

When to Call for Radon System Repair: Signs and Solutions for Homeowners

Radon is a silent hazard. It moves into your home through the soil, through cracks in the foundation, and through gaps around pipes. You cannot see it, smell it, or taste it. The only way to know it is there is to test for it. But once you have a radon mitigation system in place, the next question is how to keep it working. A system that fails is worse than no system at all, because it gives a false sense of safety. That is where understanding radon system repair becomes essential for any homeowner.

How a Radon Mitigation System Works

Most homes in York County, PA, and across the region rely on active soil depressurization. This method uses a radon fan connected to a vent pipe that runs through the foundation and into the ground. The fan draws soil gas from beneath the slab and vents it above the roofline, where it disperses harmlessly. A sub-slab depressurization system is the most common type. It creates a low-pressure zone under the concrete floor, which prevents radon from being pulled into the living space.



The system depends on a tight loop: the fan, the PVC piping, the sump pit or collection point, and the seals that keep the pathway airtight. If any part of that loop breaks, the pressure drops and radon can re-enter the home. That is when [radon system repair](#) becomes a priority, not an option.

Signs Your System Needs Attention

Most homeowners do not think about their radon system until something goes wrong. But there are warning signs that can help you catch a problem early. The most obvious is a change in the manometer reading. A manometer, often a U-tube manometer, is a simple device that shows whether the fan is creating enough suction. If the fluid in the tube is level on both sides, the system has lost pressure. That means the fan may have failed, the piping may be blocked, or there may be a leak in the sealant around the sump pit or the vent pipe.

Another clue is an increase in radon levels shown by a radon test kit or a continuous radon monitor. If you run a short-term test and the result is above the EPA action level of 4 pCi/L, and you have an existing mitigation system, something is wrong. A long-term test can confirm

whether the issue is persistent or just a seasonal spike. But if your continuous radon monitor shows rising levels over several days, it is time to inspect the system.

Listen to the radon fan. Most fans run quietly, but if you hear a hum, a rattle, or a change in pitch, the motor may be wearing out. Fans are built to run continuously for years, but they do fail. A failed fan means no suction, which means no protection.



Check the PVC piping for cracks or disconnections. Pipes that run through basements or crawl spaces can be bumped, shifted, or damaged by moisture. Even a small gap in the piping can

break the vacuum and let soil gas escape into the home.

Common Causes of System Failure

One of the most frequent issues is a loss of seal. Over time, the sealant around the sump pit or along the foundation can dry out, crack, or pull away from the concrete. This is especially common in older homes where the concrete has settled or where water intrusion has weakened the seal. Re-sealing cracks and joints is often the simplest fix, but it requires careful inspection to find every breach.

Another common problem is a fan that has reached the end of its service life. Radon fans are rated for continuous duty, but they are not immune to wear. Dust, humidity, and power surges can shorten their lifespan. When a fan fails, the entire system stops working. Replacing the fan is a straightforward part of radon system repair, but it must be done with the correct model that matches the system's pressure and flow requirements.

Blocked vent pipes can also cause trouble. Debris, insect nests, or even small animals can get into the piping, especially if the termination point is not properly screened. A blockage reduces airflow, which lowers the vacuum and allows radon to accumulate under the slab.

In some cases, the original installation was not done correctly. A passive radon system, which relies on natural convection rather than a fan, may not be sufficient for the house's radon levels. Converting a passive system to active soil depressurization requires adding a fan and possibly re-routing the vent pipe. That is a bigger job than a simple repair, but it is sometimes necessary.

When to DIY and When to Call a Professional

Some aspects of radon system repair are within the reach of a handy homeowner. Checking the manometer, listening for odd noises, and looking for visible damage to pipes or seals are all things you can do yourself. If you find a loose connection or a crack in the piping that you can reach, you can apply sealant or tighten a coupling. But there are limits.



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Working with radon mitigation equipment involves electrical connections, roof work, and sometimes digging around foundations. A mistake can leave the system worse than before. If you are unsure about the source of a pressure loss, or if the fan needs replacement, it is smarter to call someone who does this work every day. A professional can test the system with a manometer, check the integrity of the sub-slab depressurization loop, and confirm that the radon fan is operating at the correct speed and pressure.

Dan Jenkins, a local radon mitigation expert in York County, PA, emphasizes that many failed systems are simply underperforming, not broken. A system that was installed ten years ago may still work, but the home's foundation may have shifted, or new cracks may have formed. A

simple re-sealing and fan adjustment can bring the system back to full performance without a full replacement.

Testing After Repair

Once a repair is done, you need to verify that it worked. The best way is to run a radon test. A short-term test, left in place for two to seven days, will give you a quick reading. But for real peace of mind, follow it with a long-term test that runs for three months or more. Radon levels fluctuate with weather, soil moisture, and how often you run your heating or cooling system. A long-term test averages out those swings and gives a more accurate picture.

If you use a continuous radon monitor, you can watch the levels in real time. That is especially useful if you suspect the system was only partially fixed. A continuous monitor will show you whether the levels stabilize after the repair or whether they continue to climb.

Preventive Maintenance

The best way to avoid emergency radon system repair is to check the system regularly. Look at the manometer every month. If it shows a loss of pressure, investigate immediately. Keep the area around the sump pit and the vent pipe clear of clutter and moisture. Make sure the termination point on the roof is not blocked by leaves, snow, or animal nests.

If your home was built with radon-resistant construction, you may have a passive radon system already in place. Those systems include a gas-permeable layer under the slab, a vent pipe, and a vapor barrier. But without a fan, they do not always reduce radon to safe levels. If you have a passive system and your test results are borderline, adding a fan is a proactive step that avoids the need for more extensive repair later.



Some homeowners choose to install an active system even when the passive system is working, just for the extra margin of safety. That is a personal decision, but it is worth

discussing with a professional who can assess your home's specific soil gas conditions.

The Bottom Line

Radon mitigation is not a set-it-and-forget-it solution. Systems age, parts wear out, and homes settle. Keeping an eye on the manometer, listening to the fan, and testing regularly will help you catch problems before they become serious. When something does go wrong, prompt radon system repair is the only way to restore your protection. Whether you handle the small fixes yourself or call in a specialist, the goal is the same: keep the radon out and keep your family safe.

If you live in an area like York County, PA, where radon is a known concern, staying on top of your system's condition is part of responsible homeownership. A few minutes of inspection each season can save you from a costly emergency and, more importantly, from living with elevated radon levels without knowing it.