

Why a Radon Test During Home Inspection Matters for St. Louis Homebuyers

Buying a home in St. Louis comes with plenty of unknowns, but radon gas does not have to be one of them. As a home inspector who has tested hundreds of properties across the region, I have seen how a simple radon test during home inspection can save buyers from unexpected health concerns and expensive fixes later on. Radon is a naturally occurring radioactive gas that seeps into homes from the soil, and it is especially common in areas with certain rock formations. In St. Louis, the geology means many homes sit on ground that can produce elevated radon levels. The good news is that testing is straightforward, and results come quickly when you use the right equipment.

Understanding Radon and Your Risk

Radon gas is odorless, colorless, and tasteless. You cannot detect it without proper radon measurement tools. The gas forms when uranium in the ground decays, and it moves up through the soil into the air. Once inside a home, it can build up to unsafe levels, especially in lower floors like basements. The EPA radon guide recommends fixing any home with radon levels at or above 4 picocuries per liter (pCi/L). Even lower levels can be a concern over many years. For homebuyers, knowing the radon level before closing gives you leverage. You can ask the seller to install a radon mitigation system or adjust the purchase price accordingly. This is where a radon test during home inspection becomes a powerful tool in a real estate transaction.

Why St. Louis Real Estate Needs Radon Testing

St. Louis real estate often features older homes with basements, crawl spaces, and slab-on-grade foundations. These construction types can allow radon entry points through cracks in the foundation, sump pumps, or utility penetrations. I have tested homes in Kirkwood, Webster Groves, and the city itself that showed radon levels well above the EPA action level. Sellers are not always aware of the problem because they have not tested. In Missouri, radon disclosure is not mandatory on a seller disclosure form, though some buyers include a radon contingency in their offer. Without a homebuyer radon test, you might inherit a problem that costs thousands to fix. A continuous radon monitor gives you results in 48 hours or less, which fits neatly into the typical home inspection period.

The Difference Between Short-Term and Long-Term Tests

When you schedule a [radon test during home inspection](#), you usually have two choices: a short-term radon test or a long-term radon test. Short-term tests last from two to seven days

and give you a snapshot of current conditions. Long-term tests run for 90 days or more and show the average level over a season. For a home purchase, the short-term test is the standard because you need answers quickly. But it comes with a caveat. Short-term results can be affected by weather, closed-house conditions, and even the time of year. That is why many professionals, including Air Sense Environmental, use a continuous radon monitor instead of a passive radon device. The continuous monitor takes readings every hour, so even if conditions fluctuate, you get a reliable average. Passive devices, like charcoal canisters, are cheaper but less precise and easier to tamper with.

What Happens During the Test

If you are a homebuyer, you should know what to expect when the inspector arrives. The radon test during home inspection involves placing a monitor in the lowest livable area of the home, typically the basement. The inspector will set up the continuous radon monitor and instruct the occupants to maintain closed-house conditions. That means keeping windows closed, avoiding excessive exhaust fan use, and not moving the device. The test runs for at least 48 hours. During that time, the monitor logs data without interruption. This method meets the National Radon Program standards for accuracy. Once the test is complete, the inspector downloads the results and provides a written report. If the radon levels are high, you have immediate information to work with.

Interpreting Results and Next Steps

A result below 4 pCi/L is generally considered acceptable, but many experts recommend mitigation if levels are between 2 and 4 pCi/L, especially if you plan to finish the basement or spend a lot of time there. If the test shows elevated radon levels, the next step is to consult a radon mitigation contractor. They can design an active soil depressurization system, which pulls radon from beneath the house and vents it safely above the roof. This is the most common and effective radon mitigation system. The cost typically ranges from \$800 to \$2,500, depending on the home's foundation and the contractor's approach. In a real estate transaction, you can negotiate for the seller to pay for mitigation or offer a credit at closing. Having the test results in hand makes that conversation factual instead of speculative.

Adding Radon to Your Home Inspection Checklist

When I put together a home inspection checklist for buyers, I always suggest including a radon test. It is a small expense compared to the peace of mind it provides. Here are a few practical points to keep in mind:

- Schedule the radon test at the same time as the general home inspection to save time and coordinate closed-house conditions.

- Ask the inspector to use a continuous radon monitor for the most accurate short-term results.
- Check if the seller has any previous radon measurement records. In some cases, a long-term radon test from the current owner might already be available.
- If the home has a basement radon problem, factor the cost of mitigation into your offer.
- Remember that radon levels can vary seasonally. A summer test might show lower levels than a winter test because of how the house ventilates.

The Role of Professional Testing

You can buy a do-it-yourself radon test kit at a hardware store, but for a real estate transaction, a professional test carries more weight. A certified tester follows strict protocols, ensures the device is placed correctly, and provides a report that meets the standards of the National Radon Program. This documentation can be used in negotiations or attached to the seller disclosure form if the seller decides to fix the issue before listing. Companies like Air Sense Environmental specialize in this kind of testing for St. Louis buyers and sellers. They use continuous monitors that leave no room for doubt. When I work with clients, I always recommend a professional radon measurement over a kit because the accuracy protects everyone involved.

Common Myths About Radon in St. Louis

I hear a lot of misconceptions about radon from both buyers and sellers. One myth is that radon only affects older homes. In reality, new construction can have high radon levels too, especially if the builder did not install a radon mitigation system during construction. Another myth is that opening windows solves the problem. While ventilation helps temporarily, it is not a permanent fix. The radon gas keeps entering the home from the soil, and once you close the windows again, levels can rebound. A continuous radon monitor will show exactly how the levels fluctuate with ventilation. The only reliable way to reduce basement radon long term is active soil depressurization or another EPA-approved method.

How a Radon Test Affects Your Home Purchase

For buyers, the radon test during home inspection is a negotiation tool. If the test comes back high, you have three main options: ask the seller to install a radon mitigation system before closing, negotiate a credit to cover the cost yourself, or walk away from the deal if the seller refuses and the problem is severe. I have seen all three scenarios play out. In one case, a buyer in Creve Coeur used a test result of 6.7 pCi/L to get a \$1,500 credit from the seller. The buyer hired a radon mitigation contractor after closing and brought the level down to 1.2 pCi/L. That

is a win for health and for the home's resale value. Sellers also benefit from testing before listing. If you know the radon level is low, you can put that in your disclosures and avoid surprises later. If it is high, you can fix it proactively and market the home as radon-safe.

Final Thoughts on Radon Testing in Home Inspections

Radon testing is not a luxury; it is a necessary part of a thorough home inspection in St. Louis. The geology of the region, with its limestone and shale deposits, creates conditions where radon can accumulate in homes. Skipping the test might save you a couple of hundred dollars upfront, but it could cost you much more in health expenses and mitigation later. By including a radon test during home inspection, you are taking a simple step that protects your family and your investment. Whether you are a first-time buyer or a seasoned investor, make sure the test uses a continuous radon monitor and is performed by someone who understands the local conditions. That way, you get reliable data you can act on. And if the results show elevated levels, do not panic. Radon is a solvable problem with proven methods like active soil depressurization. The key is to test early and test accurately.