

Screening Type Radon Measurement

Side by Side E-Perm™ Method:

These sampling devices consist of an electrically conductive container that houses an electrostatically charged Teflon® disk called an electret. When opened, radon in the room (if present) diffuses into the chamber and begins to decay. When this occurs, ions are generated and collected on the charged electret thus decreasing the electrostatic voltage. These changes are measured and are used to determine the radon concentration over the test period.

Note: the USEPA recommends that “side by side” testing be performed for radon tests for Real Estate transactions. The side by side test provides confidence that chamber variations don’t lead to bias results. Two chambers should be placed next to each other (four inches apart) and should be opened and closed at the same time. The report from the lab will show the readings for the individual chambers and also provide the average of the two chambers.

Sampling Conditions:

The following conditions should exist for twelve hours prior to and during the measurement period:

- Windows and external doors should remain closed, except for normal entry and exit.
- Non-essential ventilation devices should not be operated (kitchen and bath fans, whole-house fans or fireplaces).
- Outside weather conditions should be relatively calm and normal.

The chambers should be opened and exposed to the air for a minimum of 2 full days and up to a maximum of 7 full days and the returned immediately to the lab for processing.

Sampling Conditions:

Expose the chambers in the lowest level of the structure suitable for routine occupancy. Finished basements, basements that have washer/dryer facilities, basements that are to be play areas for children or basements that will be renovated are likely candidates for radon testing. Areas such as kitchens, bathrooms, garages or crawl spaces are not typically tested.

Place the Chambers:

- Away from windows and doors (3ft. minimum)
- Above the floor (2ft. minimum)
- Away from exterior walls (1ft. minimum)
- Away from direct sunlight
- Away from drafts or fireplaces
- Where they will not be moved or disturbed

Sampling Instructions:

Starting the Test

1. Unscrew the cap at the top of the E-Perm chamber. A spring located inside the cap will lift the cap to the “on position”.
2. Fill in all of the information on the test form
3. Fill in the start date and time
4. Fill in the zip code of test address
5. Fill in the name of the person starting the test

Ending a Test

After 2 full days (48 hours) and up to 7 full days:

1. Push cap down against spring force and screw it until it bottoms (finger tight will do)
2. Place both chambers in mailing box
3. Fill in the stop date and time
4. Fill in the name of person ending test
5. Place box in mailing envelope provided and mail back to lab.