

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Smoke Alarm Placement

Learning objective: The student shall be able to identify one location where smoke alarm placement is prohibited.

Automatic smoke alarms for dwelling units, and smoke detectors installed in commercial properties, always should be installed in accordance with manufacturer's installation and listing requirements. These installation instructions are included in the product packaging.

Smoke detection devices should not be installed in corners or where the wall and ceiling meet. Research shows there is a potential dead air space here where smoke and other combustion products may not be able to reach the detection chamber.



The National Fire Alarm Code[®], NFPA 72, provides a schematic illustrating that smoke detectors should not be installed on a wall within four inches of the ceiling or on the ceiling within four inches of the wall.

You should refer to the manufacturer or NFPA 72 for additional information, particularly for unusual conditions such as sloped ceilings, unheated spaces, buildings located 3,000 feet or more above sea level or where radiant heat is installed in the ceiling.