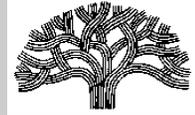


# SMOKE AND CARBON MONOXIDE ALARM INSTALLATION



## CITY OF OAKLAND

- Section R314 Smoke Alarms
  - R314.1 Smoke detection and notification
  - R314.2 Smoke detection Systems
  - R314.3 Location
    - R314.3.1 Alterations, repairs and additions
  - R314.4 Power Source
  - R314.5 Interconnection
- Section R315 Carbon Monoxide Alarms
  - R315.1 Carbon monoxide alarms
    - R315.1.1 Power supply
    - R315.1.2 Interconnection
  - R315.2 Where required in existing dwellings
  - R315.3 Alarm requirements
    - R315.3.1 Multiple-purpose

*Combination Smoke and Carbon  
Monoxide Detector*



## BUILDING SERVICES DEPARTMENT

Our knowledgeable staff is here to assist you as you prepare to construct an addition, build a new home or renovate an existing building. Working closely with our colleagues in [Planning & Zoning](#), we provide our best determination of the permits, contacts, documents and other project specific information that will be required. It is essential that you contact us before you begin construction. Visit our [Permit Center](#) for guidance.

After permits are issued, our inspectors review construction to make sure it's proceeding according to the approved plans and conditions-of-approval. They also make sure that all [current building code standards](#) are being met. This will help to ensure personal safety and to secure the value of the improvement.

*Smoke Detector - Wireless*



## CODE ENFORCEMENT

Our inspectors ensure the safety of Oakland residents and workers by citing property owners who do not maintain their buildings in accordance with [state and city codes](#). A City inspector issues a violation notice when a property is found to be in violation of an ordinance designed to ensure public safety and the safety of building inhabitants.

If you receive a violation notice, it is essential that you take the corrective actions specified on the notice within the time stated to avoid fines and fees. [Visit our Code Enforcement Page for more information](#)

*Carbon Monoxide Alarm*



## INSPECTIONS

Inspections are required to insure that the construction is proceeding according to the approved plans and project conditions-of-approval, and that all current code standards are being met. This will help to insure personal safety and to secure the value of the improvement.

It is your responsibility to schedule all inspections. An appointment must be made at least one working day in advance. During busy construction months, you may have to schedule several days in advance. Periodic inspections must be scheduled until the project is completed and the City gives final approval. After the job has received a final inspection, the building permit will be kept on file in the Building Services Department as proof of the work completed.

For Questions, Call: 510-238-3891

February, 2011

# SMOKE AND CARBON MONOXIDE ALARM INSTALLATION



*Smoke Alarms - Strobe Light Module Hearing Impaired*



*Smoke Alarms - Battery*



*Smoke Alarm - Ionization Wiring*

## SECTION R314 SMOKE ALARMS

**R314.1 Smoke detection and notification.** All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning *equipment* provisions of NFPA72. *Systems and components shall be California State Fire Marshal listed and approved in accordance with California Code of Regulations, Title 19, Division 1 for the purpose for which they are installed.*

**R314.2 Smoke detection systems.** Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notifications device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by an approved supervising station and be maintained in accordance with NFPA 72.

**Exception:** Where smoke alarms are provided meeting the requirements of Section R314.4.

## R314.3 LOCATION

Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area. in the immediate vicinity of the bedrooms.
3. On each additional *story* of the *dwelling*, including *basements* and habitable attics but not including crawl spaces and uninhabitable *attics*. In *dwellings* or *dwelling units* with split levels and 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.

When more than one smoke alarm is required to be installed within an individual *dwelling* unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

### R314.3.1. Alterations, repairs and additions.

When *alterations*, repairs or additions requiring a *permit* occur, or when one or more sleeping rooms are added or created in existing *dwellings*, the individual *dwelling unit* shall be equipped with smoke alarms located as required for new dwellings.

## R314.4 POWER SOURCE

*Smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.*

### *Exceptions:*

1. *Smoke alarms are permitted to be solely battery operated in existing buildings where no construction is taking place..*
2. *Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.*
3. *Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for*



*Fire Alarms - Battery Operated*



*Carbon Monoxide Alarm - Hard Wire*



*Carbon Monoxide Alarm - Hardwire*

### R314.5 INTERCONNECTION

Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

#### Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where 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 for interconnection without the removal of interior finishes.

## SECTION R315 CARBON MONOXIDE ALARMS

**R315.1 Carbon monoxide alarms.** For new construction, an approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling unit that have attached garages.

## SECTION R315 CARBON MONOXIDE ALARMS

**R315.1.1. Power supply.** For new construction required carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery back-up. Alarm wiring shall be directly connected to the permanent building wiring without a disconnecting switch other than as required for overcurrent protection.

#### Exceptions:

1. In dwelling units where there is no commercial power supply the carbon monoxide alarm may be solely battery operated.
2. In existing dwelling units a carbon monoxide alarm is permitted to be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space.

**R315.1.2 Interconnection.** Where more than one carbon monoxide alarm is required to be installed within the dwelling unit or within a sleeping unit the alarm shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit.

#### Exception:

1. Interconnection is not required in existing dwelling units where repairs do not result in the removal of wall and ceiling finishes, there is no access by means of attic, basement or crawl space, and no previous method for interconnection existed.

## R315 (CONT'D)

**R315.2 Where required in existing dwellings.** Where a permit is required for alterations, repairs, or additions exceeding one thousand dollars (\$1,000), existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.1 Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained.

**R315.3 Alarm requirements.** Single- and multiple-station carbon monoxide alarms shall be listed as complying with the requirements of UL 2034. Carbon monoxide detectors shall be listed as complying with the requirements of UL 2075. Carbon monoxide alarms and carbon monoxide detectors shall be installed in accordance with this code, the current edition of NFPA 720 "Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment" and the manufacturer's installation instructions. Other carbon monoxide alarm and detection devices as recognized in NFPA 720 are also acceptable.

Carbon monoxide alarms required by Section R315.1 and R315.2 shall be installed in the following locations:

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

**R315.3.1 Multiple-purpose alarms.** Carbon monoxide alarms combined with smoke alarms shall comply with Section R315, all applicable standards, and requirements for listing and approval by the Office of the State Fire Marshal, for smoke alarms.

For Questions, Call: 510-238-3891

February, 2011



# CEDA, BUILDING SERVICES DEPARTMENT

250 FRANK H. OGAWA PLAZA • SUITE 2340 OAKLAND, CA 94612

PHONE: 510-238-3444 • FAX: 510-238-2963 • TTY: 510-238-3254

## SMOKE AND CARBON MONOXIDE ALARM INSTALLATION

(Valuation of Work Exceeding \$1000.00)

Jobsite Address: \_\_\_\_\_

Permit RB: \_\_\_\_\_

Permittee: \_\_\_\_\_

Property Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

City/State: \_\_\_\_\_

Number of Units: \_\_\_\_\_

Email: \_\_\_\_\_

*I certify that Smoke Detectors for this residential occupancy are installed throughout the premises in Accordance with 2010 California Residential Building Code Sections R314 and R315 and the manufacturer's instructions.*

\_\_\_\_\_  
Certifier's Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Certifier's Name

\_\_\_\_\_  
Date

Owner  Owner's Agent  Permittee



**DETACH AND MAIL CERTIFICATION FORM**



# SMOKE AND CARBON ALARM INSTALLATION

City of Oakland  
CEDA, Building Services  
250 Frank H. Ogawa Plaza, 2nd Fl.  
Oakland, CA 94612

Phone: 510.238.3444  
Fax: 510.238.2263  
E-mail: [permitspection@oaklandnet.com](mailto:permitspection@oaklandnet.com)



**SAVE LIVES- PROMOTE SAFETY  
INSTALL SMOKE DETECTORS**

PLEASE  
PLACE  
STAMP  
HERE

**MAILING ADDRESS LINE 1**

**MAILING ADDRESS LINE 2**

**MAILING ADDRESS LINE 3**

**MAILING ADDRESS LINE 4**

**MAILING ADDRESS LINE 5**



Located in downtown Oakland  
next to City Hall (City Center)  
on the corner of 14th and Clay  
Street.

## BUILDING SERVICES DEPARTMENT

The Building Services Department is committed to improving the living and working environment for the citizens of Oakland. Through permit and inspection services the community is provided services and information that will reduce life safety concerns.

Smoke and Carbon Monoxide Alarm installations are one of many necessary tools used to improve life in the City of Oakland.



[www.oaklandnet.com](http://www.oaklandnet.com)