

CO And Smoke Alarms

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Many people are confused about the requirements for CO and Smoke Alarms. They sell their home, the Inspector walks through, and they have to add alarms hither and yon. Here is a summary of the Code requirements in Anchorage.

Carbon Monoxide Alarms: The Municipality of Anchorage (MOA) follows the International Residential Code (IRC). IRC 23.85.R315 requires that a CO detector be installed on each floor level. If any level contains bedrooms, the CO detector should be immediately outside the bedrooms – that is, in the hallway leading to the bedrooms. This is the basic rule.

The question sometimes arises as to how the alarms are powered. In new construction, these alarms are hard-wired and have a battery back-up. They are also interconnected so that, if one goes off, they all activate. If your home is so configured, any repairs required by a home inspector must follow this same configuration. Homes built in the last 5 or 6 years are likely to be configured this way.

If you have an older home, or a home not built in this manner, any new CO detectors required may be either electric or battery operated.

Smoke Alarms: The MOA has its own Building Safety Regulation on this topic – Section 314. Another helpful site is <http://www.muni.org/Departments/Fire/PublicAffairs/Pages/ChildernandSmokeAlarms.aspx> (Muni has spelt ‘children’ incorrectly).

Smoke detectors are required in every sleeping room, plus an additional unit in the immediate vicinity outside the “sleeping area” (in most cases, outside the “bedrooms”, similar to the IRC Carbon Monoxide requirement).

The reference to “sleeping room” suggests that any room used for sleeping, other than a legal “bedroom” which must have a closet and egress window, is a must for a smoke alarm to protect the sleeper. In addition, every level of the home must have at least one Smoke alarm whether it has “sleeping rooms” or not.

In new construction, the Code requires the smoke alarms to be hard-wired with battery backup, and interconnected, and you will find that homes built since the mid 90’s are so constructed. This configuration must be followed if repairs are required. Otherwise, a battery operated unit is acceptable.

Summary: Current new construction codes in Anchorage, enforced rigidly since the tragic accident in Bear Valley a few years ago, require interconnected CO detectors with electric and battery support, and Smoke alarms also with an interconnected system, electrically powered plus battery back-up. On older homes, the Municipality will compromise.

It would seem logical, and is permissible, for the CO and Smoke protection to consist of a single, dual function unit, particularly in the areas required other than in the bedrooms themselves where

only a Smoke detector is mandatory. The idea is that dual function (CO and Smoke) units are permissible so long as each individual code is clearly maintained.

Finally, although the codes do not specify exact locations, the units may be on the ceiling or wall, but should not be tight into the line where ceiling and wall meet. Install Smoke detectors at least one foot away from corners where smoke would curl and not necessarily reach the device in a fire. CO detection may also be captured equally well on a wall or ceiling. Carbon Monoxide mixes throughout the air at all levels.

Note: It is difficult to find a single source of exact laws at the MOA, and this column does not purport to provide a precise code interpretation. The above comments are meant as a guide only to assist you with understanding requests for repairs. The MOA uses the IRC Code as a basis for Carbon Monoxide protection, and the National Fire Protection Association (NFPA) provisions for Smoke alarm rules.

Readers are advised to refer to the Building Safety Division of the MOA (telephone 343-8301) for further clarification if required.

Dear Dave: We are buying a home in Eagle River that has a private well. We know the well is to be tested but want to make sure there is no Arsenic in the water. Can we ask the seller to test for Arsenic?

Answer: No need – The well must be tested for Arsenic by law. This Municipal regulation has now been in force for 5 years.

All wells in the Municipality of Anchorage must be tested for flow rate and potability (water quality) when a single-family residence is sold. Arsenic has not been a significant problem in the Anchorage bowl but elevated levels were found in the Sand Lake area in 2001 and this drew attention to the problem.

In addition to the standard well test (costs around \$1,000 including MOA Certificate), you can ask for a P.I.W.A. test for an additional \$300 which will reveal contamination from plumbing (copper, lead or other materials) and other contents that may make the water unpalatable.

Curiously, the presence of Arsenic does not provide grounds for the Municipality to disapprove a well. The Municipality is concerned about man-made contamination and Arsenic is a natural substance. If a well contains Arsenic, the Muni will put an Advisory Notice on the certificate and then it is up to the Buyer to decide if he is happy with that, or if he wants to negotiate an Arsenic filtration system with the Seller.

If you are buying a home with a well, you should discuss all this with a specialist Engineer. Buyers can easily over-react, or under-react, when it comes to wells. In general, wells in Alaska are an excellent source of domestic water and, arguably, better than public water in many cases.