

Why a Radon Retest Matters After Mitigation in St. Louis

Understanding Radon in St. Louis Homes

Living in St. Louis means dealing with a lot of things, humidity, potholes, and that occasional basement dampness. But one thing many homeowners don't think about until they sell is radon. It's a colorless, odorless gas that seeps up from the soil. The EPA action level sits at 4.0 picocuries per liter. Anything above that, and you're supposed to fix it. The fix usually involves a radon mitigation system. But here's the part that trips people up: after you install that system, you need a radon retest to make sure it actually works.

I've been in the home inspection and indoor air quality world for over a decade. I've seen homeowners spend thousands on mitigation, only to skip the follow-up test. They assume the system is running and that's enough. It's not. A radon retest tells you if the radon fan is pulling enough soil suction, if the sealant around the sump pit is holding, and if the manometer reading matches reality. Without it, you're guessing.

The Short-Term Test vs. The Long-Term Test

Most people start with a short-term radon test, usually a charcoal canister test that sits in the lowest livable level for two to seven days. That gives you a snapshot. If the snapshot shows levels above the EPA action level, you call a mitigator. Air Sense Environmental, for example, does a lot of this work around St. Louis. They install sub-slab depressurization systems, which use a radon fan to pull gas from under the slab and vent it above the roof. The system looks simple, but the installation requires careful sealing of cracks and joints with a quality sealant, and sometimes adding an air exchanger to balance pressure.

Once the system is in, you wait a day or two, then run another short-term radon test. That second test is your [radon retest](#). It confirms the system dropped levels below the action level. But here's a nuance: a short-term test can be thrown off by weather, barometric pressure, and even how much you run the furnace. A single good result is encouraging, but not definitive. That's why many experts, including the National Radon Program at Iowa State University, recommend following up with a long-term radon test after the initial retest. A long-term test runs for 90 days to a year and gives you a true average. If that average stays below 4.0, you're golden.

What Happens If the Retest Shows High Levels?

Sometimes the radon retest comes back above the action level. It happens more often than you'd think. The system might have an issue, a radon fan that's underpowered, a crack in the suction line, or a seal that didn't hold. I've seen cases where the manometer showed a steady negative pressure, but the actual soil suction was weak because the system wasn't pulling from the right spot under the slab. In those cases, the mitigator needs to come back and troubleshoot.

One common fix is to adjust the sub-slab depressurization point or add a second suction pit. Another is to seal the sump pump cover more thoroughly or address a hidden crawlspace. Air Sense Environmental typically includes a follow-up visit in their mitigation price, but not every company does. That's why you should ask about retesting upfront. Some contractors will even loan you a continuous radon monitor for a few days so you can watch the readings trend in real time. That kind of data is gold, especially if you're trying to dial in a system that's borderline.

Why Radalink and Other Digital Tools Help

Traditional charcoal canister tests are cheap and reliable, but they only give you one number. If you want to see how the system responds to a big storm or a sudden cold snap, you need something more. That's where Radalink and similar services come in. They offer continuous radon monitors that plug into your home Wi-Fi and send readings to your phone. You can watch the levels spike when the furnace kicks on and drop when the radon fan runs steady. A few days of that data can tell you more than a dozen canister tests.

I've started recommending Radalink to clients who are hyper-concerned about their levels. It's not a substitute for a certified lab test, but it's a great tool for verifying that your radon mitigation system is holding up day to day. And if you're doing a radon retest for a real estate transaction, you still need a professional test from a certified lab. But for your own peace of mind, a continuous monitor is worth the investment.

The Role of Builder's Risk and Home Inspection

If you're building a new home in St. Louis, you have a chance to do it right from the start. Radon-resistant new construction techniques include a layer of gravel under the slab, a vapor barrier, and a rough-in for a future soil suction pipe. Even if the builder doesn't install the radon fan during construction, having the stub in place makes future mitigation much cheaper. Builder's Risk insurance policies sometimes require radon testing before they'll cover a claim related to indoor air quality, so it's worth checking your policy.

During a home inspection, a good inspector will note whether the home has a radon mitigation system and whether the manometer is showing negative pressure. If the system is running but there's no recent test result, the inspector will likely recommend a radon retest before closing.

That's standard practice. I've seen deals fall through because the seller assumed the old system was still working, only to find out the radon fan had died years ago. A simple retest would have caught it early.

How Often Should You Retest?

The EPA says to test every two years, and after any major renovation or change to the home's foundation. If you install a new radon mitigation system, retest immediately. After that, set a reminder to do a long-term radon test every two years. If you have a continuous radon monitor, you can check the trend anytime. But even with a monitor, a formal charcoal canister test every few years is smart, it gives you a third-party verification that your system is still performing.

I once worked with a family in south St. Louis County who had a radon mitigation system installed in 2015. They tested once after installation, it came back at 2.1 pCi/L, and they forgot about it. Five years later, they listed the house. The buyer's home inspection included a radon test, and it came back at 5.8. The system had a slow leak in the suction line, probably from a settling slab. The seller had to pay for a repair and a radon retest. That retest cost them about \$150 for the test kit and lab fees, plus the repair. But it was a lot cheaper than losing the sale or paying for a whole new system.

Final Thoughts on Radon Retesting

Radon is a real issue in St. Louis. The geology of the area, with its limestone and clay soils, creates conditions where radon can accumulate. A radon mitigation system is the best way to keep levels low, but it's not a set-it-and-forget-it solution. Fans wear out, seals crack, and soil conditions change. The only way to know your system is still working is to test it. A radon retest, whether done with a charcoal canister or a continuous monitor, gives you that answer. It's a small investment for the health of your family and the value of your home.