Installing smoke alarms

- Choose smoke alarms that have the label of a recognized testing laboratory.

- Install smoke alarms inside each bedroom, outside each sleeping area and on every level of the home, including the basement.

- On levels without bedrooms, install alarms in the living room (or den or family room) or near the stairway to the upper level, or in both locations.

- Smoke alarms installed in the basement should be installed on the ceiling at the bottom of the stairs leading to the next level.

- Smoke alarms should be installed at least 10 feet (3 meters) from a cooking appliance to minimize false alarms when cooking.

- Mount smoke alarms high on walls or ceilings (remember, smoke rises). Wall-mounted alarms should be installed not more than 12 inches away from the ceiling (to the top of the alarm).

- If you have ceilings that are pitched, install the alarm within 3 feet of the peak but not within the apex of the peak (four inches down from the peak).
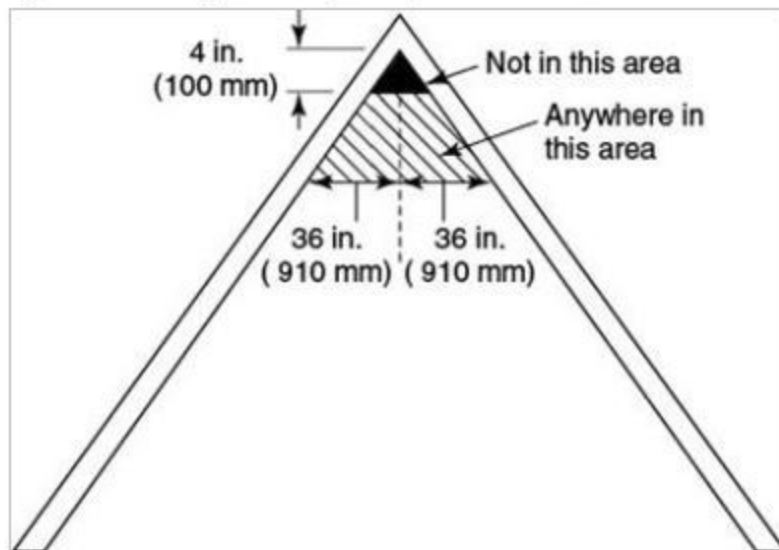

Figure A.29.8.3.1 from NFPA 72, National Fire Alarm and Signaling Code (2013 edition).

- Don't install smoke alarms near windows, doors, or ducts where drafts might interfere with their operation.

- Never paint smoke alarms. Paint, stickers, or other decorations could keep the alarms from working.

- For the best protection, interconnect all smoke alarms. When one smoke alarm sounds they all sound. Interconnection can be done using hard-wiring or wireless technology.

- When interconnected smoke alarms are installed, it is important that all of the alarms are from the same manufacturer. If the alarms are not compatible, they may not sound.

- There are two types of smoke alarms – ionization and photoelectric. An ionization smoke alarm is generally more responsive to flaming fires, and a photoelectric smoke alarm is generally more responsive to smoldering fires. For the best protection, both types of alarms or combination ionization-photoelectric alarms, also known as dual sensor smoke alarms, are recommended.

- Keep manufacturer's instructions for reference.