

## RECOMMENDED LOCATION OF ALARMS

- Locate the first smoke alarm in the immediate area of the bedrooms. Try to protect the escape route as the bedrooms are usually farthest from an exit. If more than one sleeping area exists, locate additional smoke alarms in each sleeping area. If a hall is more than 40 feet (12 meters) long, install a smoke alarm at each end.
- Locate additional smoke alarms to protect any stairway as stairways act like chimneys for smoke and heat.
- Locate at least one smoke alarm on every floor level.
- Locate a smoke alarm in any area where a smoker sleeps or where electrical appliances are operated in sleeping areas.
- Smoke, heat and other combustion products rise to the ceiling and spread horizontally. Mounting the smoke alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction. However, in mobile homes, wall mounting on an inside partition is preferred to avoid the thermal barrier that may form at the ceiling.
- When mounting smoke alarm on the ceiling, locate it a minimum of 4"(10cm) from a side wall or corner (see Diagram A)
- When mounting smoke alarm on a wall, if local codes allow, use an inside wall with the top edge of the smoke alarm a minimum of 4" (10cm) and a maximum of 12" (30.5cm) below the ceiling/ wall intersections (See Diagram A).

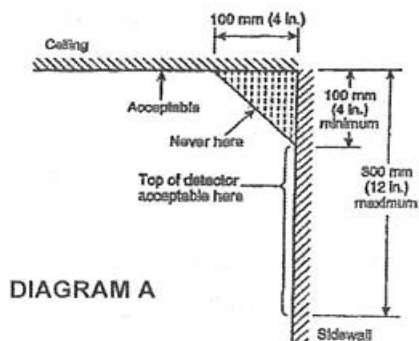
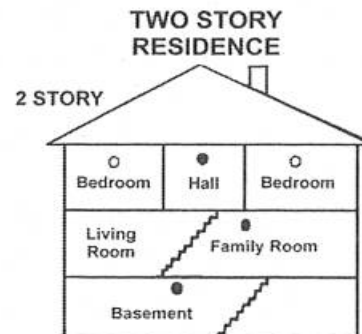


DIAGRAM A

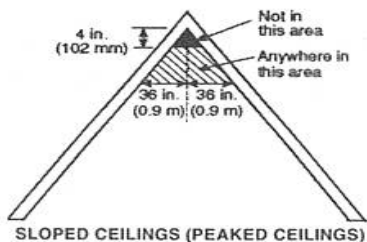


### Existing Homes:

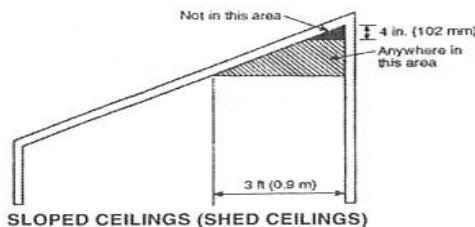
The NFPA requires a smoke alarm on every level and outside each sleeping area in existing construction. An existing household with one level and one sleeping area is required to have one smoke alarm.

### New Construction Homes and Manufactured Homes:

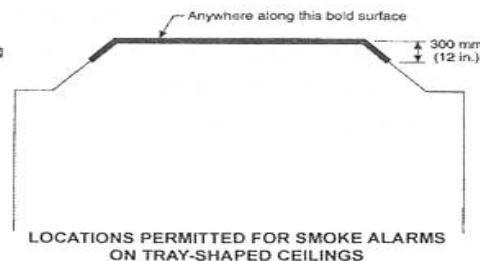
The NFPA requires AC-powered, interconnected smoke alarms to be installed inside each bedroom, outside each bedroom area, and on every level of the home. They also require a minimum of two AC-powered, interconnected smoke alarms in any new construction home.



SLOPED CEILINGS (PEAKED CEILINGS)



SLOPED CEILINGS (SHED CEILINGS)



LOCATIONS PERMITTED FOR SMOKE ALARMS ON TRAY-SHAPED CEILINGS

### Sloped Ceilings (Peaked Ceilings):

Smoke alarms or smoke detectors mounted on a peaked ceiling shall be located within 36 in. (914mm) horizontally of the peak, but not closer than 4 in. (102mm) vertically to the peak.

### Sloped Ceilings (Shed Ceilings):

Smoke alarms or smoke detectors mounted on a sloped ceiling having a rise greater than 1 ft. in 8 ft. (1 m in 8 m) horizontally shall be located within 36 in. (914mm) of the high side of the ceiling, but not closer than 4 in. (102mm) from the adjoining wall surface.

### Tray Shaped Ceilings:

Smoke alarms or smoke detectors shall be installed on the highest portion of the ceiling or on the sloped portion of the ceiling within 12 in. (305mm) vertically down from the highest point.

### Mobile Home Installation:

For minimum protection, smoke alarms should be installed in compliance with H.U.D. Manufactured homes Construction Safety Standards, Title 24 CFR, Section 3280.208 and Section 3282. For additional protection, see Single Story Residence smoke alarm requirements/ recommendations for existing Homes and New Construction Homes.

Note: For mobile homes built before 1978, install smoke alarms on inside walls between 4" and 12" from the ceiling (older mobile homes have little to no insulation in the ceiling). This is especially important if the ceiling is unusually hot or cold.

Install a smoke alarm inside each bedroom and in the hallway

## AVOID THESE LOCATIONS

- The garage –products of combustion are produced when you start your vehicle.
- Near appliances or areas where normal combustion regularly occurs (kitchens, near furnaces, gas hot water heaters). Use smoke alarms with photoelectric sensors or smoke alarms with Silence Feature for these areas.
- In areas with high humidity, like bathrooms or areas near dishwashers or washing machines. Install at least 3 feet (0.9 meters) away from these areas.
- In areas of turbulent air such as air returns or heating and cooling supply vents, smoke alarms shall not be located where airflow prevents smoke from reaching the alarms.
- In extremely dusty, dirty or insect infested areas. Loose particles interfere with smoke alarm operation.
- In areas where temperature may fall below 40° F (4.4°C) or rise above 100°F (37.8°C).
- Closer than 1 foot (0.3m) from fluorescent lights, electrical “noise” and flickering may affect the alarm’s operation.
- Closer than 3 feet (0.9m) horizontal path from the tip of the blade of a ceiling suspended (paddle) fan.
- On a poorly insulated ceiling or exterior wall (mount smoke alarm on an inside wall).

**THIS SMOKE ALARM WILL NOT WORK WITHOUT A GOOD BATTERY PROPERLY INSTALLED.  
THE SMOKE ALARM SHOULD BE TESTED WHEN INSTALLED AND THEN TESTED WEEKLY AFTER THAT.**



*Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: A smoke alarm installed in each separate sleeping area (in the vicinity of, but outside of, the bedrooms); and, as appropriate, heat or smoke alarms in living rooms, dining rooms, kitchens, attics, furnace rooms, closets, utility storage rooms, basements and attached garages. Test the alarms weekly to assure proper operation.*

## DEVELOP AND PRACTICE A PLAN OF ESCAPE

### BASICS OF ESCAPE PLAN

- Make a floor plan indicating all doors and windows and at least two escape routes from each room. Second story windows may need a rope or chain ladder.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- Determine a place outside your home where all of you can meet if a fire occurs.
- Familiarize everyone with the sound of the smoke alarm and train them to leave your home when they hear the sound.
- Identify children’s bedrooms with red stickers placed in the upper left corner of the windows. They are available from your local fire department.
- Practice a fire drill at least every six months. Practice allows you to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do!

### WHAT TO DO WHEN THE ALARM SOUNDS

- Leave immediately by your plan of escape. Every second counts, so don’t waste time getting dressed or picking up valuables.
- In leaving, don’t open any inside door without first feeling its surface. If hot, or you see smoke seeping through cracks, **don’t open that door!** Instead, use your alternative exit. If inside door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor if air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the Fire Department from your neighbor’s home—**not from yours!**
- Don’t return to your home until fire officials say that it is all right to do so.

### NATIONAL FIRE PROTECTION ASSOCIATION REQUIRED INFORMATION

For your information, the national Fire Alarm Code, NFPA 72, reads as follows:

“11.5.1 \* Required Detection—Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single and multiple—station smoke alarms shall be installed as follows:

- (1) \* in all sleeping rooms and guest rooms.
- (2) \* outside of each separate dwelling unit sleeping area, within 6.4m (21ft) of any door to a sleeping room, the distance measured along a path of travel.
- (3) On every level of a dwelling unit, including basements
- (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics.
- (5) \* In the living area(s) of a guest suite.
- (6) In the living area(s) of a residential board and care occupancy”

The equipment should be installed using wiring methods in accordance with the National Fire Protection Association’s Standard 72.  
(National Fire Protection Association, Batterymarch Park, Quincy, MA 02269)

### CAUTION (AS REQUIRED BY THE CALIFORNIA STATE FIRE MARSHAL)

“Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows. A smoke alarm installed in each separate sleeping area (in the vicinity of, but outside of the bedrooms), and heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages.