

Understanding Radon in York Rowhomes: A Practical Guide for Homeowners

Why Rowhomes in York County Face Unique Radon Challenges

Living in a York rowhome comes with a lot of character. You get solid brick walls, shared rooflines, and a close-knit street feel that newer developments just can't match. But when it comes to radon gas, those same historic construction details can create hidden problems. Radon doesn't care about neighborhood charm. It seeps up from the ground through cracks in the foundation, gaps around pipes, and hollow-block walls. And in a row of attached homes, one home's issue can be a sign of what's happening next door.

I've spent years working on radon mitigation across Pennsylvania, and I can tell you that York rowhomes are a special breed. The basements are often older, with poured concrete floors that have settled and cracked over decades. The shared walls mean that a radon system installation in one unit has to account for airflow patterns that don't exist in a standalone house. That's why understanding radon in York rowhomes isn't just a matter of testing one property. It's about knowing the neighborhood geology, the age of the construction, and the specific pathways radon uses to get inside.



How Radon Gets Into Your Rowhome

Radon is a radioactive gas that comes from the natural decay of uranium in soil and rock. York County sits on a mix of limestone, shale, and granite formations, some of which have higher uranium content. The U.S. EPA has mapped much of central Pennsylvania as Zone 1, meaning predicted average indoor radon levels could be above 4 picocuries per liter (pCi/L). That's the action level where the EPA recommends you take steps to reduce exposure.

In a rowhome, radon enters through the lowest level. That might be a full basement, a crawl space, or a slab-on-grade foundation. Common entry points include floor cracks, wall-floor joints, gaps around utility penetrations, and the porous surface of cinder block walls. Because rowhomes are attached, the soil gas pressure can vary from unit to unit. I've seen cases where one home tests at 2 pCi/L and the attached neighbor tests at 15 pCi/L. The difference often comes down to foundation condition and the presence of a proper sub-slab depressurization system.

The Importance of Radon Testing First

Before you even think about radon mitigation, you need accurate data. Radon testing is cheap and easy to do yourself with a radon test kit from a hardware store or online retailer. Short-term tests take two to seven days and give you a snapshot. Long-term tests are better for understanding your average exposure over a year. For a rowhome, I recommend running a short-term test in the lowest livable area during the heating season. Winter creates a stronger stack effect, pulling more soil gas inside.

If your initial test comes back above 4 pCi/L, don't panic, but do schedule a follow-up test. Some homeowners make the mistake of testing once and either ignoring a high result or overreacting to a borderline one. A follow-up test confirms whether the first reading was a fluke or a real pattern. If both tests show elevated levels, it's time to call a qualified radon contractor.



The phrase "[radon in York rowhomes](#)" comes up a lot in my conversations with local homeowners. They've heard stories from neighbors or read about it online, but they're not sure what to do next. The first step is always testing. You can't fix what you haven't measured.

Radon Mitigation Options for Attached Homes

Once you know your radon level, the most common fix is sub-slab depressurization. That involves drilling a small hole through the basement floor, pulling soil gas from beneath the slab, and venting it above the roofline with a radon fan. In a rowhome, the fan is usually installed in the attic or on an exterior wall, with the discharge pipe extending at least 10 feet above ground level and above any window or door opening.

Here are some considerations specific to rowhomes:

- The shared foundation may require coordination with neighbors. If your system pulls air from under the slab, it could affect soil gas pressure next door.
- Roof access can be tricky. Rowhomes often have flat or low-pitch roofs, so the vent pipe needs proper flashing and sealing to prevent leaks.
- Existing plumbing and electrical chases can create hidden radon pathways. A good contractor will seal those with radon sealant or foam.
- If the rowhome has a crawl space instead of a basement, a membrane and sump system might be a better fit than a pipe through the dirt floor.

Radon system installation in a York rowhome usually takes one to two days. The contractor will install the fan, run the vent pipe, and seal any obvious entry points. After the system is running, you should wait at least 24 hours before retesting. The manometer on the pipe tells you the fan is pulling proper vacuum. If the liquid levels are even, the system isn't working.

Fan Replacement and Maintenance

Radon fans are designed to run continuously for years, but they do wear out. The average lifespan is five to ten years, depending on the model, how hard it works, and whether it's exposed to moisture or extreme temperatures. When a fan fails, your radon levels can climb back up quickly. That's why fan replacement is a common service call.

Signs your fan may need replacement include unusual noise, vibration, or a manometer reading that shows no pressure difference. Some newer fans have indicator lights that warn you when performance drops. If your system is more than seven years old and you haven't had it checked, consider scheduling a service visit. A professional can test the fan's static pressure and airflow, and replace it if needed.

I've worked on rowhomes where the original installer used undersized pipe or placed the fan in a hot attic without insulation. Those systems fail faster. When you replace the fan, it's a good time to review the whole installation. Maybe the pipe needs better support, or the roof boot needs resealing. A thorough check keeps your radon levels low for the long haul.



Follow-Up Testing After Mitigation

After the new system is installed, you need to confirm it's working. Follow-up testing should happen within 30 days of completion, using the same type of test you used initially. The goal is to reduce the radon level below 4 pCi/L, ideally much lower. Most properly designed systems bring levels down to 1 or 2 pCi/L.

Don't skip this step. I've seen systems that looked perfect on paper but failed to lower radon because the fan was undersized or the pipe had a leak. Follow-up testing catches those problems while they're still easy to fix. It also gives you peace of mind and a baseline for future reference.

Some homeowners choose to do annual follow-up testing on their own. The EPA recommends retesting every two years, or after any major renovation that affects the foundation. If you finish a basement or add a sump pump, you could create new radon entry points. A simple test kit tells you if your mitigation system is still doing its job.

Radon-Resistant Construction in Newer Rowhomes

If you're buying a newly built York rowhome, you might assume radon isn't an issue. That's not always true. While many new homes include radon-resistant construction features, the effectiveness depends on proper installation. A gas-permeable layer under the slab, a vapor barrier, and a sealed sump are all good measures, but they only work if the contractor didn't leave gaps.

I recommend that buyers of new rowhomes still test for radon during the first year of occupancy. The construction materials may have dried and shifted, creating new cracks. And if the home was built on a site with high soil radon potential, even the best passive system may need an active fan to get levels down. A passive stack vent without a fan relies on natural pressure differences, which aren't always strong enough to pull gas out.

York County has done a good job educating builders about radon, but it's not required by code in all municipalities. If you're planning a new construction or a major addition, talk to your builder about installing a passive system that can be activated later. It's much cheaper to put in a vent pipe during construction than to retrofit one after the concrete is poured.

Health Risks and Peace of Mind

Radon is the second leading cause of lung cancer in the United States, according to the EPA. The risk comes from long-term exposure, not from a few weeks of high readings. But because radon is invisible and odorless, it's easy to ignore until you have a test result that scares you.



For me, the biggest reward of this work is seeing a family's anxiety drop after a successful mitigation. When I install a system and the follow-up test comes back at 1.2 pCi/L, the homeowner can finally breathe easier. Not just because the radon is gone, but because they took control of a problem that felt invisible and overwhelming.

If you live in a York rowhome and haven't tested for radon, start there. The test kit is cheap, the process is simple, and the information is invaluable. If your levels are elevated, a qualified radon contractor can design a system that fits your home's unique layout. And if you already have a system, check that manometer once a month and schedule a fan replacement before it fails.

Rowhomes are wonderful places to live. They're solid, historic, and part of what makes York County special. With a little attention to radon in York rowhomes, you can keep them safe too.