

When a Short-Term Radon Test Makes Sense for Your Home

Understanding the basics of radon measurement

Radon gas is a natural radioactive byproduct of uranium breaking down in soil and rock. It moves up through the ground and can seep into homes through cracks in foundations, gaps around pipes, and other openings. Because you cannot see or smell it, radon testing is the only way to know if your home has elevated radon levels. The Environmental Protection Agency recommends that every home be tested, and for good reason. Long-term exposure to elevated radon is the second leading cause of lung cancer in the United States.

When people first learn about radon risk, they often want answers quickly. That is where a short-term radon test comes in. It gives you a snapshot of radon levels over a period of two to seven days, depending on the device and protocol. Many homeowners start with a short-term test to get a general sense of whether radon is present at concerning levels. If the results show high numbers, you can then move to a long-term test or proceed directly to radon mitigation.

How a short-term radon test works

A [short-term radon test](#) typically uses either a charcoal-based radon test kit or an electronic continuous radon monitor. Charcoal kits are passive devices that absorb radon over a set period. After the test window closes, you mail the kit to a lab for analysis. Continuous monitors, on the other hand, actively sample the air and record radon levels hour by hour. This type of radon detector gives you more detail about daily fluctuations, which can be useful if you suspect intermittent spikes.

Regardless of the method, placement matters. You want the radon measurement device in the lowest livable level of the home - usually a basement or first-floor room if there is no basement. It should be placed away from drafts, direct sunlight, and high humidity, and kept at least twenty inches from the floor. Following these guidelines ensures the radon test results reflect actual conditions rather than setup errors.

Why timing matters with radon testing

Radon levels in homes can vary significantly from season to season. In winter, homes are sealed up tight, which can trap radon gas indoors. Summer can bring higher levels in some houses due to stack effect or soil moisture changes. A short-term radon test captures only a narrow window of time. If you test during a period of low radon entry, you might get a false

sense of safety. Conversely, testing during a heavy rain or a prolonged cold snap could show a spike that is not representative of average conditions.

For this reason, the Environmental Protection Agency suggests starting with a short-term test but following up with a long-term test if the initial results are borderline. A long-term radon test runs for at least three months and gives a more accurate picture of your year-round radon levels. However, if you are buying or selling a home, you often do not have months to wait. In those cases, a short-term radon test is the practical choice. Real estate transactions routinely rely on short-term tests because they fit the closing timeline.

Interpreting your short-term radon test results

Radon levels are measured in picocuries per liter (pCi/L). The Environmental Protection Agency has set the radon action level at 4.0 pCi/L. If your radon test results come back at or above this level, the agency recommends taking steps to reduce radon in your home. That does not mean levels below 4.0 pCi/L are risk-free - there is no completely safe level of radon exposure - but 4.0 is the threshold where mitigation is strongly encouraged.

It is worth noting that a single short-term radon test result above 4.0 pCi/L does not automatically mean you need a full radon mitigation system. Sometimes retesting under different conditions gives a different number. If you get a high result, many professionals recommend doing a second short-term test or switching to a continuous radon monitor for a week to confirm the pattern before investing in radon reduction. In St. Louis, where radon in homes is fairly common due to the region's geology, it is smart to treat borderline results seriously.

When a short-term radon test might not be enough

There are situations where a short-term test can mislead. If your home has high humidity, a charcoal test kit can saturate and give an inaccurate reading. If you test right after a major renovation, construction dust and changed airflow patterns can throw off the radon measurement. And if you test during a period of unusually low barometric pressure, radon entry rates can be higher than normal. These are not reasons to avoid short-term testing, but they are reasons to interpret the results with some caution.

For homeowners who want a clearer picture of their radon risk, a long-term radon test is the better investment. It smooths out daily and seasonal swings and gives a more reliable average. But long-term tests take months, and if you need answers now - for a real estate closing, for peace of mind before moving into a new home, or to decide whether to call a radon mitigation contractor - a short-term radon test is a perfectly reasonable starting point.

Practical tips for getting reliable radon test results

- Close windows and doors at least twelve hours before starting the test, and keep them closed during the test period. Normal entry and exit is fine, but avoid leaving doors open for long stretches.
- Place the radon detector in a room where you spend significant time, such as a family room or bedroom in the basement level. Avoid bathrooms, kitchens, laundry rooms, and unfinished storage areas.
- Do not move the device during the test. If you bump it or shift it to a different spot, the radon measurement may be invalid.
- Follow the test manufacturer's instructions exactly. Each radon test kit has its own requirements for timing, placement, and return shipping.
- If you use a continuous radon monitor, download the data after the test ends and review the hourly readings. A pattern of spikes might indicate radon entering through a specific crack or seam.

What to do after your short-term radon test

Once you have your radon test results, the next steps depend on the numbers. If the result is below 2.0 pCi/L, most experts consider that low risk, though you may still want to retest every few years. Between 2.0 and 4.0 pCi/L, you are in a gray zone. Some homeowners choose to do a long-term follow-up test, while others proceed directly to preventive radon mitigation to be safe. At or above 4.0 pCi/L, the standard recommendation is to contact a radon testing service or a radon mitigation professional to discuss your options.

In the St. Louis area, companies like Air Sense Environmental offer professional radon testing that uses continuous monitors for accurate, tamper-resistant results. They can help you understand your radon test results and advise whether radon reduction is warranted. If mitigation is needed, a radon mitigation system typically involves sealing foundation cracks and installing a vent pipe with a fan to pull radon from beneath the house and release it outside. The cost varies depending on the home's construction, but it is usually a few thousand dollars - a small price for reducing a known health risk.

The bottom line on short-term radon testing

A short-term radon test is a practical, affordable way to check for radon in your home. It is not a perfect tool - no single test is - but it gives you actionable information quickly. For most homeowners, the best approach is to start with a short-term test, treat the results with appropriate caution, and follow up with a longer-term measurement or professional consultation if the numbers are high. Radon exposure is a serious health concern, but it is also

a problem you can solve. Testing is the first step, and a short-term test is often the easiest way to take that step.