Why test your home for radon?

High levels of radon gas in buildings can harm your lungs if you breathe it. Radon is the second leading cause of lung cancer, just behind smoking.

**Electret Ion Detector**

Electret ion detectors contain an electostically charged Teflon disk. Ions generated by the decay of radon strike and reduce the surface voltage of the disk. By measuring the voltage reduction, the radon concentration can be calculated. These can be used for short or long term radon tests; however this is a high-cost test that requires training to use.

**Alpha Track Detector**

Alpha track detectors contain a small sheet of plastic that is exposed for a period of three months to one year. Alpha particles etch the plastic as they strike it. These marks are then chemically treated and counted in the laboratory to determine the radon concentration. These long-term detectors come in various shapes and sizes.

**Charcoal Canister**

Charcoal canisters and charcoal liquid scintillation detectors contain small quantities of activated charcoal. Radon and its decay products are absorbed onto the charcoal and are measured by counting with a sodium iodide detector or a liquid scintillation counter. These detectors are designed for short-term tests of two to seven days.
There are various kinds of Radon detectors, however, the Alpha Track and the Charcoal Canister are the most widely used. Electret Ion Detectors and Continuous Monitors are available.

Continuous monitors are active devices which need power to function. They require operation by trained testers and work by continuously measuring and recording the amount of radon in the home.

How to Test

During a short-term test, doors and windows are closed 12 hours prior to testing and throughout the testing period. A short-term test lasting two or three days should not be conducted during unusually severe storms or periods of unusually high winds. The test kit is placed in the lowest lived-in level of the home, at least 20 inches above the floor, in a room that is used regularly, but NOT in the kitchen or bathroom where high humidity or the operation of an exhaust fan could affect the validity of the test. At the end of the test period, the kit is mailed to a laboratory for analysis; results are mailed back in a few weeks.

In some cases, such as real estate transaction trained EPA-listed or state-certified contractors conduct the radon test.