

DEPLOYMENT INSTRUCTIONS FOR RADON SST E-PERM[™] ELECTRETS

SHORT-TERM SST E-PERM[™] ELECTRETS

Short-term Radon measurements are valuable for capturing a snap shot of Radon conditions to help identify potential issues, or to determine the effectiveness of mitigation measures following implementation. Monitoring using the short-term SST E-PERM[™] device must be conducted for a minimum of 48 hrs—up to 10 days. If the average of two co-located E-PERM[™] devices is 200 Bq/m³ or higher, Health Canada recommends further action be taken. It is important to follow short-term measurement with long-term measurement as levels can fluctuate significantly between hours, days, and seasons.

DEPLOYMENT INSTRUCTIONS FOR RADON DEVICES

Health Canada stipulates that "closed building conditions" be maintained during short-term radon measurements. If the measurement period is less than four days, "closed building conditions" must be initiated 12 hours prior to starting the test. These conditions are defined as:

- Windows must be kept closed and doors opened only long enough to go in and out.
- Exhaust fans, window air conditioners, or whole-house fans should not be operated.
- Fireplaces (unless they are the primary heat source) must not be used and the dampers must be closed.
- Permanent radon mitigation systems, if installed, should be functioning (on) for at least 24 hours prior to and during the measurement period. In addition, measurements of less than 4 days should not be conducted during times of severe weather.

The E-PERM[™] devices should be placed as soon as possible after receiving to ensure accurate results. To make a short-term measurement, the E-PERM[™] should be opened and placed in the lowest occupied or potentially occupied (4-hours per day) area of the house, i.e. the lowest area which residents now use or which could be readily adapted for use, typically the basement. It is important to co-locate a replicate device for every 10 devices (i.e. if there is one device then one replicate, if there are 20 then two replicates), and one device for every room less than 200 m² (~2,000 ft²).

The E-PERM[™] device(s) should be located at least 30 inches above the floor, not closer than 24 inches to the ceiling; approximately 16 inches from an interior wall or approximately 20 inches from an exterior wall. Bathrooms, kitchens, laundry rooms, root cellars, garages, crawl spaces, or sumps are not suitable measurement locations.

The E-PERM[™] device should be left undisturbed for the duration of the test period, after which it should be closed and returned for analysis as soon as possible.

Send radon detector(s) in person, or by mail to:

AGAT Laboratories 2420 - 42 Avenue NE Calgary, Alberta T2E 7T6 Telephone: (403) 736-5300

Inquiries: radon@agatlabs.com

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HOW TO DEPLOY A RADON E-PERM[™] ELECTRET CAUTION: DO NOT TOUCH SURFACE OF THE ELECTRET - IT WILL INVALIDATE THE TEST

- 1. Ensure the ST Electret is securely attached to the bottom of the SST E-PERM[™] canister. To initiate the radon test, unscrew the cap on the top of the E-PERM canister. A spring inside will lift the cap to the "on" position. The detector starts to measure radon as soon as the "top" pops up.
- 2. Place the SST E-PERM[™] device according to Health Canada's recommended deployment protocols as described on page 1.
- 3. Record the location where each E-PERM[™] device is deployed on the chain of custody form using the Serial Number located on the bottom of the electret.
- 4. Record the Date and Time the radon test was started.
- 5. To terminate the test, simply screw the top back down. In this position, the detector will no longer measure radon. If the tamper indicating plastic seal was installed, this seal must be removed (cut) before the top can be screwed back down.
- 6. Record the Date and Time the radon test was terminated.
- 7. Return device(s) along, with deployment information, for analysis as soon as possible.







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