



## FIRE DEPARTMENT

# RESIDENTIAL SMOKE DETECTORS REQUIREMENTS FOR INSTALLATION AND MAINTENANCE

***The majority of fatal home fires happen at night when people are asleep. Contrary to public belief, the smell of smoke may not wake a sleeping person. The poisonous gases and smoke produced by a fire can numb the senses and put you into a deeper sleep. CAUTION: Recent studies have shown that a sleeping child may not be awakened by a smoke detector. Adults should be aware that children will need assistance exiting in an emergency.***

## CHOOSING A SMOKE DETECTOR

There are many types of smoke detectors available for home use. The most common type of detector is called "photoelectric" because its sensing chamber uses a beam of light and a light sensor. All approved smoke detectors, regardless of type, will offer adequate protection provided they are installed and maintained properly. The following are smoke detector requirements as they presently exist in the Burbank Municipal Code, Section 9-2-905.3(a) and in accordance with Section 907.2.11.1 to 907.2.11.4 of the CFC.

## WHERE TO INSTALL

All residences shall have smoke detectors installed in each sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. When the dwelling unit has more than one story and in dwellings with basements, a smoke alarm shall be installed on each story and in the basement. In dwelling units where a story or basement is split into two or more levels, the smoke alarm shall be installed on the upper level, except when the lower level contains a sleeping area, a smoke alarm shall be placed at the ceiling of the upper level in close proximity to the stairway. In dwelling units where the ceiling height of a room, open to the hallway serving the bedrooms, exceeds that of the hallway by 24 inches (610 mm) or more, smoke alarms shall be installed in the hallway and in the adjacent room.

**All** existing residences are required to meet the following:

- One and two family residences may have battery operated smoke detectors, and will be required to have them installed in areas giving access to sleeping rooms **and in every sleeping room**.
- Three units or more under a common roof must have **hard wired** smoke detectors with battery back-up in areas giving access to sleeping rooms and in every sleeping room.
- ❖ *Note: Dwellings of three units or more that were code compliant in 1989 shall meet the following requirements:*
- ❖ *Must have existing **hard-wired** smoke detectors at a point centrally located in the corridor or area giving access to each sleeping area. When the dwelling unit has more than one story and in dwellings with basements, a smoke alarm shall be installed on each story and in the basement. In dwelling units where a story or basement is split into two or more levels, the smoke alarm shall be installed on the upper level, except that when the lower level contains a sleeping area, a smoke alarm shall be placed at the ceiling of the upper level in close proximity to the stairway. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches (610 mm) or more, smoke alarms shall be installed in the hallway and in the adjacent room.*

## **Smoke Detectors for Residential Installation** (Continued)

❖ *Shall have smoke detectors installed in each sleeping area. These may be solely battery operated.*

In new construction, remodels over \$1,000.00, or the addition of one or more bedrooms, requirements of the California Building Code shall be met. The basic requirements are as follows:

- All smoke detectors shall be **hard wired** with battery back up.
- Single- or multiple stations smoke alarms shall be installed and maintained in Groups R-2, R-3, R-3-1, R-4 and I-1 regardless of occupant load at all of the following locations:
  1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
  2. In each room used for sleeping purposes.
  3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
  4. In enclosed common stairwells of apartment complexes and other multiple-dwelling
  5. In Group R-3-1 occupancies, in addition to the above, smoke alarms shall be provided throughout the habitable areas of the dwelling unit except kitchens.

### **POWER SUPPLY**

In new construction *and in newly classified Group R-3.1 occupancies*, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

**EXCEPTION:** Smoke detectors may be solely battery operated when installed in residential occupancies of not more than two dwelling units under a common roof in existing occupancies.

### **MAINTENANCE**

Remember, only a functioning smoke detector can protect you. **Never** disable a detector by borrowing its battery for another use. Following manufacturer's instructions, test all your smoke detectors monthly and install new batteries twice a year. It is recommended that you change the batteries at the same time you change your clock for daylight savings time to standard time and back. Many battery-powered units "chirp" or give you some other audible signal when their batteries need to be replaced.

Clean your smoke detectors. Dust and cobwebs can reduce the detector's sensitivity to smoke. Never paint a smoke detector.

### **WHEN THE DETECTOR SOUNDS...**

- When an alarm sounds, leave the building immediately. **Remember** that children will need assistance.
- Know at least two ways out of each room.
- Agree on a meeting place outside your home, **before an emergency**, where all residents will be gathered after they escape.
- Practice your escape plan at least twice a year.

***Once you're out, stay out! Never return to a burning building for any reason.***