



ECOBROKER International

Green Topic Pages

Radon

Technology Snapshot & Benefits:

Health benefits can accrue from designing and building features that effectively remove radon from your home. Radon is a colorless, tasteless, odorless radioactive gas that can seep into your basement or the lowest livable space in the home from surrounding soil. Decomposition products attach to very small particles in the air and these can be breathed deeply into the lungs, potentially resulting in serious health consequences. National statistics indicate that one in fifteen homes in the U.S. have unacceptable levels of radon.

The only way to know whether your house has unacceptable levels of radon is to have the lowest livable space in the home tested. You may test yourself using kits that are available at home supply stores or seek professional assistance. Winter is the best time to test since doors and windows are kept closed allowing radon concentrations to reach detectable levels.

If radon occurs as a result of out gassing from the soil, the most common reason, this can be readily mitigated with ventilation for roughly \$1,000. Removal technology is simple and straightforward. It involves blocking points of entry into the lowest livable space in the home and venting areas to the outside using an active circulation system to exhaust basement air. Usually plastic ducting and piping are sufficient, and these low-cost materials help keep total costs low. In a few rare cases, it has been discovered that foundations were made of radioactive mine tailings or other waste materials. In these situations, the costs of radon mitigation become substantially more than \$1,000.

Estimated Cost Savings:

Cost savings of radon mitigation is measured in terms of assuring the quality of indoor air and preventing any health problems associated with radon. A typical cost to eliminate radon from the home is on the order of \$1,000, with costs ranging from several hundred to several thousand dollars. Most people find this to be more than worth the investment, when protecting the health of family and loved ones.

Issues:

Remedies will likely involve some sort of ducting to the outside. You should think carefully about how best to design the ducting, keeping in mind both aesthetic and practical considerations.

Regional Issues:

Some regions of the country have soils and rocks with higher levels of radon than others. Even in areas prone to radon infiltration, there is no way of knowing for sure that you have a problem without testing. Testing is inexpensive and easy and should be performed when buying or selling a home.

Installation (Getting It Done):

Be sure to get two or three (or more) bids from designers and/or building contractors to gain immediate perspective on the actual costs of radon mitigation and equipment installation details in your area.

More Articles on This Topic:

[U.S. Environmental Protection Agency: Indoor Air - Radon](http://www.epa.gov/radon/)

<http://www.epa.gov/radon/>

[U.S. Environmental Protection Agency: A Citizen's Guide to Radon](http://www.epa.gov/radon/pubs/citguide.html)

<http://www.epa.gov/radon/pubs/citguide.html>

[U.S. Geological Survey: The Geology of Radon](http://energy.cr.usgs.gov/radon/georadon.html)
<http://energy.cr.usgs.gov/radon/georadon.html>