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## **Smoke and Carbon Monoxide Detectors**

## **CITY OF NEWARK, CALIFORNIA**

**BUILDING INSPECTION** 

**DIVISION** 

37101 Newark Boulevard, Newark, CA 94560-3796 • Phone: 510-578-4261 • Fax: 510-578-4307 • e-mail: building.inspection@newark.org

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**GENERAL:** Sections R314 and R315 of the 2010 California Residential Code require the installation of both smoke and carbon monoxide detectors in all new dwelling units and in existing dwellings whenever alterations and/or additions exceed \$1,000.00 in construction valuation.

**SMOKE DETECTORS:** Smoke detectors shall be installed in all new dwelling units and in existing dwelling units when alterations and/or additions exceed \$1,000.00 in construction valuation. Smoke detectors shall be installed in the following locations;

- In each sleeping room
- Outside each separate sleeping area in the immediate vicinity of the bedrooms
- At each story including basements and habitable attics. The alarms located outside sleeping areas can be counted as meeting this requirement for the story they are located on. A habitable attic is an attic where the distance between the top of the ceiling joists and the bottom of the roof rafters is 42 inches or greater and such attic is served by fixed stairs.

Smoke detectors should be mounted on the ceiling as close to the center of the room as possible. If this is not practical, mount no closer than four inches (4") from any wall or corner. For sloped ceilings mount the detector between twenty inches (20") and sixty inches (60") from the high point of the ceiling. If the detector is mounted on a wall install the detector no closer than four inches (4") and no further than twelve inches (12") from the ceiling and no closer than four inches (4") from a corner.

**CARBON MONOXIDE DETECTORS:** Carbon monoxide is a toxic gas that is colorless, odorless, tasteless, and initially non-irritating. Carbon monoxide is a product of incomplete combustion of organic matter. Common sources of carbon monoxide in and around dwellings are fire places, gas stoves, gas water heaters, gas furnaces, automobiles, and small internal combustion engines. Exposures at 100 ppm or greater can be dangerous to human health. Symptoms include lightheadedness, confusion, headaches, vertigo, and flu-like effects. High exposures can lead to significant toxicity of the central nervous system and heart, and death.

Carbon monoxide detectors shall be installed in all new dwelling units and existing dwelling units when alternations and/or additions exceeding \$1,000.00. Carbon Monoxide alarms shall be installed in the following locations:

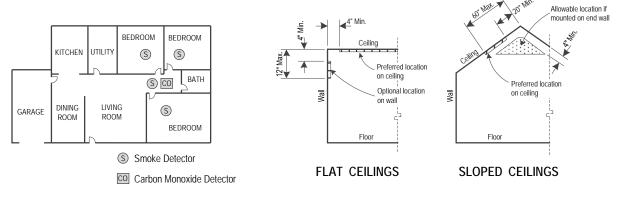
- Outside of each separate sleeping area in the immediate vicinity of the bedroom(s).
- On every level of a dwelling unit including basements.

**POWER SUPPLY:** In new construction and significant remodels /additions smoke and carbon monoxide detectors shall be powered by the primary electrical system and have a battery backup. All smoke detectors in new and significant remodels /additions shall be interconnected. All carbon monoxide detectors in new and significant remodels /additions shall be interconnected. On small additions or alterations to existing dwellings smoke and carbon monoxide detectors may be battery powered only and need not be interconnected. Carbon monoxide detectors that plug into an electrical wall receptacle are not acceptable.

**COMBINATION SMOKE and CARBON MONOXIDE DETECTORS:** Combination smoke and carbon monoxide detectors may be used provided they meet the standards listed above and are installed per the manufacturer's printed instructions.

**INSPECTIONS:** Smoke and Carbon monoxide detectors shall be installed prior to the final inspection for all construction. An inspection will be performed by a City Building Inspector. It is impractical for a City Building Inspector to perform an inspection of the interior of a dwelling for projects only involving outdoor construction such as re-roofing. Therefore, in lieu of the City Building Inspector performing an inspection for smoke and carbon monoxide detectors the homeowner or permit applicant can certify that all required smoke and carbon monoxide detectors have been properly installed.

**SPECIAL STATE LAW:** A state law, unrelated to building code standards, requires all existing single family dwellings to have carbon monoxide detectors installed by July 1, 2011. All existing multi-family dwellings, such as apartments, shall have carbon monoxide detectors installed by January 1, 2013. The City Building Inspection Division does not have the authority to enforce this state law but highly recommends that carbon monoxide and smoke detectors be installed in all existing dwellings, even if no construction work is performed.



**DETECTOR LOCATIONS** 

SMOKE DETECTOR LOCATIONS

**SELF CERTIFICATION:** As the property owner, property manager or licensed contractor, I certify that both smoke and carbon monoxide detectors in the quantity and locations listed above have been installed at the dwelling listed below and operate properly. (Self Certification is only used for residential re-roofing projects)

Project Address	_ Project Description	
Certified by: Sign	Print Name	Title
Date signed:	_	