Carbon Monoxide Poisoning Prevention Act

On May 7, 2010, Senate Bill (SB) 183 was enacted into law and is known as the Carbon Monoxide Poisoning Prevention Act (Act). This will require the placement of carbon monoxide devices in all dwelling units; and requires that the presence or absence of these devices must be disclosed when residential real estate is transferred.

This Bill is a result of Senate hearings that dealt with the dangers of carbon monoxide poisoning. According to the American Medical Association, carbon monoxide poisoning is the leading cause of accidental poisoning deaths in the United States. The California Air Resources Board has determined that thirty to forty “avoidable deaths”, on average, occur in California each year due to unintentional carbon monoxide poisoning; and “avoidable” emergency room visits and hospitalizations in the State range up into the high one hundreds per year.

This bill applies to existing housing. It covers every “dwelling unit intended for human occupancy” which means single-family dwelling, factory-built homes, duplex, lodging house, condominiums, motels, hotels, dormitories, stock cooperatives, time-share projects and dwelling units in “multiple-unit dwelling unit buildings” (apartment houses). It applies to every dwelling unit that has “a fossil fuel burning heater or appliance, fireplace, or an attached garage”. “Fossil fuel” means coal, kerosene, oil, wood, fuel gases, and other petroleum or hydrocarbon products, which emit carbon monoxide as a byproduct of combustion."

This Act requires dwelling units to have installed a “carbon monoxide device” that is designed to detect carbon monoxide and produce a “distinct, audible alarm”; and requires the State Fire Marshal to certify and approve carbon monoxide devices and their instructions. This Act prohibits the marketing, distribution, or sale of devices unless they and their instructions have been approved and listed by the State Fire Marshal.

The devices must be installed, consistent with new construction standards or according to the approved instructions, in all existing single-family dwelling units no later than July 1, 2011. All other dwelling units (such as apartments) must have proper carbon monoxide detectors installed no later than January 1, 2013.

As noted, there are disclosure requirements with respect to carbon monoxide detectors. Currently, sellers of residential properties in California must provide the buyer with a state-mandated form known as the Real Estate Transfer Disclosure Statement (TDS). The TDS requires the seller to answer a variety of inquiries as to features of the property. SB 183 amends the TDS so that, effective January 1, 2011, the seller will have to say whether or not the property contains one or more carbon monoxide detectors. It is important to note that, even if the answer is “no”, that will not invalidate the sale or transfer of the property. A footnote explains that the lack of such a device may fail to meet current safety standards. Nonetheless, a transfer of the property may still take place.
Carbon Monoxide Product Approval and Listing
Carbon Monoxide (CO) alarms and detectors are required to be listed by the Office of the State Fire Marshal (OSFM) – Fire Engineering Division prior to marketing and sale in California. To view the listing database on line please go to our website:
http://osfm.fire.ca.gov/licensinglistings/licenselisting_bml_searchcotest.php
Under “Category”, click on the sort by “Number” button, then go to the drop down menu (right down arrow) to select “5276-CARBON MONOXIDE ALARMS” or “5278-CARBON MONOXIDE DETECTORS”. Then Click on “Search” and it will list all CO alarms or detectors that are currently approved and listed by the OSFM.

Carbon Monoxide Awareness
In an effort to increase awareness as to the potential dangers of CO, the OSFM would like to emphasize the following:

• CO is the leading cause of accidental poisoning deaths in the United States.

• CO is produced by furnaces, common household appliances, unvented kerosene and gas space heaters, automobile exhaust, generators, fireplaces, and other systems that are powered by the burning of fuel that includes, but is not limited to, natural gas, propane, gasoline, oil, and wood.

• CO is a colorless, odorless, and tasteless poison gas that can be fatal when inhaled, and it is known as “the silent killer” because it cannot be seen, smelled, or tasted.

• Public education and awareness about CO poisoning are critical to protecting residents of California from the dangers of this deadly gas and the risk factors in the home.

• CO alarms and detectors have been determined to be the most effective way to detect carbon monoxide.

Building Codes
The following pages contain the requirements of the latest editions of the California Residential Code for the installation of carbon monoxide and smoke alarms. Please note that combination alarms which detect both carbon monoxide and smoke are available as both wired and battery operated units.
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 NFPA 72. 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 notification 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.

Exceptions: See Section R314.6.

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 building wiring without the removal of interior finishes.

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 that 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.

R314.6 Existing Group R-3 occupancies.

R314.6.1 Existing buildings housing Group R-3 occupancies established prior to the effective date of these regulations may have their use continued if they conform or are made to conform to provisions of these regulations to the extent that reasonable and adequate life safety against the hazards of fire, panic and explosion is substantially provided. Additional means of egress, the installation of automatic sprinkler systems, automatic fire alarm system or other life safety measures may be required to provide reasonable and adequate safety.

Note: It is the intent of this section that every existing occupancy need not mandatorily conform with the requirements for new construction. Reasonable judgment in the application of requirements must be exercised by the enforcing agency.
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 units that have attached garages. Carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions.

R315.1.1 Carbon monoxide detection systems. Carbon monoxide detection systems, that include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

R315.1.2 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.

3. In existing dwelling units, a carbon monoxide alarm is permitted to be solely battery operated or plug-in with battery back-up where repairs or alterations are limited to the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.

4. In existing dwelling units, a carbon monoxide alarm is permitted to be solely battery operated or plug-in with battery back-up when work is limited to the installation, alteration or repair of plumbing or mechanical systems.

R315.1.3 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.

Exceptions:
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.

2. In existing dwelling units, carbon monoxide alarms are not required to be interconnected where no construction is taking place.
3. In existing dwelling units, carbon monoxide alarms are not required to be interconnected where repairs or alterations are limited to the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.

4. In existing dwelling units, carbon monoxide alarms are not required to be interconnected when work is limited to the installation, alteration or repair of plumbing or mechanical systems.

R315.2 When required in existing dwellings. Prior to July 1, 2011, when a permit is required for alterations, repairs or additions with a total cost or calculated valuation 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.

R315.2.1 Carbon monoxide alarms on or after July 1, 2011. All existing detached single-family dwelling units intended for human occupancy, shall have a carbon monoxide alarm, approved and listed by the State Fire Marshal installed on or before July 1, 2011. See Health and Safety Code Sections 17926, 17926.1 and 17926.2. Carbon monoxide alarms are permitted to be solely battery operated or plug-in with battery back-up in existing buildings where no construction is taking place. When a permit is required for alterations, repairs or additions, 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 315.1.

R315.2.2 Carbon monoxide alarms on or after January 1, 2013. All other existing dwelling units intended for human occupancy as defined in Health and Safety Code Section 13262 (b) shall have a carbon monoxide alarm approved by the State Fire Marshal installed on or before January 1, 2013. See Health and Safety Code Sections 17926, 17926.1 and 17926.2. Carbon monoxide alarms are permitted to be solely battery operated or plug-in with battery back-up in existing buildings where no construction is taking place. When a permit is required for alterations, repairs or additions, existing dwelling units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section 315.1.

R315.3 Alarm requirements. No person shall install, market, distribute, offer for sale, or sell any carbon monoxide device in the State of California unless the device and instructions have been approved and listed by the State Fire Marshal.

Carbon monoxide alarms required by Sections 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.

NOTE: Authority Cited: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.
AFFIDAVIT: SELF-CERTIFICATION OF INSTALLATION OF SMOKE AND CARBON MONOXIDE ALARMS

FOR COMPLIANCE WITH SECTIONS R314 AND R315 OF THE CALIFORNIA RESIDENTIAL CODE
WHERE NO INTERIOR ACCESS FOR INSPECTION IS OTHERWISE REQUIRED

Property Address: ________________________________________________________________

Owner Name: ___________________________ Permit Number: _________________________

Number of Alarms Installed: Smoke ________; Carbon Monoxide __________

When additions, alterations, or repairs requiring a building permit are made to an existing dwelling unit, the California Residential Code, Sections R314 and R315, requires the installation of smoke and/or carbon monoxide alarms. The requirement for these alarms and their locations is specified in the code sections attached to this document.

As owner of the above referenced property, I hereby certify that the alarm(s) referenced above has/have been installed in accordance with the manufacturer’s instructions and in compliance with the California Residential Code. The alarms have been tested and are operational.

Signature: ___________________________ Date: ___________________________

This affidavit must be returned to the Building Inspector prior to final inspection approval of all building permits requiring compliance with Section 420.4.1 of the California Building Code. This form may be mailed to the Building and Safety Division at the address above.

This is a Voluntary Smoke and Carbon Monoxide Alarm verification procedure. If you prefer a Building Inspector to perform the verification, you must arrange to have an adult (18 years or older) present on the date of when the final inspection is requested.