



## **Division of Building Regulation**

### **Smoke Alarms Installation Guideline**

- Smoke alarms should not be installed within 3 feet (0.9m) of the following: the door to a kitchen, the door to a bathroom containing a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas (see figure 4).
- When mounting an alarm on the ceiling, locate it at a minimum of 4” (10 cm) from the side wall.
- When mounting the alarm on the wall, use an inside wall with the top edge of the alarm at a minimum of 4” (10 cm) and a maximum of 12” (30.5 cm) below the ceiling (see figure 2).
- Put smoke alarms at both ends of a bedroom hallway or large room if the hallway or room is more than 30 feet (9.1 m) long (see figure 3).
- Install smoke Alarms on sloped, peaked or cathedral ceilings at or within 3ft (0.9m) of the highest point (measured horizontally). NFPA 72 states: “smoke alarms in rooms with ceiling slopes greater than 1ft in 8ft horizontally shall be located on the high side of the room.” NFPA 72 states: “A row of detectors shall be spaced and located within 3 feet of the peak of the ceiling measured horizontally (see figure 1).
- Smoke, heat, and 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.
- Kitchens. Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature or be a photoelectric type.
- Near fluorescent lights. Electronic “noise” may cause nuisance alarms.
- Smoke alarms are not to be used with detector guards unless the combination (alarm and guard) has been evaluated and found suitable for that purpose.

# TYPICAL SMOKE ALARM LOCATIONS

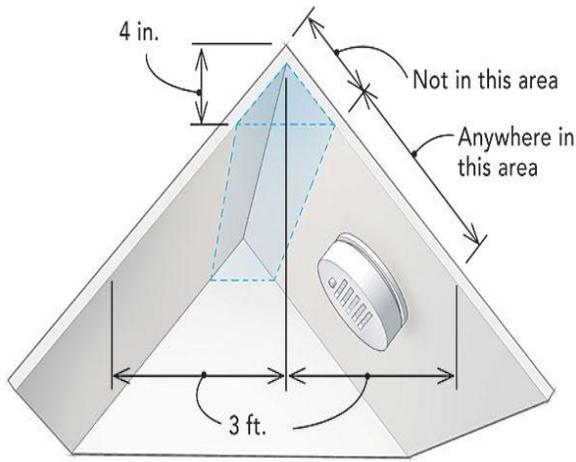


FIGURE - 1

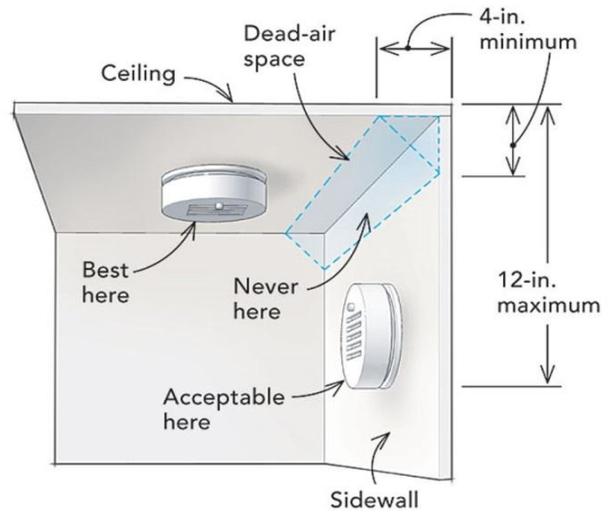


FIGURE - 2

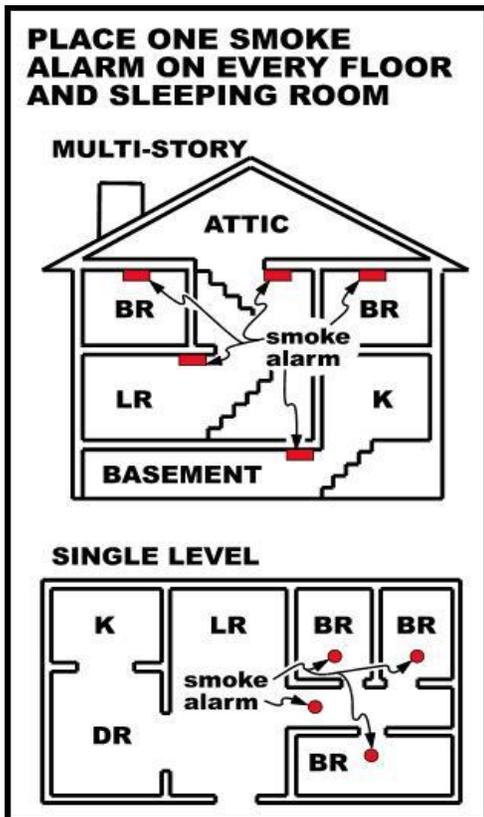


FIGURE-3



FIGURE-4