

What You Should Expect to Pay for a Radon Fan Replacement Cost Guide

When the Fan Fails: Understanding Replacement Costs

If you own a home with a radon mitigation system in St. Louis, you probably do not think about the fan very often. It sits on the side of the house, connected to a radon vent pipe, quietly pulling air from beneath the slab. But after a few years, that fan can wear out. It might start making noise, or you notice the manometer reading has dropped to zero. That is when the question of radon fan replacement cost becomes immediate and personal.

I have seen homeowners put off replacing a failed fan because they are worried about the expense. That hesitation can undo years of protection. Once the fan stops running, radon levels can climb back up, sometimes above the EPA action level. So understanding what a new fan costs, and what drives those numbers, helps you make a smart decision without paying more than you have to.

What Is Actually Inside That Fan Unit?

A radon fan is not a standard bathroom exhaust fan. It is a specially designed in-line fan built to run continuously for years, moving corrosive soil gases without seizing up. Most systems use a sub-slab depressurization design. The fan is mounted on the exterior wall or in the attic, connected to a suction pit under the concrete floor. When it runs, it creates negative pressure that pulls radon-laden air from beneath the house and discharges it safely above the roofline.

Because the fan runs 24/7, it experiences constant wear. Bearings dry out, motors overheat, and seals degrade. The average lifespan of a radon fan is roughly five to ten years, depending on the radon fan brand, installation quality, and exposure to weather. When it fails, you need a replacement that matches the airflow and static pressure of the original system. That is not something you can guess at.

Breaking Down the Radon Fan Replacement Cost

The [radon fan replacement cost](#) typically falls into two main buckets: the fan itself and the labor to install it. On the equipment side, a standard residential radon fan runs between \$250 and \$600. Higher-end models with better energy efficiency or lower noise levels can push toward \$800. Some popular radon fan brands include Fantech, RadonAway, and Tjernlund. Each has its own line of fans designed for different pipe sizes and flow rates.

Fan installation labor adds another \$300 to \$600, depending on the complexity. If the old fan is on an exterior wall and the vent pipe is in good shape, a swap takes a couple of hours. If the

fan is in an attic or crawl space, or if the radon vent pipe needs repairs, labor goes up. Some jobs also require new wiring, a new weather cover, or replacement parts like gaskets and couplings. Those small radon fan replacement parts can add fifty to a hundred dollars to the total.

So a realistic range for a complete replacement, including the fan, labor, and incidental materials, is usually \$550 to \$1,200. In St. Louis, where basements are common and soil conditions vary, I have seen quotes from Air Sense Environmental fall right in that middle zone. They tend to be transparent about costs, which helps homeowners plan.

Warranty and Longevity Considerations

One factor that heavily influences radon fan replacement cost is the radon fan warranty. Most manufacturers offer a five-year warranty on the motor and components. A few premium models carry ten-year warranties. Paying a little more for a fan with a longer warranty can save you money in the long run, because you are less likely to face another replacement in a few years.

But warranty coverage is not a blank check. It usually covers the fan unit itself, not the labor for the replacement. So if a fan fails under warranty, you still pay for the technician to come out and swap it. That is why I recommend asking a radon mitigation contractor about the total replacement cost, including labor, when you are comparing options. Some contractors offer a labor warranty on top of the manufacturer warranty, which is worth considering.

Signs Your Fan Needs Replacing

You do not want to wait until your post-mitigation test shows high radon levels. By then, you have been exposed for weeks or months. Watch for these signs that the fan is failing:

- The manometer shows no pressure difference, or the fluid level has not moved in weeks.
- The fan makes a humming, grinding, or rattling sound that was not there before.
- You notice ice buildup on the radon vent pipe in winter, which can block airflow.
- The fan runs but the radon levels in the house creep upward on a radon testing device.
- The fan has been in place for over seven years and has never been serviced.

If you spot any of these, it is time to call a radon mitigation contractor for an evaluation. Ignoring the signs can turn a relatively simple fan replacement into a bigger job involving the suction pit or the entire system.

Labor and Local Factors in St. Louis

St. Louis sits on limestone and glacial till that can produce moderate to high radon levels. Many homes here were built with sump pumps or French drains that can interfere with sub-slab depressurization. That means the radon mitigation system may be more complex than a simple pipe through the slab. When the fan fails, the contractor might find that the original installation skimmed on the suction pit or used an undersized radon vent pipe. Fixing those issues adds to the fan replacement cost.

I have seen jobs where the old fan was mounted too low, allowing rain to enter the pipe and corrode the motor. In that case, the contractor has to relocate the fan higher on the wall and patch the old hole. That kind of work adds labor and materials. A good radon mitigation contractor will inspect the whole system before quoting a replacement, not just swap one fan for another.

Energy efficiency is another consideration. Older fans use more electricity and run louder. Newer models are quieter and draw less power. Over a few years, the energy savings can offset part of the replacement cost. If you are already paying for the labor, upgrading to a more efficient radon fan brand makes sense.

Can You Do It Yourself?

Some handy homeowners ask about replacing the fan themselves to save on labor. It is possible if the existing system is straightforward and the new fan matches the old one exactly. But there are risks. If the wiring is not done correctly, the fan can run backward or short out. If the vent pipe connection leaks, you lose suction and the system fails. And if you make a mistake, you might void the radon fan warranty or create a safety hazard.

Most radon mitigation contractors recommend professional installation for a reason. They have the tools to test the system afterward, confirm the manometer reading is correct, and perform a post-mitigation test if needed. That peace of mind is usually worth the labor cost, especially if you are not experienced with HVAC or electrical work.

Planning for the Future

If your fan is still running fine, it is still smart to set aside a budget for eventual replacement. The radon fan replacement cost is not something you want to scramble for when the fan dies on a Friday evening. Knowing the typical range and having a trusted contractor in mind makes the process smoother. Air Sense Environmental in St. Louis has a solid reputation for straightforward pricing and quality work, and they can give you a real quote based on your specific system.

Radon testing should be part of your regular home maintenance, even after the system is installed. Testing every two years, or after any major renovation, ensures the system is still working. If the test shows higher radon levels, the fan may be the culprit. Acting quickly on fan replacement cost keeps your family safe and your home value intact.

In the end, a radon fan is a small mechanical device that carries a big responsibility. Spending a few hundred dollars every five to ten years to keep it running is a small price compared to the health risks of prolonged radon exposure. Know the signs, know the costs, and do not let a failed fan go unnoticed.