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Smoke Detector Requirements for all Dwelling Units

Building Safety Room 210 City Hall Duluth MN 55802 Ph 218/730-5300 Fax 730-5159



WHERE REQUIRED: Single or multiple station smoke alarms shall be installed and maintained in Group R-2, R-3, R-4, and I-1 regardless of occupant load in ALL of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attic spaces.

POWER SOURCE:

In new construction, required smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup. Smoke alarms are allowed to be solely battery operated in existing buildings.

MAINTENANCE:

For all occupancies covered by this section where the occupant is not the owner of the dwelling unit, the owner is responsible for the maintenance of the smoke detectors. The occupant of a dwelling unit must inform the owner of the dwelling unit of a non-functioning smoke detector within 24 hours of discovering that the smoke detector in the dwelling unit is not functioning. If the occupant fails to inform the owner under this subdivision, the occupant's liability for damages is not greater than it otherwise would be.

Minnesota Fire Safety Statutes 299F.362 Subd 5 & 5a

TAMPERING:

An occupant who willfully disables a smoke detector or causes it to be non-functioning, resulting in damage to persons or property is guilty of a misdemeanor.

Minnesota Fire Safety Statutes 299F.362 Subd. 6



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Locating Smoke Detectors

NFPA 72E

The following are general guidelines for installing and locating heat and smoke detectors. For a further clarification of the statement, refer to the appropriate paragraph that is noted after each statement in the NFPA 72E standard, 1990 edition.

• Installation

- Install detectors in all areas where required by the appropriate NFPA standard or the Authority Having Jurisdiction. (2-7.4)
- Install heat detectors in all areas where required either by the appropriate NFPA standard or the Authority Having Jurisdiction. (3-1.1.2)
- Support detectors, in all cases, independently of their attachment to the circuit conductors (wiring). (2-7.2)

• Location

- Locate heat detectors upon the ceiling not less than 4" from the side wall or on the side walls between 4" and 12" from the ceiling. See Figure 1. (3-4.1)
- Locate smoke detectors on the ceiling not less than 4" from the sidewall to the near edge, or if on a sidewall, between 4" and 12" down from the ceiling to the top of the detector. See Figure 1. (4-4.2)

Exception: In the case of beam construction where beams are less than 12" in depth and less than 8" on center, installing detectors on the bottom of the beams is allowed.

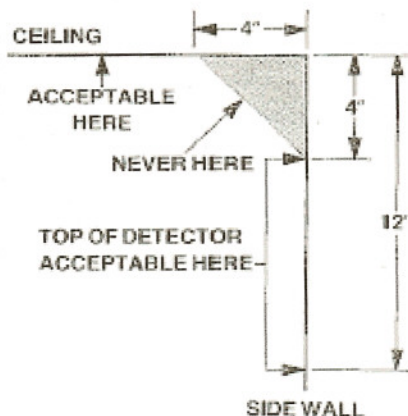


FIGURE 1

- On smooth ceilings, place smoke detectors on 30' centers as a guide. Use other spacing depending on ceiling height, conditions, or response time requirements. In all cases, follow the manufacturer's recommendations. (4-4.5.1)
- If exposed beam construction is used and the beams exceed 18" in depth and are more than 8" on centers, treat each bay as a separate area requiring at least one heat or smoke detector. (4-4.7.4)

**Minnesota Department of Public Safety
State Fire Marshal Division**

**Smoke Alarm Information
2/08**

Current Fire Code language dictates that “smoke detectors” now be called “smoke alarms” to denote their true function.

Minnesota Statute 299F.362 Requirements:

- Every dwelling and dwelling unit must be provided with a smoke detector that meets the requirements of the Minnesota State Fire Code. This includes single family homes, townhouses, apartment, hotels (containing six or more guest rooms), lodging houses (containing five or less guest rooms), and similar occupancies.
- Smoke detectors must be mounted in accordance with the requirements of the Minnesota State Fire Code.
- When activated, the smoke detector must sound an alarm in the dwelling unit.
- In new construction, smoke detectors must be directly connected to the dwelling’s central power source.
- The owner of the occupancy is responsible for the maintenance of the smoke detector.
- Occupants are required to inform the owner of a nonfunctioning smoke detector within 24 hours of discovering that the detector is not functioning.
- It is a misdemeanor for an occupant to willfully disable a smoke detector, or cause it to be nonfunctioning, if such an action results in damage or injury to persons or property.
- Local governments may establish ordinances for the installation of smoke detectors in single family homes that are more restrictive than the requirements of statute. Local smoke detector ordinances may be enforced through a truth-in-lending housing inspection.

The Minnesota State Fire Code Requirements:

- Smoke alarms installed prior to March 31, 2003. Smoke alarms must be installed in hallways or areas which provide access to each separate sleeping area.
- Smoke alarms installed on or after March 31, 2003. A smoke alarms must be installed in each sleeping room in addition to a point centrally located in the corridor or area providing access to each separate sleeping area. Where more than one smoke alarm is required to be installed in a single family home, the smoke alarms must be interconnected so that the activation of one alarm will activate all the alarms in the home.
- For all smoke alarms installed prior to July 10, 2007. If any residential structure had code compliant smoke alarms installed prior to the current fire code adoption, then those smoke alarms are still permitted.
- For all smoke alarms installed on or after July 10, 2007. Any residential structure installing smoke alarms after this date must install the smoke alarms in all sleeping rooms, in all hallways leading to the exit and on each floor.
- In homes constructed prior to August 1, 1989. Smoke alarms may be battery powered only.
- In homes constructed on or after August 1, 1989. Smoke alarms must receive their power from the home’s permanent primary wiring without a disconnecting switch and be equipped with a battery backup.
- Smoke detector location and spacing must follow manufacturer’s instructions.



OFFICE MEMORANDUM

DATE: July 3, 2006

TO: Code Officials, Design Professionals, Contractors, and Suppliers

FROM: 
Jerry Rosendahl
State Fire Marshal


Thomas Joachim
State Building Official

SUBJECT: Carbon Monoxide Alarms

Background: The 2006 legislative session passed a new carbon monoxide (CO) law (Minn. Stat. § 299F.50) requiring CO alarms in all single-family homes and multifamily apartment units. Every single-family dwelling and every multifamily dwelling unit shall be provided with an approved and fully operational carbon monoxide alarm.

Effective Dates:

- Effective January 1, 2007 all newly constructed single family homes and multifamily dwelling units for which building permits were issued on or after January 1, 2007 shall be provided with an approved carbon monoxide alarm
- Effective August 1, 2008, all existing single family homes shall be equipped with an approved carbon monoxide alarm meeting U/L specifications.
- Effective August 1, 2009 all other multifamily or apartment dwelling units shall be provided with approved CO alarm.

General Location Requirements:

- Within ten (10) feet of each room lawfully used for sleeping purposes.

Listing or Certification of Detectors:

- All CO alarms shall be certified by a nationally recognized testing laboratory to conform to the latest Underwriters Laboratory (UL) Standards (also known as UL2034 Standards).

Owner Responsibilities in Multifamily Dwellings:

- It shall be the owner's responsibility of a multifamily dwelling that is required to be equipped with carbon monoxide alarms to:
 - (1) Provide and install one approved and operational carbon monoxide alarm within ten feet of each room lawfully used for sleeping; and

(2) Replace any required carbon monoxide alarm that has been stolen, removed, found missing, or rendered inoperable during a prior occupancy of the dwelling unit and which has not been replaced by the occupant prior to the commencement of a new occupancy of a dwelling unit.

Power:

- CO alarms must be either be hardwired into the electrical wiring, directly plugged into an electrical outlet without a switch, or battery powered.

Battery Removal and Tampering Prohibited:

- No person shall remove batteries from, or in any way render inoperable, a required carbon monoxide alarm.

Exceptions for Certain Multifamily Dwellings and State-Operated Facilities:

- Multifamily dwellings may have approved and operational carbon monoxide alarms installed between 15 and 25 feet of carbon monoxide producing central fixtures and equipment provided there is a centralized alarm system or other mechanism for responsible parties to hear the alarm at all times.
- An owner of a multifamily dwelling that contains minimal or no sources of carbon monoxide may be exempted from the requirements provided that such owner certifies to the commissioner of public safety that such multifamily dwelling poses no foreseeable carbon monoxide risk to the health and safety to the dwelling units.
- The requirements of this section do not apply to facilities owned or operated by the state of Minnesota.

Enforcement:

- Building and Fire officials should collaborate on enforcement of this new law. For example plan review comments for new residential buildings permitted after January 1, 2007 should cite MS 299F.50 to ensure the new law is understood before construction proceeds.

If you have additional questions or need further information on the carbon monoxide legislation please contact the State Fire Marshal Division at 651-201-7200, visit our web site at www.fire.state.mn.us or e-mail your questions to firecode@state.mn.us.

You may also visit the Department of Labor and Industry web site at <http://www.doli.state.mn.us> or call 651-284-5060