



From The Home Inspector

DOES IT REALLY MATTER WHO DOES THE RADON TESTING?

By John Woodmansee

The answer is YES. The question has been bothering me for the past several weeks since finding that a termite inspector has been marketing radon testing along with his pre-purchase pest inspection. You probably know that anyone can be a radon measurement provider in North Carolina. No license or evidence of testing proficiency is required, so no law is being broken. In 14 other states you must be licensed to get paid for radon testing or remediation.

What troubles me is that the termite man is using an electronic, continuous radon monitor (CRM) without any calibration sticker on it. If he bought that CRM new he spent about \$700. Or, he might have bought a used one with expired calibration for as little as \$100. It cost \$300-350, up front, to both calibrate (annually) and demonstrate that CRM's ability to measure accurately (every two years), so you can understand why used ones are not worth much. What does this monitor measure? Its lack of calibration and testing against a national standard leaves the testing results open to a challenge by anyone who bothers to ask questions.

The CRM integrates its results every hour, and the operator can see what has happened during the whole test period. But if the operator does not understand the dynamics of radon entry into a building, what does he make of his data? How sure is he that what he has is a fair sample of radon entry into this home. Others will depend on credible results, and we who test radon are implying that we can make a fair judgment about the safety of this home. The use of CRM's and electrets (E-Perms) requires special judgment and quality control by the testing person. The EPA protocol that deals with all radon testing and remediation matters requires that those of us who deal with these devices be specially qualified and perform certain quality-controlling tasks with our test equipment. We are called "Measurement Analysts".

Actually, it is likely that most radon testing is done by people other than those of us who are "certified" or accredited by a third party like the National Environment Health Association (NEHA) or the National Radon Safety Board (NRSB). These two groups have members who are the only ones who qualify to be on the NC Radon Program's list of Certified Measurement Providers. We like being on that list.

Most of radon testing is done with devices that absorb radioactive particles and hold them in activated charcoal (charcoal canisters or pouches), or record radiation emanations on a piece of film (alpha track devices). One can purchase these test devices in a store, on the internet, or have someone (usually a home inspector) place them. These simple devices are exposed at least two days (the minimum for any test), exact times are recorded, and the device is returned to a laboratory for analysis plus the lab's conclusion about "the average radon exposure". In this case the distant laboratory is responsible for judging the result to be such-and-such, and advising what to do about the radon level in the location just tested. Even in this apparently simple test scenario, awareness of how the test was performed is the responsibility of the testing person (e.g. exposure to humid air, protection of the test device before and after it was used, closed house conditions, unfavorable weather effects, location in the room where the test was placed). Furthermore, even those who rely on these simple test devices are to do certain quality control procedures to assure that the tests are valid.

The point in all of this discussion is that accurate radon testing is not a simple matter. The people who are certified and listed on the www.ncradon.org website have all taken and passed an intensive and difficult course on radiation basics, radon gas's dynamics, types of radon measurement devices & their pros and cons, why radon gas is a carcinogen, and why you should be part of the cadre of professionals who are pledged to raise awareness of radon's danger in America. We are pledged to follow the EPA protocol for testing, interpretation, record-keeping and quality control in this testing work, and we must keep going to school to maintain our listing (16 hours of CE each two years). There are 87 persons on the NC Radon Measurement list. Across North Carolina 7-10% of home inspectors are on the State list. About 35% of home inspectors in the Piedmont Triad are listed as "Certified". Home inspectors do 70% of the radon testing in the United States.

This is an informational project of the Home Inspection Committee of the Winston-Salem Regional Association of REALTORS®. Check our website for other helpful reports (www.wsrar.com). John Woodmansee, owner of The Home Inspector company, Winston-Salem. His radon testing credential is Radon Measurement Analyst # 100092RT (NEHA-NRPP).