

Why a Home Radon Test Should Be on Your St. Louis Home Inspection Checklist

If you own a home in St. Louis, you already know the city has a lot of character. Beautiful brick bungalows, charming Victorians, and modern builds tucked into quiet neighborhoods. But there is something beneath many of those homes that doesn't show up in a typical home inspection. Radon. It is a colorless, odorless gas that seeps up from the soil. And in Missouri, the geology makes radon a serious concern. The only way to know if your home has a problem is to run a home radon test. Not a guess. Not a feeling. A measurement.

I have spent years working with homeowners across Missouri, and I have seen the same pattern play out again and again. People buy a house, do a visual walkthrough, check the roof, the plumbing, the electrical panel. They assume the air is fine. But radon doesn't care about your assumptions. It doesn't knock. It collects in basements and crawl spaces, sometimes at concentrations high enough to increase your risk of lung cancer. That is why I always recommend a professional home radon test as part of any home inspection in St. Louis. It is one of the few tests that can give you real data about an invisible threat.

What Radon Is and Why It Matters

Radon is a radioactive gas that forms naturally when uranium in soil and rock breaks down. It moves up through the ground and enters buildings through cracks in the foundation, gaps around pipes, or even through the water supply. Once inside, it can build up to dangerous levels. The EPA has set a recommended action level of 4 picocuries per liter of air. But even lower levels carry some risk. The health effects of radon exposure are well documented: it is the second leading cause of lung cancer in the United States, after smoking. For nonsmokers, radon exposure is the number one cause of lung cancer. That is not a statistic to brush off.

Missouri has some of the highest potential for elevated radon levels in the country. The U.S. Geological Survey maps show large swaths of the state with moderate to high radon potential. St. Louis sits right in that zone. So if you live here, you are not being paranoid by testing. You are being smart.

The Difference Between a Test Kit and a Professional Test

You can buy a radon test kit at a hardware store for twenty dollars. It looks like a small canister or a plastic bag with a charcoal packet inside. You open it, leave it in your basement for a few days, seal it up, and mail it to a lab. Wait a week or two for results. That is a short-term radon test. It gives you a snapshot. But snapshots can be misleading. Radon levels fluctuate with

weather, barometric pressure, and how much you run your furnace or air conditioner. A one-time short-term test might catch a spike or a low period. You don't know which.

A professional [home radon test](#) uses a continuous radon monitor. This is an electronic device that sits in your home for a defined period, usually 48 to 72 hours for a short-term test, or up to 90 days for a long-term test. It takes readings every hour or so and records the average. The data is more reliable because it captures variation. Companies like Air Sense Environmental use these monitors for all their tests. The results come with a clear report, not just a number. You also get guidance on what to do next if your levels are high.

I have seen homeowners get a kit from the store, run it during a rainy week, get an inflated reading, and panic. I have also seen them run it during a dry week, get a low reading, and assume they are safe. Neither is a good basis for a decision about your family's health. A professional test removes a lot of that uncertainty.

When to Test and How Often

The EPA recommends testing every two years, or after any major renovation that changes the structure of your home. If you are buying a home, you should include a home radon test in your inspection contingency. If you are selling, you might test proactively so you can address any issues before listing. In St. Louis, where radon potential is high, I recommend testing at least once every two years, and more often if you have made changes to your basement or crawl space.

A short-term radon test is often the first step. It gives you a quick answer. But if you want a more accurate picture of your average exposure over time, a long-term radon test is better. The EPA actually suggests starting with a short-term test, then following up with a long-term test if levels are between 2 and 4 pCi/L. If the short-term test shows levels above 4 pCi/L, you should consider radon remediation without waiting.

What Happens If Your Levels Are High

If your test shows radon levels above the EPA action level, don't panic. Radon mitigation systems are well understood and effective. The most common approach is sub-slab depressurization, also called soil suction. A contractor drills a hole through the basement floor, creates a cavity under the slab, and installs a pipe that runs up through the house to a fan on the roof. The fan creates negative pressure under the slab, pulling radon-laden air out and venting it safely above the roofline. It is a permanent fix that typically reduces indoor radon levels by 80 to 99 percent.

In houses with crawl spaces, a similar system can be installed using a vapor barrier on the crawl space floor and a fan that draws air from beneath the barrier. These systems are not

cheap, but they are not outrageously expensive either. A typical installation runs between \$800 and \$2,500, depending on the complexity of your home. And the peace of mind is worth every dollar. After installation, you should run another home radon test to confirm the system is working. Some companies include a follow-up test in the cost of the mitigation system.

Why Continuous Monitors Are Better

I have a bias here, and I will own it. I think a continuous radon monitor is the only way to get a trustworthy result for a short-term test. Here is why. Charcoal test kits can be affected by humidity, temperature, and even the way you pack them for shipping. The lab analysis can have error margins. And the kit has no way to tell you if someone left a window open during the test period, which would flush out radon and give a false low reading. A continuous monitor records time-stamped data. If the numbers jump or drop at odd hours, you can see that. You can correlate it with weather or activities. You get a story, not just a number.

Air Sense Environmental uses continuous monitors for all their tests. When I refer clients to them, I know they will get a clear result and a straightforward explanation of what it means. The report includes the average radon level, the range of readings, and a recommendation for next steps. If the level is high, they help you understand your mitigation options without pushing a specific contractor. That kind of honest, data-driven advice is rare.

Radon and Real Estate Transactions

If you are buying or selling a home in St. Louis, radon testing can feel like a point of negotiation. Sellers sometimes worry that a high reading will kill a deal. Buyers worry that they will end up with a house that has a hidden problem. The truth is, radon is fixable. A high radon reading does not make a house unlivable. It just means you need a mitigation system. And a house with a working mitigation system is actually better than a house that has never been tested. You know the levels are under control.

I have seen transactions where the buyer asked for a radon test, the result came back at 6 pCi/L, the seller installed a mitigation system, and the buyer was satisfied. Everyone walked away okay. The key is to test early in the process. Do not wait until the week before closing. If you are the buyer, include a radon test contingency in your offer. If you are the seller, consider doing a proactive test and installing mitigation if needed before you list. It can give you a competitive advantage in a market where buyers are increasingly aware of indoor air quality.

Final Thoughts on Testing

Radon is not a scare tactic. It is a real risk with a real solution. The first step is knowledge, and that comes from a reliable home radon test. Whether you use a professional service like Air

Sense Environmental or a do-it-yourself kit, the important thing is to test. Do not assume your home is safe because it is newer or because your neighbor's house tested low. Radon levels vary from house to house, even on the same street. The only way to know is to measure.

If your test comes back high, take action. Install a radon mitigation system. Seal cracks in the foundation. Improve ventilation in your basement. And then test again to make sure the fix worked. It is a straightforward process. It just requires you to start.