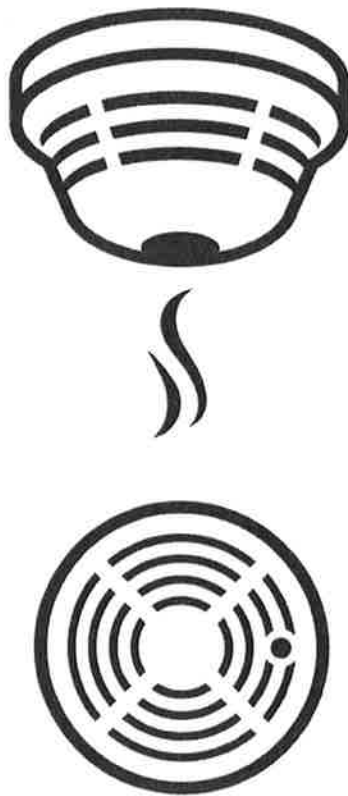


RESIDENTIAL DETECTORS

Information for the proper placement of smoke and carbon monoxide detectors



City of Aberdeen
Building Inspection Dept.
(605) 626-7017
2015 IRC – pamphlet revised 4/03/18
*drawings contained herein are not to scale



GENERAL REQUIREMENTS FOR PLACEMENT OF SMOKE AND CARBON MONOXIDE DETECTORS

In September of 2015, NFPA (National Fire Protection Association) released a study conducted over a 4-year span. The study concluded that 3 of every 5 deaths caused by home fires were a result of no smoke alarms installed in the residence or nonfunctioning smoke alarms. Other findings included;

- The death rate per 100 reported home fires were more than twice as high in homes that did not have any working smoke alarms compared to the rate in houses with working smoke alarms
- In fires in which the smoke alarms were installed but did not operate, almost half had missing or disconnected batteries
- Dead batteries caused one-quarter of all smoke alarm failures

The life span of a smoke detector is 10 years

The life span of a carbon monoxide detector is 5 years

Where required. Smoke and carbon monoxide detectors shall be provided for every residence within the jurisdiction of the City of Aberdeen, SD Building Inspection Department. Any home construction or remodel/renovation project, regardless of cost or scope, shall require that the smoke and carbon monoxide detectors be updated (or installed) to the current standard.

Location of detectors. Smoke alarms and carbon monoxide detectors shall be provide in the locations specified in the attached drawing. Combination smoke/carbon monoxide detectors may be installed in lieu of stand-alone smoke detectors or carbon monoxide detectors.

Exception: Dwellings not having any fuel-fired appliances or an attached garage are exempt from the carbon monoxide detection requirement.

Smoke detectors shall not be installed within 3 feet (horizontally) from the door or opening of a bathroom containing a bathtub or shower unless it would prevent the installation of an alarm in a required location.

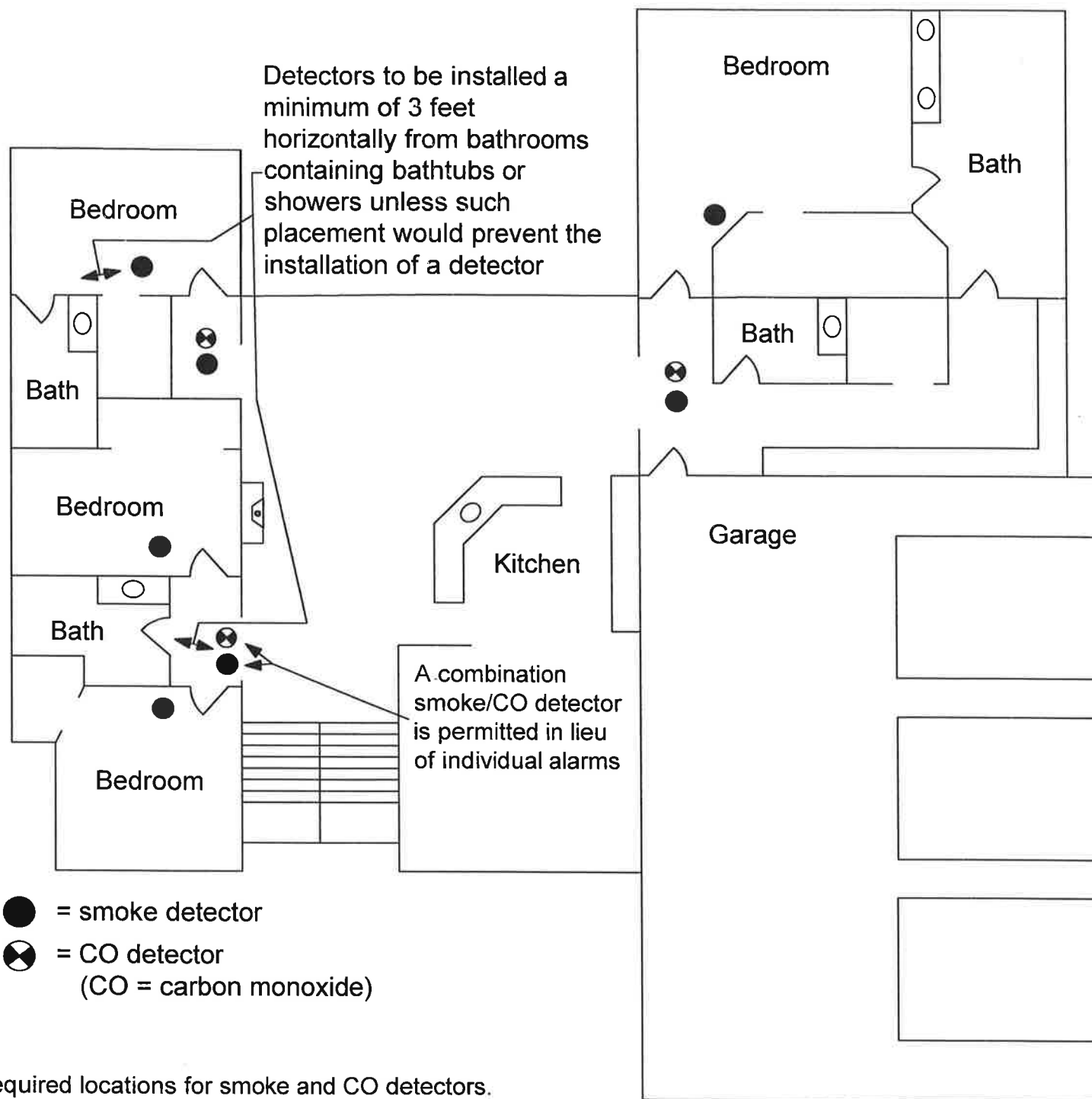
Installation near cooking appliances. Smoke alarms shall not be installed in the following locations unless it would prevent the installation of a device required by the above section;

1. Ionization smoke alarms shall not be installed less than 20 feet horizontally from a permanent cooking appliance
2. Ionization smoke alarms with an alarm silencing switch shall not be installed less than 10 feet horizontally from a permanent cooking appliance
3. Photoelectric smoke alarms shall ne be installed less than 6 feet horizontally from a permanent cooking appliance

Interconnection. Where more than one detector is required to be installed in a residence, the devices must be interconnected in a manner that the actuation of one alarm will activate all other alarms.

Exception: Interconnection shall not be required in existing areas where alterations or repairs do not result in the removal of wall of ceiling finishes exposing the structure, unless there is access to an attic, basement, or crawl space that would provide access without the removal of interior finishes.

Power source. Alarms shall receive their primary power from the building wiring when such power is from a commercial source. Where primary power is subject to interruption, power shall be provided by battery. Where alarms are retrofitted without access to the building wiring, power is permitted to be provided by battery.



Required locations for smoke and CO detectors.

Smoke detectors

1. In each sleeping room
2. Outside of each separate sleeping area in the immediate vicinity of the bedrooms
3. On each additional story of the dwelling including basements and habitable attic spaces. Crawl spaces or uninhabitable attics are not required to have detectors installed.

Carbon Monoxide (CO) detectors

1. Outside of each separate sleeping area in the immediate vicinity of the bedrooms. Where fuel-burning appliances are installed in a bedroom or attached bathroom, a carbon monoxide detector shall be installed within the bedroom

Combination smoke/CO detectors may be installed in lieu of stand-alone smoke or CO detectors.

