

RTCA's RaDome Electret Ion Chamber - Long-Term Radon Test Kit

RTCA®'s RaDome Electret Ion Detectors contain an electrostatically charged Teflon disk. The ions produced by the alpha decay of radon inside the detector strike the disk, reducing the surface voltage. The voltage reduction is measured in the laboratory and the radon concentration is then calculated.

Radon levels vary from day to day and from season to season. Long-term tests remain in the home for 90 days, up to one year and give a better estimate of the year-round average radon level. The U.S. Environmental Protection Agency recommends the test kit be placed in the **lowest lived-in level** of the home. It should be placed in a room that is used regularly, but not a kitchen or bathroom. States or other organizations may have differing recommendations. Pennsylvania for example, recommends testing in the lowest livable level. Contact your state agency if you have any questions regarding placement.

INSTRUCTIONS

This test kit contains two (2) RaDome electret ion detectors; one is labeled "RA-DOME" and the other is labeled "BLANK". The one that is labeled BLANK should remain sealed in the foil pouch. Both detectors should be placed side by side approximately 4" to 6" apart during the exposure period.

1. Cut open the protective foil bag labeled "RA-DOME" with scissors at the zip-lock end and remove the RaDome radon detector and test information card. This begins the monitoring period. Save the protective foil bag for the return shipment.
2. Place the RaDome radon detector upright on a table, bookcase or other flat surface away from possible drafts (windows, doors, heating/cooling vents). Place the detector at least 20" above the floor in an undisturbed location. Avoid placing the detector near any concrete or masonry walls. Place sealed bag labeled "BLANK" approximately 4" to 6" away from the RaDome.
3. Please print the name and test location address on the front of the test information card. This is how it will appear on the RTCA® Radon Report.
4. Fill in the information cells on the back of the card: START date and time (AM or PM), year, time zone, average indoor temperature, and the building level the detector was placed.
5. Leave the detectors undisturbed for a period of at least 3 months (90 days) up to 1 year. **Removing the tamper tape from the RaDome will VOID the test.**
6. At the end of the monitoring period, record the STOP date and time (AM or PM) on the test information card. Place the RaDome radon detector and the test information card into the protective foil bag and close the zip-lock.
7. Place both detectors in a padded envelope or box and return for analysis to:
RTCA, 2 Hayes Street, Elmsford, NY 10523.