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RADON TESTING

Radon is a radioactive gas that has been found in homes all over the U.S. It was not until December 1984 that it was realized that people in homes could also be exposed to high concentrations of Radon. A worker in a nuclear generating plant triggered a radiation detection monitor as he entered the plant. It turned out that his home had twenty times more radiation than is allowed in a uranium mine. Radon comes from the natural breakdown of uranium in soil, rock and water and gets into the air you breathe. It typically moves up through the ground to the air above and into your home through cracks and other holes in the foundation. Your home can trap radon inside. Sometimes radon enters the home through well water.

Any home can have a radon problem. This means new and old homes, well sealed and drafty homes, and homes with or without basements. In fact, you and your family are most likely to get your greatest radiation exposure at home. That is where you spend most of your time. Nearly out of every 15 homes in the U.S. is estimated to have elevated radon levels. In fact the Surgeon General has warned that radon is the second leading cause of lung cancer in the United States today. Elevated levels of radon gas have been found in homes in your state. Contact your state radon office or a Homechek office near you for more information about radon in your area.

Testing is the only way to find out a home's radon levels. EPA and the Surgeon General recommend testing all homes below the third floor for radon. The concentration of radon in the air is measured in units of picocuries per liter of air (pCi/l). Based on currently available information, the EPA has set guidelines for radon levels in residential structures. Their "action level" is 4 pCi/l; that is, no action is needed if the radon concentration is below 4 pCi/l. The most accurate method of determining the average annual radon concentration is a long-term test. However, since time is usually limited in Real Estate transactions, a long-term test is not practical, and consequently a radon device with a test period of two to seven days is generally used.

The most common radon testing devices used are the continuous electronic radon monitor, charcoal canisters, and the E-Perm. These devices are to be placed in the lowest livable area of the home without major renovations. They should be left there for a minimum period of two days and then retrieved for analysis. The continuous electronic radon monitor is the most reliable of the radon detection devices and is the least susceptible to tampering. They record hourly radon levels as well as an average radon reading whereas the charcoal and E-Perm devices only give an average radon reading. The continuous electronic radon monitors also provide fast test results.

If after a house is tested it is determined that it has a high radon concentration, do not panic. Fixing a radon problem is just another home repair, easily and inexpensively performed by an EPA or state qualified contractor. A number of methods have been successful in reducing radon concentration levels in buildings to a point below the "action level." A typical mitigation procedure that is very effective is to use 4-inch plastic pipe with an in-line fan that vents the radon gas from below the floor slab to above the roof. Although, the cost may vary depending on the size and design of the home, it seldom runs more than \$600-\$1500. It is important to note that Radon control systems in no way diminish the dollar value of the home and are accepted nationally as a home improvement.

Typical costs for a Radon test can range from \$100-\$150.