

## Post mitigation testing

After your initial radon test and following the installation of your Radon Clear mitigation system, it is critical to test. This post-installation test confirms that radon levels have been reduced to non-hazardous levels.

Radon Clear will provide a test kit with each installation performed. The test kit can be implemented by any adult living in the home. Follow the kit instructions then simply drop the kit in the mail.

(Lab fee analysis costs have been prepaid by Radon Clear for your convenience, you will have to provide postage.)

We recommend you wait 3-5 days to conduct the post-installation radon test because radon (Rn222) has a half-life of 3.8 days, meaning the picocuries per liter (pCi/L) (the unit by which radon is measured) reduces by approximately half every four days.

Your home naturally vents radon and existing radon naturally decays, but if your home has a high radon level, you will want to give your house enough time for the radon to clear, hence the waiting time before testing. And your newly installed radon mitigation system is the only way to prevent new radon from entering your home.

What is my ideal test result?

The EPA recognizes the radon level 4.0 pCi/L as the official action level. Meaning, any building that has a level of 4.0 pCi/L or higher should be effectively "mitigated." Ideally, you want your radon level to be as close to zero pCi/L as possible in the living space, but in reality, the average radon level in the U.S. is about 1.3 pCi/L indoors and 0.4 pCi/L outdoors. Refer to your test kit results for recommendations on safe levels of radon or consult the EPA.

When and where do I conduct my test?

Ideally, you want to test under closed house conditions and on a day where there is little humidity. In the lowest finished living space. These standards assume you are in the living space for 12 to 16hrs a day, they want you to test where you're doing the most breathing. Some tighter houses have radon levels that can increase as you go higher in the house. Closed house conditions mean that you should make a conscious effort to keep doors and windows closed in the house during testing, but you can still enter in and out of your home. Closed conditions should be kept for up to 12 hours before the test starts and the 48hrs of the short term test. The test should be conducted at least 36 inches from the floor and 12 inches away from exterior walls and frequently used doors.

## Remember that the test should not be conducted with an unfinished basement or crawl space of the house, but rather in the room above or beside it.

Please keep in mind that you should avoid testing during heavy rainstorms. During a heavy rainstorm, your radon test can be skewed because of differences in atmospheric pressure and humidity.

We recommend that you retest your home every two years. Home radon tests can be purchased at your local hardware or home improvement stores, or you can hire a professional radon tester. How Your System Works

Your Radon Clear radon mitigation system is designed to run 24/7/365 to maintain a balance of negative pressure and suction beneath your home. As the system continues to run, you can rest assured that the radon levels in your home will continue to remain low.

Manometer – (vacuum gauge).

The pressure gauge on your radon mitigation pipe (located in line with the piping, between the fan and the lowest suction point) is designed to report activity within the radon mitigation system piping. The pressure gauge uses blue dye inside of a "U" shaped clear plastic tube. The tube operates using the same physics as a straw in your drink – when the fan is sucking or moving air, the pressure gauge should



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be higher on one side. If the fan ever stops running, the pressure gauge will "zero out" and be even on both sides.

\*IF YOUR PRESSURE GAUGE EVER READS ZERO OR BOTH SIDES ARE EVEN, THE FOLLOWING SHOULD BE CHECKED:

1. Check the on/off switch (or power plug for an interior attic system) for the radon mitigation system. Power supplies are almost never consistently located in the same locations at every house because home designs vary, but the system's power plug must utilize a credible power-source in your home.

2. Go outside and check to see if there is a switch on the fan, if it is in the off position, turn it on.

3. Walk through your home and check all your GFCI outlets. There is a strong chance that a GFCI outlet has tripped in a location other than the power supply of the radon system.

4. Make sure that one end of the plastic tube is inserted into the glass vacuum gauge and the other end is inserted into the PVC pipe. If the plastic tube is not fed into the pipe the pressure gauge will not have access to the interior of the tube to execute the reading. (This usually happens when your gauge is at zero and your fan seems to be running.)

5. If none of the previous methods causes your fan to turn it back on, then please call our office, 603-436-8877 or email at <u>jzammit@radonclear.com</u>, and we will further assist you.

\*IF YOU DISCOVER THAT YOUR RADON FAN IS NOT RUNNING, DO NOT PANIC. Studies have suggested that radon gas is most harmful over long periods of exposure. The chances of having immediate adverse health problems from radon are minimal, but don't delay in scheduling service.

The components of the radon mitigation system are nearly maintenance free, here are a few common questions.

1. Why don't radon mitigation systems have covers or grills on the top of the discharge stack. This is because over the years we have found that the amount of force from the air flow coming from inside of the pipe is enough to keep 99% of debris and foreign objects out of the system and its piping. Wire grills will create Ice blockage in New England winters.

2. You may notice that your piping is starting to fade a little. Do not worry. This is a natural part of the PVC pipe and plastic. One good way to prevent this is to paint the radon pipe.

3. Condensation and moisture. There is a large difference between the temperature under your home and the air outside your home. If you see that there are water droplets on the piping in your basement or in your attic, please monitor. Excessive moisture can do damage to carpet and drywall and should this moisture become excessive, or hear a gurgling sound, (high water table) turn your system off and call the Radon Clear at 603-436-8877 or email jzammit@radonclear.com . The Radon Fan

Your radon mitigation fan is designed for continuous and should never be turned off unless absolutely necessary. The fan is critical because it pulls the radon from the collection chamber through the piping and out of your home. If you turn off your fan for a significant length of time, it can damage the fan, make it susceptible to pest entry, and you may see an immediate increase in your radon levels. It is very difficult to predict how long it may take for this to occur, so please always leave the system on. Through Radon Clear, you have a 5-year manufacturer's warranty from the date of manufacture on the radon mitigation fan, subject to a \$75.00 service fee.

Thank you, Joe Zammit Radon Clear LLC.

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