

Why a Radon Real Estate Test Matters for Buyers and Sellers in Metro East

When you are buying or selling a home in the Metro East area, the list of inspections can feel endless. General home inspection, termite check, sewer scope, maybe a well water test. Among all those, the radon real estate test is one that often gets overlooked until the last minute. I have seen too many transactions delayed because someone assumed radon testing was optional or could be skipped. The truth is, radon gas is a natural hazard that does not care about your closing date. It collects in basements and crawl spaces, and the only way to know if it is present is to test for it.

Radon is a radioactive gas that comes from the natural breakdown of uranium in soil and rock. It moves up through the ground and into homes through cracks in slabs, gaps around pipes, and sump openings. The EPA considers radon the second leading cause of lung cancer after smoking. That might sound dramatic, but it is a real health risk. In the Metro East counties near Belleville, Edwardsville, O'Fallon, and Collinsville, the geology includes glacial till and limestone deposits that can produce elevated radon levels. That is why a radon real estate test is not just a checkbox for the file. It gives a buyer confidence and a seller a clear path forward.

Short-Term vs. Long-Term Testing

There are two main ways to test a home for radon: short-term and long-term. A short-term radon test usually runs from two to seven days. The most common device for this is a small container of activated carbon that absorbs radon decay products. You place it in the lowest livable area of the house, leave it closed up for the test period, and then mail it to a lab. The result gives you a snapshot of radon levels during that specific window. That is the kind of test most often used during a real estate transaction because the timeline is tight.

Long-term radon tests use an alpha track detector or a similar device that stays in place for three months to a year. They give a more accurate picture of annual average exposure because radon levels fluctuate with weather, barometric pressure, and seasonal changes. For a buyer who plans to live in the house for years, a long-term test can be useful after closing. But during the contract period, the short-term test is the standard.

I always tell clients that a short-term test is better than no test at all. The EPA recommends fixing a home if the radon level is 4 picocuries per liter or higher. That number is an action guideline, not a safety threshold. There is no safe level of radon, but 4 pCi/L is the point where mitigation is strongly advised. Some homes in the Metro East area test well above that. I have seen readings of 10 or even 20 pCi/L in older houses with dirt crawl spaces. Those homes need a radon mitigation system.

What Happens When Radon Levels Are High?

If the [radon real estate test](#) comes back above 4 pCi/L, the buyer and seller have to decide what to do. In many cases, the seller agrees to install a mitigation system as part of the sale. The most common approach is sub-slab depressurization, also called active soil depressurization. That involves running a pipe from under the concrete slab up through the roof, with a radon fan attached to create negative pressure. The fan pulls radon gas from beneath the house and vents it safely outside before it can enter the living space.

A good mitigation system includes a manometer, which is a simple U-tube gauge that shows whether the fan is running and pulling enough suction. That little device is your friend. It tells you at a glance if the system is working. If the manometer reads zero, the fan might be off or the pipe could be blocked. Regular checks keep the system reliable.

Installation is not a DIY project. Proper placement of the suction point and sealing of the slab require experience. Companies like Air Sense Environmental, which serves Belleville, Edwardsville, O'Fallon, and Collinsville, have the training to design a system that works for the specific foundation type. They also install RadonAway fans, which are a trusted brand in the industry. A well-installed system can reduce radon levels from double digits down to well below 2 pCi/L.

Continuous Monitors and the Home Inspection

Some home inspectors now use a continuous radon monitor for short-term tests. These are electronic devices that measure radon every hour and record the readings. They are more expensive than the activated carbon test kits, but they offer some advantages. They can show if there was a period of high humidity or if the test conditions were compromised. They also give results on site, so the buyer does not have to wait for a lab report. I have found continuous monitors useful in homes where there is concern about tampering or where the test needs to be done quickly.

That said, the activated carbon method is still the most common and perfectly reliable when done correctly. The key is to follow the test instructions exactly. The house must be kept closed for at least 12 hours before the test starts and during the entire test period. That means no opening windows, no running whole-house fans, and no operating the clothes dryer or bathroom exhaust fans more than necessary. If the conditions are wrong, the test results are meaningless. A radon real estate test is only as good as the person setting it up.

Who Pays and Who Chooses the Tester?

In a real estate transaction, the cost of the radon test is usually negotiable. Sometimes the buyer pays, sometimes the seller offers to cover it as a sign of good faith. The important part is

that the tester should be independent and certified. Using the same company that might later install the mitigation system creates a conflict of interest. The tester should have no financial stake in the outcome. That is why I recommend hiring a separate testing firm, or at least confirming that the tester is not the same entity that will quote the mitigation work.

Air Sense Environmental focuses on testing and mitigation, but they keep the two roles separate. When they do a test, they report the results honestly and let the homeowner decide what to do. That kind of transparency matters, especially when a real estate deal is on the line.

After the Test: Next Steps for Buyers

If you are buying a home in Edwardsville or O'Fallon, and the test shows elevated radon, do not panic. Mitigation is straightforward and usually costs between \$800 and \$1,500 for a typical home. The system will add a small ongoing cost for electricity to run the fan, but it is minimal. And once the system is installed, you can retest to confirm the levels dropped. Many homeowners also choose to install a long-term radon test after they move in, just for peace of mind.

If the test comes back low, that is great news. But keep in mind that radon levels can change over time. Soil settles, new cracks form, and foundation shifts happen. It is smart to retest every few years, especially if you finish a basement or do major renovation work. A single radon real estate test is a snapshot, not a lifetime guarantee.

A Few Practical Details

- Place the test device in the lowest livable area. That is usually the basement if it is finished, or the first floor if there is no basement. Do not put it in a crawl space or utility room that is not used as living space.
- Keep the house closed as much as possible during the test. The EPA recommends sealing the test area from the outside and running the heating and cooling system normally.
- Do not move the device once the test starts. Leave it in the same spot for the full duration.

Those steps sound simple, but I have seen them ignored in a hurry. The buyer wants to show the house to friends, the seller wants to air it out before an open house. Every time the windows open, the test resets. That is wasted time and money.

Mitigation Systems That Last

When a radon mitigation system is installed, it should be built to last. Sub-slab depressurization with a quality fan like those from RadonAway will run for years with little maintenance. The fan should be accessible for replacement, and the pipe should be routed so that condensation drains back to the soil, not into the fan. A good installer will also seal the sump cover and any visible cracks in the slab. In homes with a crawl space, a vapor barrier and a sealed sump can work together to reduce radon entry.

I have seen homes in Collinsville with old block wall foundations that required a different approach. Sometimes the mitigation involves sealing the walls and installing a vent pipe through the crawl space floor. Every house is a little different, which is why an experienced installer matters. Air Sense Environmental has dealt with all the foundation types common to the Metro East area, from slab-on-grade to full basements to raised foundations.

Final Thoughts on the Radon Real Estate Test

A radon real estate test is a small investment that protects a much larger one. Whether you are buying your first home in Belleville or selling a property in O'Fallon, testing gives you facts instead of guesses. If the levels are low, you move forward with confidence. If they are high, you have a clear path to fix the problem. The test itself takes only a few days, and the results can save you from years of worry. Talk to your real estate agent about including radon testing in the inspection period. It is one of those things you do once and forget about, but skipping it is a risk you do not want to take.