

# Understanding the Radon Real Estate Test: What Home Buyers and Sellers in Metro East Need to Know

When you are in the middle of a real estate transaction, the last thing you want is a surprise that delays closing or kills the deal. In the Metro East area of Illinois, one of those surprises can be radon gas. I have spent years testing and mitigating radon in homes across Belleville, Edwardsville, O'Fallon, and Collinsville, and I can tell you that the radon real estate test is one of the most straightforward yet most misunderstood parts of the home inspection process. It is not a pass-or-fail exam for the house. It is a measurement of risk, and understanding what that measurement means can save you thousands of dollars and a lot of stress.

## Why Radon Matters in a Home Sale

Radon is a naturally occurring radioactive gas that comes from the decay of uranium in soil. It moves up through the ground and into homes through cracks in foundations, gaps around pipes, and other openings. The EPA sets an action level of 4.0 picocuries per liter of air. Above that level, they recommend installing a radon mitigation system. Below it, many people think the problem is solved. That is not always true. Radon levels fluctuate by season, by weather, and even by the time of day. A single short-term radon test, the kind most often used in a real estate transaction, gives you a snapshot, not the full story.

That is why the [radon real estate test](#) has become standard practice in many parts of the country, including here in the Metro East. Buyers want to know what they are walking into. Sellers want to prove the house is safe. And agents want a smooth process. The test itself is simple, but the interpretation is where experience matters.

## Short-Term vs. Long-Term Testing

The most common test used during a home sale is the short-term radon test. It lasts between two and seven days. The device, often an activated carbon canister or a continuous radon monitor, is placed in the lowest livable level of the home. The windows stay closed, and the house is kept in what is called closed-house conditions. That means no excessive ventilation, no running attic fans, and no opening windows for long periods. If the real estate agent or the homeowner breaks those conditions, the test results can be invalid. I have seen deals fall apart because someone opened a window to let in fresh air, and the test came back low, only for a retest to come back high. It is that sensitive.

A long-term radon test, which uses an alpha track detector and stays in place for ninety days or more, gives a much better picture of the average radon level in a home. But in a real estate transaction, time is short. You cannot wait three months for an answer. So the industry relies on the short-term test. That is fine, as long as everyone understands its limits. A good radon real estate test includes a follow-up if the first result is near the action level. If the result is above 4.0 pCi/L, the buyer and seller need to talk about mitigation.

## **What Happens When Radon Is High**

If the test comes back above the EPA action level, the next step is usually a radon mitigation system. The most common and effective system for homes in this area is sub-slab depressurization, also called active soil depressurization. It works by creating a vacuum under the concrete slab. A radon fan, often manufactured by a company like RadonAway, pulls the gas from beneath the house and vents it safely above the roofline. The system includes a manometer, a small gauge that shows whether the fan is working properly. If the manometer reading changes, you know something is wrong with the system. That is a simple check any homeowner can do.

I have installed hundreds of these systems in Belleville and the surrounding towns. The cost is usually between eight hundred and fifteen hundred dollars, depending on the complexity of the house. That sounds like a lot, but it is a fraction of what a delayed closing or a lost sale can cost. And once the system is in place, the radon levels almost always drop well below the action level. The key is to test again after the system is installed to confirm it is working. That retest is part of a complete radon real estate test process.

## **The Role of the Home Inspection**

A standard home inspection does not always include radon testing. Some inspectors offer it as an add-on, but many do not have the certification or the equipment. That is where a specialized company like Air Sense Environmental comes in. We focus solely on radon testing and mitigation. That means we use the right equipment, we follow the EPA protocols, and we know the local geology. The soil in the Metro East area is particularly prone to radon because of the glacial till and the underlying limestone. I have tested homes in Edwardsville that were built on a hillside and had radon levels over 20 pCi/L. After a proper mitigation, they tested below 1.0. That is a dramatic change.

When you are involved in a real estate transaction, do not assume the home is fine because it passed a test once. Radon levels can change when the soil shifts, when the foundation settles, or when the HVAC system is modified. A good radon real estate test gives you a baseline, but ongoing monitoring is the best practice. Some homeowners install a continuous radon monitor

that plugs into a wall and gives a running average. Those are useful for peace of mind, but they are not a substitute for a certified test during the sale.

## **Common Misconceptions**

One of the biggest myths I hear is that radon is only a problem in basements. That is not true. Radon can enter a home at any level, including through a crawl space or a slab-on-grade foundation. If the house has a sump pump or a floor drain, that is a common entry point. Another myth is that radon testing is only for older homes. New homes can have just as much radon, sometimes more, because they are built tighter. A tight house traps the gas inside. That is why the EPA recommends testing every home, regardless of age or construction type.

I also hear people say that if the test comes back low, they never need to test again. That is not a good strategy. Radon levels can change over time. If you remodel your basement, add a new foundation crack, or change your heating system, you should test again. A long-term radon test every two years is a good habit. But during a sale, the short-term test is the standard.

## **Practical Advice for Buyers and Sellers**

If you are buying a home in O'Fallon or Collinsville, make the radon test a contingency in your offer. Do not let the seller use an old test result. Insist on a new test performed by a certified professional. If the test comes back above 4.0, you have leverage. You can ask for a mitigation system to be installed before closing, or you can ask for a credit at closing so you can install it yourself. Either way, get it in writing.

If you are selling, consider testing before you list the house. That way, you know the number ahead of time. If it is low, you can show the buyer the report and remove a potential objection. If it is high, you can install the mitigation system before you put the house on the market. That is often cheaper and less stressful than negotiating during the contract period. A proactive radon real estate test can make your home more attractive to buyers.

I have seen both sides of this process many times. The buyers who walk away from a house because of a high radon test are rare. Most people are reasonable. They just want to know that the problem has been addressed. A properly installed radon mitigation system is a permanent solution. It adds value to the home and protects the family living there.

## **The Bottom Line**

Radon is a serious health risk, but it is a manageable one. The radon real estate test is your first step toward understanding that risk. Whether you are buying or selling in the Metro East area, work with someone who knows the local conditions, the testing protocols, and the

mitigation options. That knowledge can turn a potential deal-breaker into a routine part of the transaction.