

Carbon Monoxide Alarms

This brochure explains the B.C. Building Code requirements for carbon monoxide alarms in new and renovated residential buildings. It identifies the sources of carbon monoxide and provides information to homeowners and landlords who wish to install carbon monoxide alarms in existing buildings.

"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."

Other Brochures Related to This Topic

- [Smoke Alarms](#)
- [Smoke and Carbon Monoxide Alarms upgrade requirements for Single and Two Family Dwellings](#)

B.C. Building Code requirements

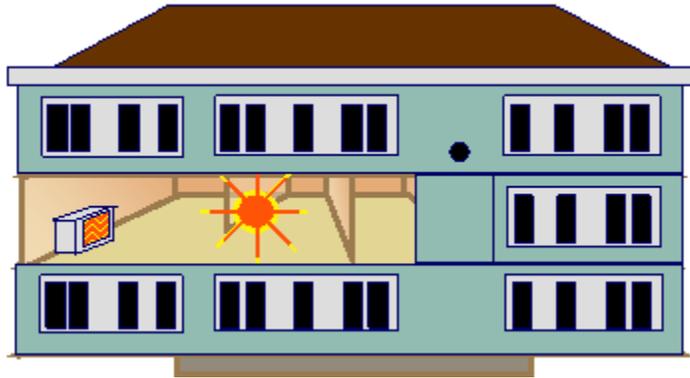
Carbon monoxide is a colourless, odourless gas that is highly toxic because it interferes with the body's ability to transport oxygen through the blood to the body's cells.

Carbon monoxide poisoning is the leading cause of accidental poisoning deaths in North America. A requirement for carbon monoxide alarms in all residential buildings was required by the BC Building Code as follows:

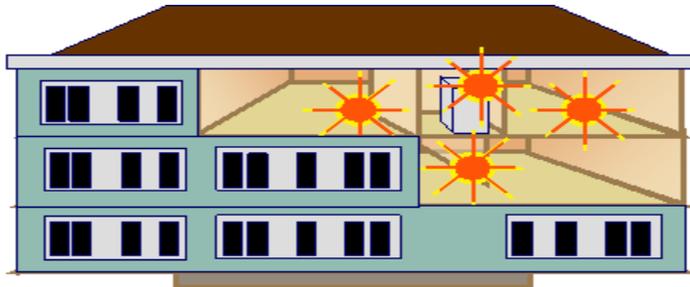
Buildings that contain **residential occupancy** shall have a carbon monoxide alarm(s) installed in every bedroom or within 5 m of **each** bedroom door, measured along the corridor, if the suite:



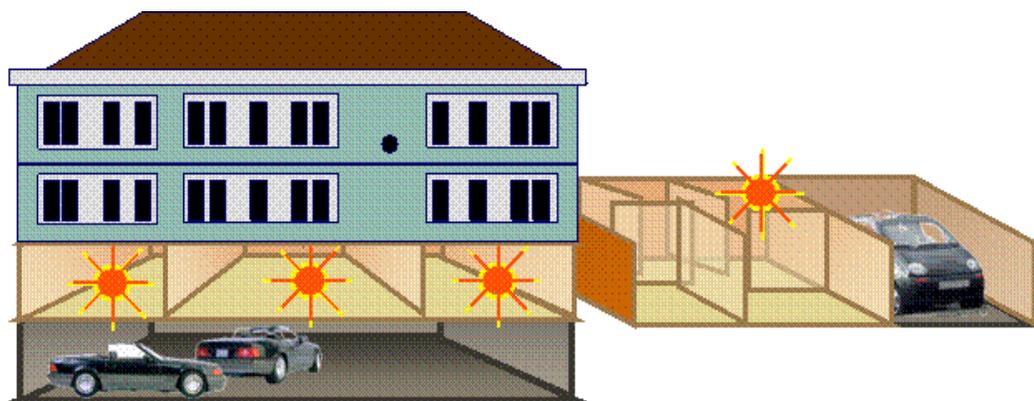
- contains a fuel-burning appliance



- shares a wall/floor or ceiling with a service room that contains a fuel-burning appliance and the service room is not within the suite of residential occupancy. Carbon monoxide alarm is also required in such service room.



- shares a wall/floor/ceiling or adjacent attic or crawl space with a storage garage.



NOTE: If a fuel-burning appliance, such as a fireplace, is located inside a bedroom the carbon monoxide alarm should be installed within the bedroom.

The carbon monoxide alarms shall:

- conform to CAN/CSA 6.19, Residential Carbon Monoxide Alarming Devices,
- be equipped with an integral alarm conforming to CAN/CSA 6.19,
- be battery-operated or hardwired, and
- if hardwired, must comply with CEC Rule 32-110, and
- be mechanically fixed at a height as per manufacturers' recommendations.
- plug-in type is not acceptable.

Units combining smoke and carbon monoxide alarms are acceptable.

Existing Buildings

Although carbon monoxide alarms are not required in existing buildings, they can warn you if this deadly gas leaks into your home. You need to understand how they work and what their limitations are in order to decide whether or not you need an alarm and, if you purchase an alarm, how to use it to get the best protection.

Only those detectors bearing CSA6.19 certification mark should be purchased and these must always be installed and maintained in accordance with the manufacturer's instructions.

Existing Buildings that are undergoing renovations may be required to install carbon monoxide alarms. Please refer to our brochure "Smoke and Carbon Monoxide Alarms Upgrade Requirements for Single and Two Family Dwellings".

Sources of Carbon Monoxide

Sources of carbon monoxide include: malfunctioning furnaces, exhaust vents for gas appliances or wood burning fireplaces that are not properly vented, and exhaust fumes from idling cars.

Another source of carbon monoxide can be from lit charcoal briquettes. Carbon monoxide may be produced in dangerous concentrations from even warm-to-the-touch charcoal briquettes. Never bring lit or warm to the touch charcoal indoors, whether it is in a house, garage, trailer, or tent. Heating an enclosed area with a charcoal grill can cause suffocation or death.

How Do Carbon Monoxide Alarms Work?

Carbon monoxide alarms trigger an alarm based on an accumulation of carbon monoxide over time. Carbon monoxide can harm you if you are exposed to high levels of carbon monoxide in a short period of time, or to lower levels of carbon monoxide over a long period of time. Carbon monoxide alarms require a continuous power supply, so if the power cuts off then the alarm becomes ineffective. Models are available that offer back-up battery power.

What Do I Do if the Alarm Sounds?

Don't ignore the alarm! It is intended to go off *before* you are experiencing symptoms. Silence the alarm, get all members of the household to fresh air, and ask whether anyone is experiencing any of the symptoms of carbon monoxide poisoning. If anyone is experiencing symptoms of carbon monoxide poisoning, call 911. If no one has symptoms, ventilate the building, identify and remedy the source of the carbon monoxide before returning inside, and have appliances or chimneys checked by a professional as soon as possible.

If you have any further questions please contact the Building Department at 604-294-7130.

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