



**Board of Commissioners**

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**SMOKE ALARMS**

**as required by the**

**2019 RESIDENTIAL CODE of OHIO**

**RCO Section 314 . . .**

Smoke Alarms shall be listed as complying with **UL 217**.

Smoke Alarms shall be installed in accordance with the manufacturer's installation instructions, the provisions **NFPA 72** for household warning equipment (see point #4 below) and as defined below in **RCO Sections: 314.1, 314.2, 314.3, 314.3.1 and 314.4**.

Smoke Alarms are **REQUIRED** to be installed:

1. In all **New Dwellings** – per the locations and details that follow:
  - In each sleeping room.
  - Outside each separate sleeping area, in the immediate vicinity of the sleeping rooms.
  - On each additional story of the dwelling, including basements and habitable attics, but not including crawl spaces and uninhabitable attics.
  - In dwellings having split levels 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.
2. When **Alterations, Repairs, or Additions** requiring an approval are made to a sleeping room and/or the area outside a sleeping room(s), smoke alarms shall be provided in those spaces as required for a new dwelling (see point #1 above).
3. **Technical Specifications** for Smoke Alarms shall follow these provisions:
  - Smoke alarms utilizing photoelectric and ionization technologies shall be used on each level. NOTE: Separate or dual sensing smoke alarms may be used.
  - Smoke alarms utilizing only photoelectric technology, shall be used outside each separate sleeping area in the immediate vicinity of the sleeping rooms.

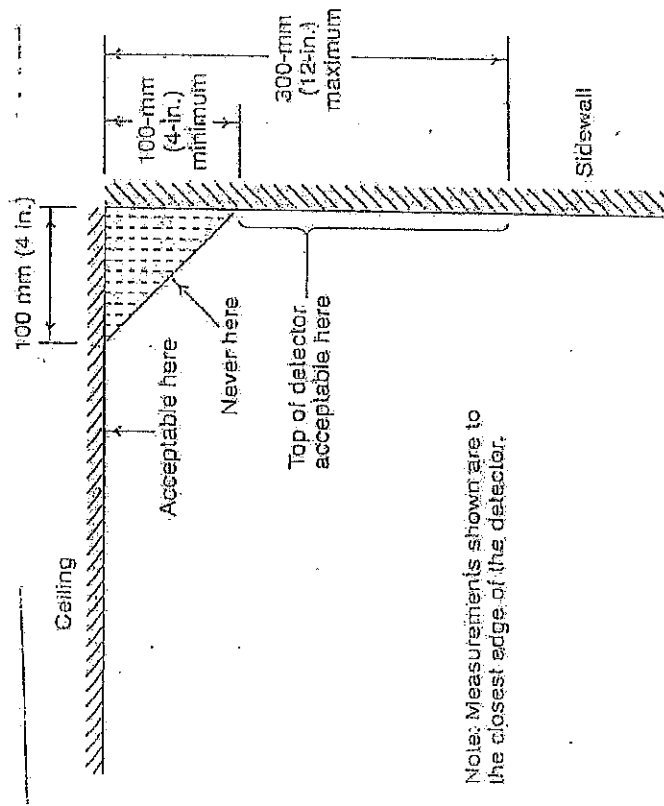


- Smoke alarms shall receive their primary power from the building wiring, when such wiring is served from a commercial source and when primary power is interrupted, the smoke alarms shall receive power from a battery. Exceptions: 1) Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power. 2) Interconnection and hard-wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access, without the removal of interior finishes.
- Wiring shall be permanent and without a disconnecting switch, other than those required for overcurrent protection.
- Smoke alarms shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms within the dwelling unit.

#### 4. NFPA 72 – Smoke Alarm Installation Requirements

- Smoke alarms and detectors shall not be located where ambient conditions, including humidity and temperature are outside the limits specified by the manufacturer.
- Smoke alarms and detectors shall not be located within unfinished attics or garages, or in spaces where temperature can fall below 40 degrees F, or exceed 100 degrees F.
- Where the mounting surface could become considerably warmer or cooler than the room, such as a poorly insulated ceiling or exterior wall, smoke alarms and detectors shall be mounted on an inside wall.
- Smoke alarms and detectors shall not be installed within a 10 foot horizontal path of a cooking appliance.
- Smoke alarms and detectors installed within a 10 foot to 20 foot horizontal path of a cooking appliance shall be equipped with an alarm silencing means or be of a photoelectric type.
- Smoke alarms and detectors shall not be installed within a 36 inch horizontal path from a door to a kitchen, or a bathroom containing a shower or tub.
- Smoke alarms and detectors shall not be installed within a 36 inch horizontal path from supply registers of a forced air HVAC system and shall be installed outside the direct airflow from those registers.
- Smoke alarms and detectors shall not be installed within a 36 inch horizontal path from the tip of the blade of a ceiling suspended fan.
- Where stairs lead to other occupied levels, a smoke alarm or detector shall be located so that smoke rising in the stairway cannot be prevented from reaching the alarm or detector by an intervening door or other obstruction.
- For stairways leading up from a basement, smoke alarms or detectors shall be located on the basement ceiling near the entry to the stairway.

#### 5. Smoke Alarm Mounting Examples – see attached page.



Note: Measurements shown are to the closest edge of the detector.

FIGURE A.11.8.3(d) Example of Proper Mounting for Detectors.

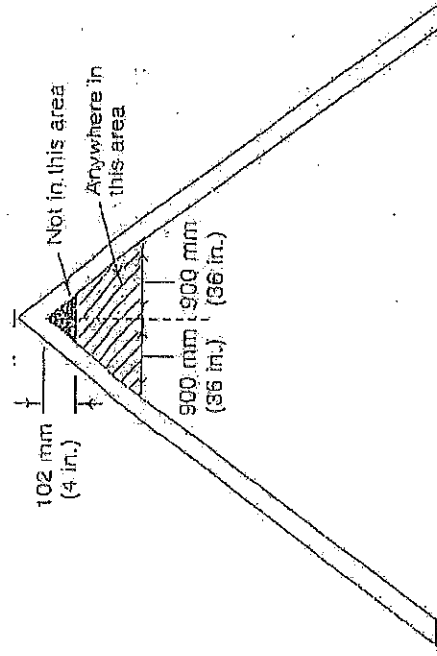


FIGURE A.11.8.3.2 Example of Proper Mounting for Alarms and Detectors with Peaked Ceilings.

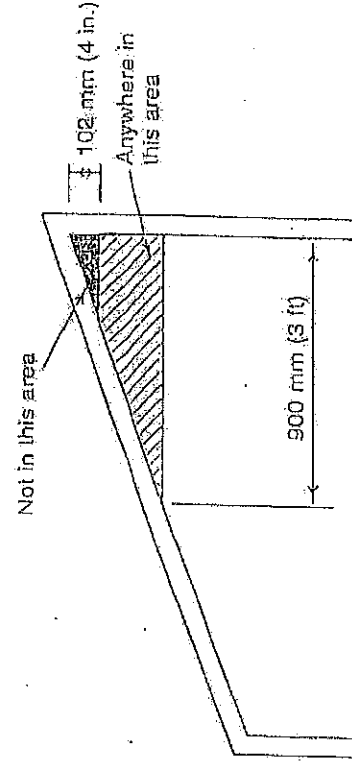


FIGURE A.11.8.3.3 Example of Proper Mounting for Alarms and Detectors with Sloped Ceilings.