

RADON TESTING & MITIGATION

• FREQUENTLY ASKED QUESTIONS



What is radon?

Radon is a radioactive gas that occurs naturally across BC and Canada. The gas is created when uranium in the soil and rock breaks down.

Why is radon a concern?

Radon gas is carcinogenic, which means it is known to cause cancer in humans. Radon is invisible, odourless and tasteless so there is no way to know if you are being exposed. In enclosed spaces such as a home, it can accumulate to high levels. Radon gas can infiltrate into any building where the foundation comes into contact with the soil.

Is it safe to test my building for radon?

Yes, testing your building for radon is very safe. The detector used for testing your building for radon is passive and does not emit radiation.

How long does it take to test for radon?

There are various methods for indoor radon testing typically ranging from 2 days to 12 months. Health Canada and the BC Lung Association recommend using a long term radon test that remains in the building for a minimum of 3 months. This was the testing method being used for government buildings. Testing should be completed in the winter months when doors and windows are typically closed and there is more potential for indoor radon levels to ‘build-up.’

Will I be told when testing in my building has started?

Yes, building tenants will be informed of the start date of testing. Signage will also be posted indicating where testing is being completed. It’s important that the test devices remain undisturbed for the duration of testing.

When will I know the test results for my building?

The testing period will be a minimum of 3 months. Upon completion, results will be sent to the lab for analysis and then provided to the project manager. Building tenants will be provided with test results within 5 months of initial testing.

How many buildings will be tested?

The Ministry of Technology, Innovation and Citizen Services plans to test all MTICS owned and leased buildings. Phase 1 and 2 testing included over 90 buildings in various regions of the province. The remaining buildings will be tested in further phases.

My office building is being tested for radon, should I also test my home?

You may decide it's a good idea to also test your home for radon. The long term radon test being used in your office building is identical to test kits used for housing. If you choose to test your home, the winter is the time that levels could be at their highest due to windows and doors being closed.

How to test your home?

The only way to know if you have radon present in your home is to test for it.

Indoor radon test kits can be purchased through the BC Lung Association. Go to www.radonaware.ca to purchase a long term test kit. Instructions on the proper deployment of the test are included with the purchase of the test kit. You may also be able to purchase test kits from your local health authority.

Long term radon tests kits cost \$29.99 plus shipping and handling at www.radonaware.ca. This includes the cost of analysis and delivery of the findings to your attention.

How can indoor radon levels be reduced?

For buildings that have radon levels above 200 Bq/m³, one or more of the following measures may be needed:

- Increasing air exchange and ventilation.
- Sealing cracks in the foundation and openings around pipes, drains and at foundation edges.
- Installing an Active Sub-slab Depressurization System.

What is an Active Sub-slab Depressurization System (ASD)?

Active sub-slab depressurization (ASD) helps to reduce the amount of radon entering a building by depressurizing the ground beneath the foundation and enabling soil gases to evacuate from below the foundation, up a pipe, and out the building. An ASD has the benefit of an electrically powered fan - typically located in the attic, but sometimes located in a basement. The fan creates a vacuum, drawing soil gases, such as radon, up through the pipe. The radon gas is then quickly diluted to the outdoors.

My building has a high radon level, when will work be completed?

If your building tested above the Health Canada action level of 200 Bq/m³ it will be mitigated and the level of radon reduced as low as possible. Mitigation work is currently being planned for completion in the winter of 2017/18. In the meantime, open windows where possible to assist with air exchange and ventilation.

Radon Concentration Recommended Remedial Action Time

Radon Concentration	Recommended Remedial Action Time
Greater than 600 Bq/m ³	Less than 1 year
Between 200 Bq/m ³ and 600 Bq/m ³	Less than 2 years
Less than 200 Bq/m ³	No action required

*as recommended by Health Canada

After the work is complete, how do they know the radon level has been reduced?

Upon completion of a radon mitigation system, the Radon Mitigation Professional will re-test the building to ensure levels are below 200 Bq/m³.

Resources

If you would like further information about radon, visit the following websites.

Health Canada

http://www.hc-sc.gc.ca/ewh-semt/radiation/radon/faq_fq-eng.php#detect

Radon in Buildings

https://www.ccohs.ca/oshanswers/phys_agents/radon.html

Guide for Radon Measurements in Residential Dwellings (Homes)

https://www.canada.ca/en/health-canada/services/publications/health-risks-safety/guide-radon-measurements-residential-dwellings.html#a1_3

Radon Reduction Guide for Canadians

http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radon_canadians-canadiens/index-eng.php

WorkSafeBC

<https://www.worksafebc.com/en/health-safety/hazards-exposures/radon>

WorkSafeBC Exposure registry

<https://www.worksafebc.com/en/resources/health-care-providers/forms/exposure-registry-program-form-41m1?lang=en>

BC Lung Association

<http://www.radonaware.ca/>

