

Major changes to the way Radon tests are conducted

AS OF JULY 1, 2022

Radon Test Protocols

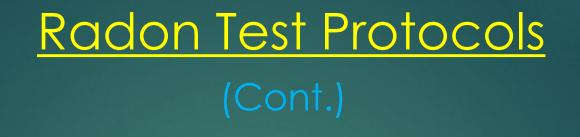
(before a test can be conducted)

1) Written approval from Client

- a) This is done using a form sent to the Client
- b) If the Client refuses a Radon test, they are to sign a decline form

2) Owner/Occupant notification that a test is scheduled

- a) A form is also used and sent to the listing agent through the buyer's agent to the owner and/or occupant
- b) This form states that closed house conditions must be met at least 12 hours prior to the start of the test and all through the testing period as well.



- 1) If a basement footprint is more than 2000 sqft. two testing devices must be used
- 2) The testing devices must be at least 20 inches from the floor or less than a foot from the ceiling
- 3) The testing devices cannot be placed in bathrooms, kitchens, laundry rooms, within three feet of any window or exterior door, any supply or return air vents, high traffic areas, closets, or crawlspaces
- 4) If there is a living area over a crawlspace or slab, it must be tested.
- 5) Mitigation may be determined with the results from a CRM (Continuous Radon Monitor)
- 6) Any modifications to a house a tested is warranted

What is Radon (RN)?

Atomic Number 86 Atomic Weight 222

1) Radon in an odorless, colorless and tasteless inert gas which is one of the decay products of Uranium U235

- 2) It has a half life of 3.8 days
- 3) It further decays into Polonium (Atomic number 84 atomic weight 209)
- 4) The Polonium is what's harmful to your health
- 5) Final decay product is lead

Closed House Conditions

The 12 hours prior to the start of the test is critical in order for the house to reach a "dynamic equilibrium".

1) The house must be closed at least 12 hours prior to the start of the test. If this is not met, the test must be extended at least 12 hours.

- a) All windows and doors must be closed, this includes the garage door
- b) Any air exchange systems must be off, this includes:
 - 1) Whole house fans
 - 2) Evaporative coolers
 - 3) Moisture mitigation systems
 - 4) Window conditioners

c) Normal entry and/or exit is fine, but the doors cannot be left open

A few myths about Radon

(T or F)

1) Airing the house before testing will reduce the levels!

False: this usually increases the levels due to the stack effect, besides it violates the protocols for "closed house" conditions

2) Levels below 4.0 pCi/l are not harmful!

False: Levels below 4.0 pCi/l still pose a risk as it is a carcinogen.

- 3) If a Radon Mitigation system has been installed, nothing else needs to be done False: A retest must be conducted after 24 hours of the installation up to 30 days
- 4) If I don't have a basement or crawlspace, I don't need a Radon test!

False: All homes in contact with the soil should be tested for Radon gas

5) My neighbor says he doesn't have Radon, so I should not have a Radon problem!

False: You don't know if you have a Radon issue, unless you test for it. Don't assume anything

6) If the results of a Radon test were less than 2.0 pCi/l, retest in 5 years!

True: Unless any modifications (such as additions, remodeling) were made to the structure or building site.

Qualifications of Radon Test Providers

 Must be certified through AARST (American Association of Radon Scientists and Technologists) and NRPP (National Radon Proficiency Program) My Certification # 113022 RMP

2) Must be licensed with the State of Colorado.My License # RME 0000166

What Test Providers must do

- 1) Be certified on the equipment they are using and use only the test equipment approved for testing.
- 2) Develop and adhere to a Quality Assurance Plan (QAP)
- 3) Maintain records for six years
- 4) When deploying a CRM (Continuous Radon Monitor) QC cross checks are required every 10 tests.

What test providers must do when deploying a Radon Test

- 1) Fill out and leave at the site a Radon test "Non-Interference" agreement or "Chain of Custody".
- 2) Place door hangers and "Radon Test in Progress: notices at all exterior doors reminding the occupants to maintain "closed House Conditions" during the testing period.
- 3) Fill out A "Job Site Form" of conditions at the time of deployment.

What test providers must do when retrieving a Radon Test

 Verify that the Radon test "Non-Interference" agreement or "Chain of Custody" has been signed.

2) Retrieve all door hangers and "Radon Test in Progress: notices from all exterior doors.

3) Fill out another "Job Site Form" of conditions at the time of retrieval

4) Print and review test data to ensure the test was valid

5) Generate report that includes all test conditions and any anomalies found

6) Can be audited at any time