Radon-resistant construction techniques are consistent with state-of-the-art energy-efficient construction. When using these techniques, follow the Model Energy Code (or other applicable energy codes) for weatherization, which will result in energy savings and lower utility bills.

A. **Gas Permeable Layer**  This layer is placed beneath the slab or flooring system to allow the soil gas to move freely underneath the house. In many cases, the material used is a 4-inch layer of clean gravel.

B. **Plastic Sheeting**  Plastic sheeting is placed on top of the gas permeable layer and under the slab to help prevent the soil gas from entering the home. In crawlspaces, the sheeting is placed over the crawlspace floor.

C. **Sealing and Caulking**  All openings in the concrete foundation floor are sealed to reduce soil gas entry into the home.

D. **Vent Pipe**  A 3- or 4-inch gas-tight or PVC pipe (commonly used for plumbing) runs from the gas permeable layer through the house to the roof to safely vent radon and other soil gases above the house.

E. **Junction Box**  An electrical junction box is installed in case an electric venting fan is needed later.

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**Are there qualified service professionals that can test or mitigate my home?**

- **Contact Mike Brennan, Washington State Radon**  (360) 236-3253  mike.brennan@doh.wa.gov
- **National Radon Proficiency Program (National Environmental Health Association)**  Toll Free: (800) 269-4174 or (828) 890-4117  Web site  www.neha-nrpp.org/  OR
- **The National Radon Safety Board (NRSB)**  Toll Free: (866) 329-3474  Web site  www.nrsb.org

For more information on radon, radon testing and mitigation, and radon-resistant new construction, call Clark County Public Health at (360) 397-8428 or visit our Web site at http://www.clark.wa.gov/health/index.html

More information about lung cancer prevention and treatment is available at these Web sites:

- **EPA**:  www.epa.gov/radon
- **American Cancer Society**:  www.cancer.org/
- **American Lung Association**:  www.lungusa.org/
- **National Cancer Institute**:  www.nci.nih.gov/
- **Memorial Sloan-Kettering**:  www.mskcc.org/mskcc/html/44.cfm
**WHAT IS RADON?**

Radon is a naturally occurring, invisible, odorless, tasteless gas that is dispersed in outdoor air, but which can reach harmful levels when trapped in buildings. It originates from natural deposits of radium in the soil. As the radium decays it turns into radon gas which can enter a home. There are no immediate symptoms that will alert you to the presence of radon. It typically takes years of exposure before any problems surface and then it is too late.

Scientists have long been concerned about the health risks of radon, but never before has there been such overwhelming proof that exposure to elevated levels of radon causes lung cancer in humans.

**Is Radon dangerous?**

According to the U.S. Environmental Protection Agency (EPA), over 21,000 lung cancer deaths each year in the United States are caused by radon exposure. It is the second leading cause of lung cancer in the country surpassed only by direct smoking, and the leading cause of lung cancer among nonsmokers.

- Because you can’t see or smell radon, people tend to downplay the health effects and ignore the possibility that there might be a silent killer in their homes.
- If you smoke and your home has high radon levels, your risk of lung cancer is especially high.

**Is there Radon in SW Washington?**

Yes! Clark County has been classified by the U.S. Environmental Protection Agency (EPA) as a Zone 1 Area, which has the highest radon potential risk.

**CITIZENS URGED TO TEST HOMES FOR RADON, THE SECOND LEADING CAUSE OF LUNG CANCER IN THE U.S.**

**How can I test for Radon?**

Simple test kits can reveal the amount of radon in any building. In most buildings, levels of radon can be reduced with easy and affordable venting techniques. Homes built on a concrete slab or homes with a basement may also be at a higher risk for radon gas.

- The only way to know if a home has a radon problem is to test.
- Every home should be tested, regardless of age, construction style, or previous testing results.
- Testing homes for elevated levels of radon is simple and inexpensive. Radon test kits can be purchased at local hardware and home improvement stores or directly from radon testing companies. Many are priced under $25.

**If the radon level is high, can I fix the problem?**

Radon problems can be fixed by qualified contractors for a cost similar to that of many common home repairs such as painting or having a new water heater installed (anywhere from $800 to about $2,500).

**RADON GETS IN THROUGH:**

1. Cracks in solid floors
2. Construction joints
3. Cracks in walls
4. Gaps in suspended floors
5. Gaps around service pipes
6. Cavities inside walls
7. The water supply

Clark County Public Health is working with the EPA in a nationwide campaign to educate communities about the dangers of radon exposure and to encourage them to take action to protect their homes and families.

Clark County Public Health is promoting increased awareness of the health effects of radon exposure and encourages testing, mitigation, and radon-resistant new construction.