

## **CONSTRUCTION TIP SHEET:** **RESIDENTIAL SMOKE ALARMS AND CARBON MONOXIDE DETECTORS**

**This Tip Sheet reflects code requirements of the Maine Uniform Building and Energy Code (MUBEC) and Maine State Law**

**Note- The intent of this Tip Sheet is to provide a general understanding of the code requirements and does not address the subject in great detail.**

**Smoke and carbon monoxide alarms must be provided in all required locations and must be:**

- Audible in all parts of the house.
- Installed per manufacturer's instructions.

### **New Houses (IRC R314 & R315)**

Smoke alarms and carbon monoxide alarms are required and must be connected to the main electrical system with battery backup.

### **Existing Houses (IRC R314.2.2 & R315.2.2)**

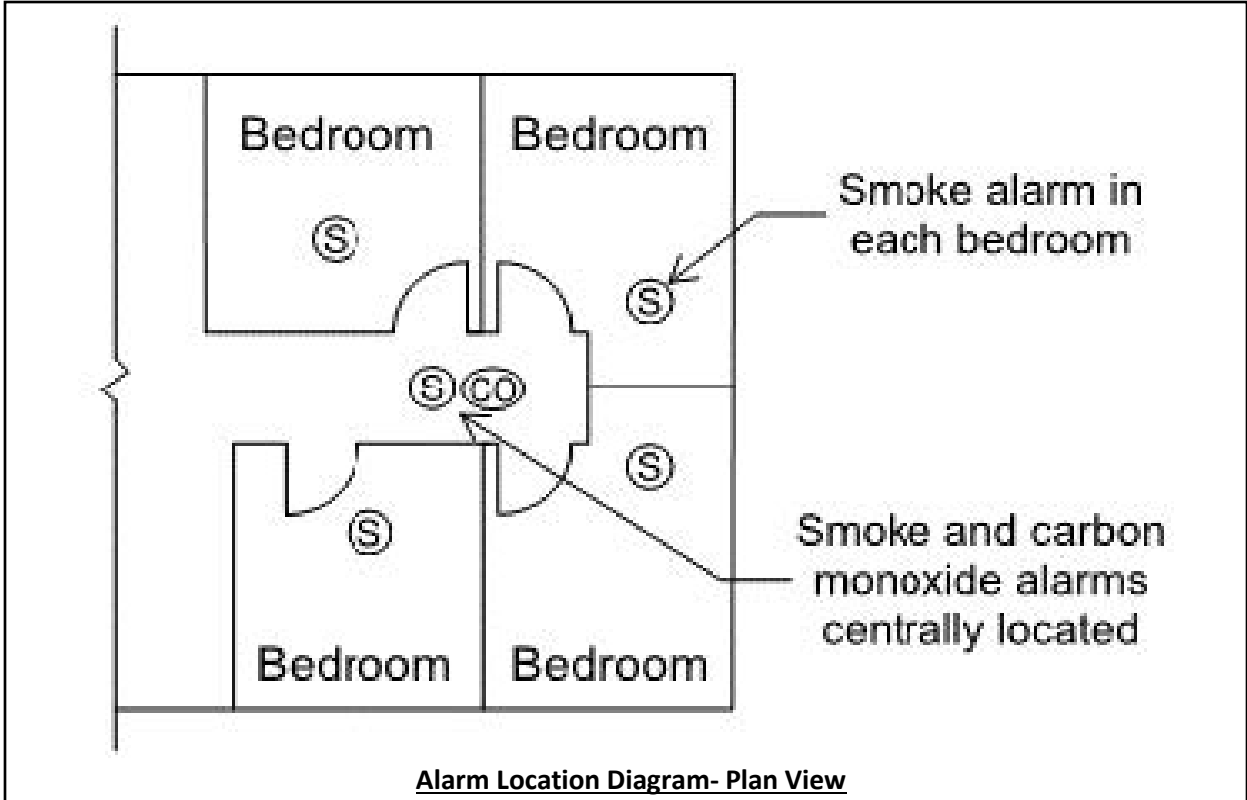
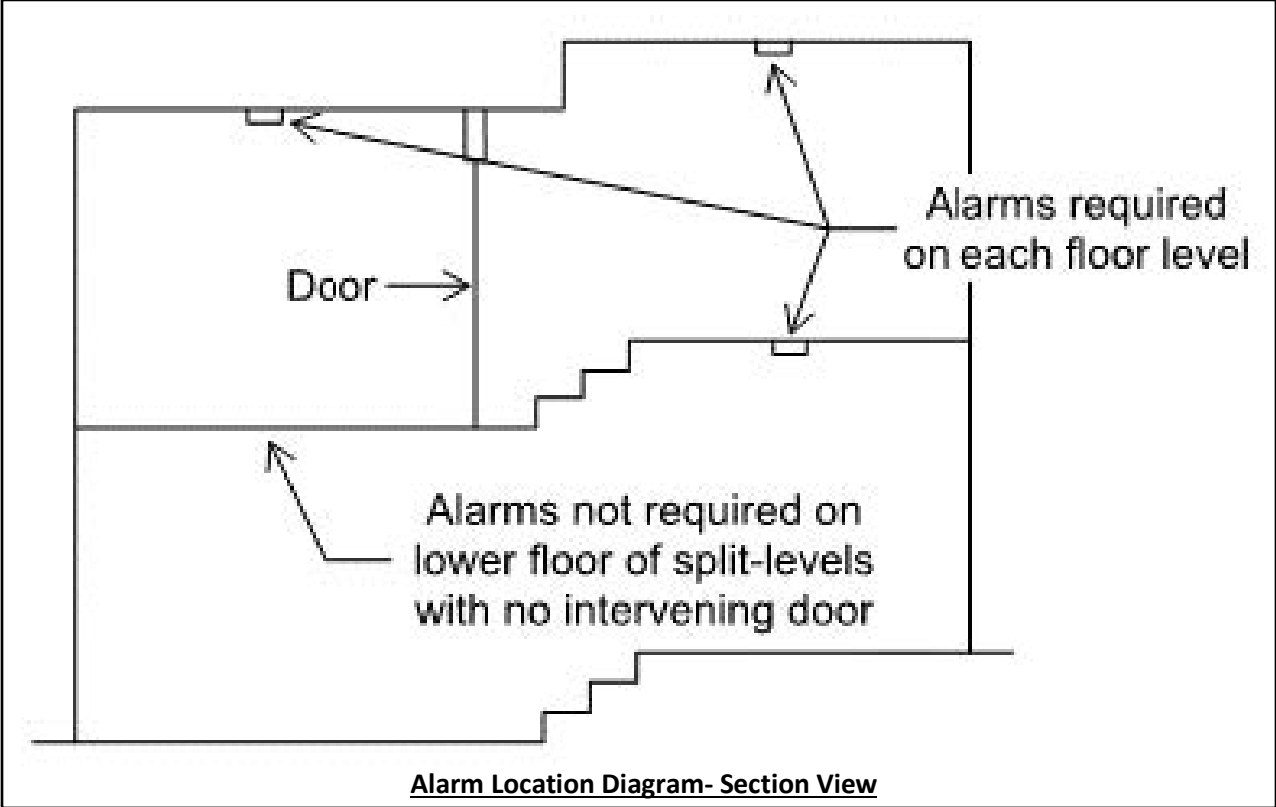
Smoke alarms are required for any addition or repair work requiring a building permit, except exterior surface work such as re-roofing, siding, deck or porch additions, and window replacement. Alarms are not required to be interconnected and hard wired where the permit work does not require the removal of interior wall or ceiling finishes unless there is an attic, crawlspace, or basement available where access is provided. Carbon monoxide alarms are required in all new and existing homes, apartments, condominiums, and other multi-family units.

**Smoke alarms are required to be located in the following locations:**

- Each sleeping room.
- In napping areas in a daycare home.
- Outside each sleeping area in the immediate vicinity of the bedrooms.
- On every floor level, including basements (does not include crawlspace and uninhabitable attics).
- In split-level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level.

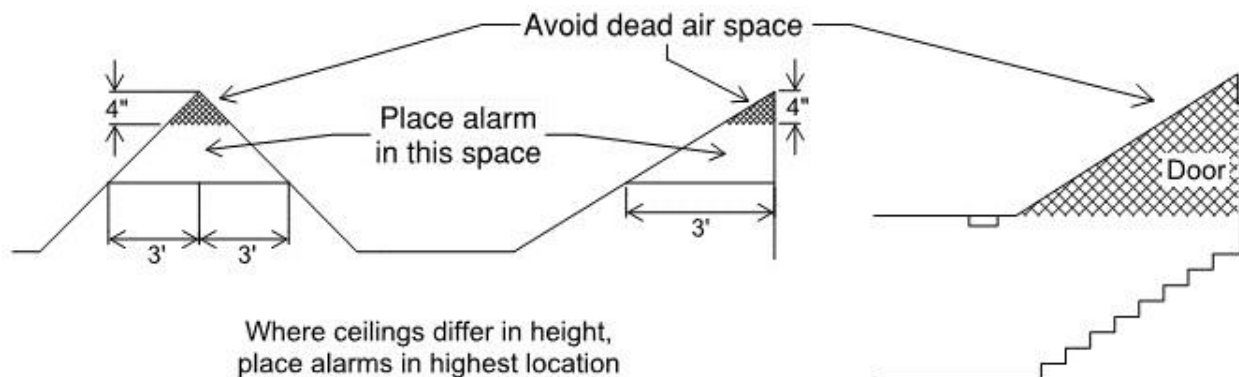
**Carbon monoxide alarms are required to be located in the following locations:**

- Outside each sleeping area in the immediate vicinity of the bedrooms.
- On every floor level, including basements (does not include crawlspaces and uninhabitable attics).
- In split-level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level.
- In a bedroom when a fuel-burning appliance is installed in the bedroom or its attached bathroom.
- A combination alarm (combined smoke and carbon monoxide alarm) is acceptable in any required location.



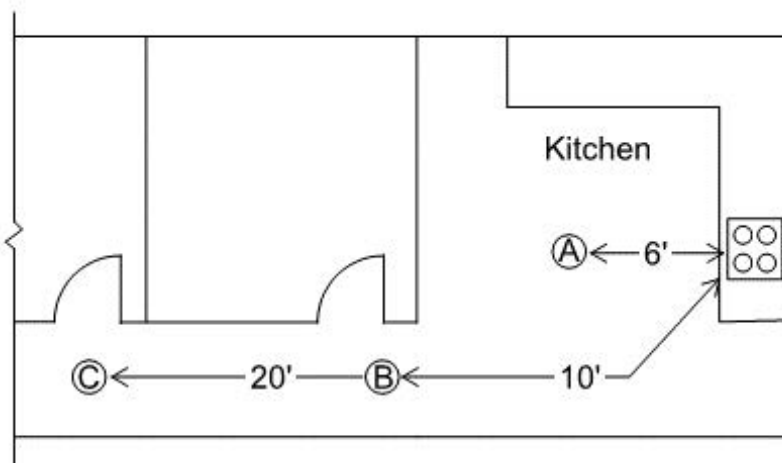
## Smoke Alarm Location Limitations:

- Wall mounted alarms must be not more than twelve (12) inches from the adjoining ceiling surface.
- Avoid placing alarms less than three (3) feet from supply registers of a forced air heating or cooling system and do not place alarms in the direct airflow of the registers.
- Avoid placing alarms within three (3) feet horizontally from doors to bathrooms containing a bathtub or shower.
- Do not place alarms in spaces where temperatures may be above or below the alarm's operating temperature range.
- Do not place alarms within 3 feet of the blades of a ceiling fan.
- Alarms in peaked or sloped ceilings must be within three (3) feet of the peak, measured horizontally, but not in the highest four (4) inches of the ceiling, measured vertically. (See figure below)
- Avoid placing alarms in dead air spaces. (See figure below)



## Smoke Alarms Near Cooking Appliances (See figure below):

- A. Photoelectric smoke alarms must not be less than six (6) feet from a permanent cooking appliance.
- B. Ionization smoke alarms with an alarm-silencing switch must not be less than ten (10) feet from a permanent cooking appliance.
- C. Ionization smoke alarms without an alarm-silencing switch must not be less than twenty (20) feet from a permanent cooking appliance.





**Carbon Monoxide Alarm Location Limitations:**

- Do not place alarms directly above or beside fuel-burning appliances.
- Do not place alarms in direct sunlight.
- Do not place alarms in low areas where children can reach.
- Do not place alarms behind curtains or any structure that might prevent carbon monoxide from reaching the sensor.