

When You Need a Radon Gas Test for a St. Louis Home

If you are buying or selling a home in St. Louis, you have probably heard about radon. It is a radioactive gas that comes from the natural decay of uranium in soil. It can seep into a house through foundation cracks, gaps around pipes, or even through a sump pump. The only way to know if you have a problem is to perform a radon gas test. I have been involved in home inspections for over a decade, and I can tell you that skipping this step is a gamble you do not want to take.

Radon is the second leading cause of lung cancer after smoking, according to the EPA. It is odorless, colorless, and tasteless. You cannot see it or smell it, so you rely on measurement. The EPA recommends that homes with radon levels at or above 4 pCi/L (picocuries per liter) should have a radon mitigation system installed. In St. Louis, the geology in certain areas can produce elevated radon levels, so a radon gas test is not just a good idea - it is a smart move for any real estate transaction.

Understanding the Different Testing Methods

Not all radon tests are the same. When I work with clients, I explain that there are two main categories: short-term and long-term. A short-term radon test usually lasts between two and seven days. The most common device for this is the activated charcoal test. You open a small canister, leave it in the lowest livable area of the home for a few days, then send it to a lab. It gives you a snapshot of the radon level during that specific period. This is the standard method used during real estate transactions because time is usually tight.

A long-term radon test lasts more than 90 days. It uses an alpha track detector or a similar device that records radon exposure over months. This gives a more accurate picture of the average radon level because it accounts for seasonal changes. However, in a home sale, you rarely have that kind of time. That is why most buyers and sellers rely on a short-term [radon gas test](#) performed by a professional.

Continuous Radon Monitors

There is a third option that I see more often now: the continuous radon monitor. This is an electronic device that measures radon levels hour by hour and gives a final result at the end of the test period. Unlike the activated charcoal test, a continuous monitor can detect spikes or drops in radon levels. If someone opens a window during the test, the monitor might show a sudden drop. That kind of data is useful because it can indicate if the home was tampered with during the test. Companies like Air Sense Environmental in St. Louis use continuous radon

monitors for this reason. They provide fast results and a level of detail that a simple charcoal test cannot match.

Why Radon Testing Matters in St. Louis

St. Louis sits on a mix of bedrock and glacial deposits that can produce radon. The EPA has mapped radon potential zones, and parts of the St. Louis metro area are in Zone 1, which means the average indoor radon level is predicted to be above 4 pCi/L. That does not mean every home is dangerous, but it does mean you should test. I have seen homes in the same neighborhood with wildly different radon levels. One house might have 2 pCi/L, and the one next door might have 10 pCi/L. The only way to know is to test.

When you are buying a home, a radon gas test should be part of your home inspection contingency. A home inspector can often coordinate the test, but you want someone who specializes in radon measurement. The test itself is straightforward: the device is placed in the lowest lived-in level of the home, away from drafts and heat sources, and left undisturbed for the required time. After that, the device is sent to a lab or the data is downloaded from a continuous monitor. The results come back in a few days.

What Happens If the Radon Level Is High?

If the radon level comes back at 4 pCi/L or higher, the EPA recommends that you take action. The most common fix is a radon mitigation system, specifically sub-slab depressurization. This involves drilling a small hole in the basement floor, inserting a pipe, and installing a fan that pulls radon gas from beneath the house and vents it outside, above the roofline. It is a proven method for radon reduction and can lower levels significantly, often below 2 pCi/L. The cost is usually between \$800 and \$2,500, depending on the house.

In a real estate transaction, a high radon level can become a point of negotiation. The buyer might ask the seller to install a mitigation system or to provide a credit. In my experience, most sellers are willing to address it because it is a known health issue and the fix is not extremely expensive. The key is having a reliable radon gas test to base the conversation on.

Radon Resistant Construction

If you are building a new home in St. Louis, you can incorporate radon resistant construction techniques. This includes a layer of gravel under the foundation, a vapor barrier, and a vent pipe that runs from the gravel layer to the roof. These features make it easier to install a mitigation system later if needed, and they can reduce radon entry in the first place. It is much cheaper to build radon resistance into a new home than to retrofit an existing one.

Common Misconceptions About Radon Testing

I often hear people say that radon is only a problem in basements. While it is true that radon enters through the lowest level, it can spread throughout the house. The EPA recommends testing on the lowest level that is regularly used. If you have a finished basement where you spend time, test there. If not, test on the first floor.

Another myth is that a short-term radon test is not reliable. It is reliable for what it is: a snapshot. If you want a year-round average, you need a long-term radon test. But for a real estate transaction, a properly conducted short-term test from a reputable company like Air Sense Environmental gives you the information you need to make a decision. Just make sure the home is closed up for 12 hours before the test starts and stays closed during the test, except for normal entry and exit.

Indoor Air Quality Considerations

Radon is part of the bigger picture of indoor air quality. Other pollutants like mold, volatile organic compounds, and carbon monoxide also affect the air you breathe. But radon is unique because it is radioactive and comes from the ground. Testing for radon is cheap and easy compared to the potential health cost. I always tell my clients that a radon gas test is one of the best investments you can make in your home's indoor air quality.

How to Choose a Testing Professional

Look for someone who is certified by the National Radon Proficiency Program or a similar body. They should use calibrated equipment and follow the EPA's testing protocols. If they use a continuous radon monitor, ask about the device's calibration history. A good tester will also check for conditions that could affect the test, like a working air conditioner or a sump pump that might draw radon differently.

In St. Louis, Air Sense Environmental specializes in radon testing for real estate transactions. They use continuous monitors and provide same-day results in many cases. That speed can be a big advantage when you are under contract and need to move quickly.

Final Thoughts

Testing for radon is not something to put off. Whether you are buying, selling, or just living in your home, knowing your radon level gives you control. If it is low, you have peace of mind. If it is high, you can fix it. The cost of a radon gas test is small compared to the potential health risk. And in St. Louis, where the geology can produce elevated levels, it is a step you should not skip.

Remember that radon levels can change over time. Even if your home tested low five years ago, it might be different now. Renovations, changes to the foundation, or even new construction nearby can affect radon entry. Testing every two to five years is a good practice. The EPA also recommends testing after any significant structural changes to your home.

In the end, the decision is yours. But I have seen too many cases where a home buyer skipped the radon gas test only to discover years later that they had been living with high levels. Do not let that be you. A simple test can make all the difference.