signal is incapable of being overridden by the nurse call system.
 - d. The visual display is apparent and obvious, and
 - e. the audible sound produced is unique and not used for any other purpose in the nurse call system.

8. Where 24-hour direct visual supervision is provided by hospital staff, patient sleeping rooms located within suites constructed in accordance with CBC, Section 407.4.4.5, smoke detection in patient sleeping rooms is not required.
9. Additional visual displays are not required at cross-corridor doors where nurse stations are in separate smoke compartments and the doors obstruct the view of corridor visual displays.
10. The patient room smoke detector shall operate using the photoelectric principle.

<u>Original signed</u>	<u>1/13/2021</u>
Paul Coleman	Date