

Radon Resistant New Construction

Protect Your Family by Building it Right

Kansas has significant radon potential, with 25-35% of existing homes likely to have elevated radon levels. Additionally, there is no way to predict radon levels before construction of your new home begins. Fortunately, effective low-cost techniques can be installed by your builder to reduce the potential for high radon, and make the home easy to mitigate if it becomes necessary.

This fact sheet should help you and your builder communicate about what steps to take to build a radon-resistant new home.

Talk with your builder about using Appendix F of the International Residential Building Code to design and install radon resistant features in your new home.

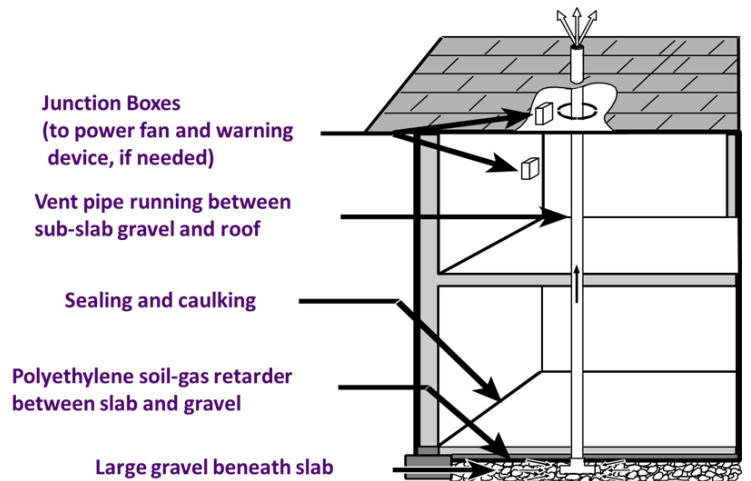
How effective is RRNC?

Passive radon systems can reduce radon by an average of about 36% if properly installed. Common errors that reduce system effectiveness include failure to seal sump lids, running vent pipes through unheated spaces like a garage or exterior wall cavity, or not leaving enough space to install an in-line fan to activate the system in the future.

RADON LAWS IN KANSAS

In Kansas, there is no state-wide building code regulating installation of radon-resistant features in new single- or two-family homes. However, several local code boards have chosen to adopt Appendix F of the International Residential Building Code, which is the accepted standard guidance for installing RRNC.

Find a list and more information about RRNC at www.kansasradonprogram.org/RRNC.



5 Basic Components

1. **Gas permeable layer** - Large gravel beneath the slab.
2. **Vapor barrier** - Polyethylene sheeting between slab and gravel
3. **Vent pipe** - A 3- or 4-inch PVC or ABS (plumbing) pipe running vertically through an interior wall in heated living space, creating a draft by natural stack effect.
4. **Junction Box** - An location near the pipe outside of the living space is wired with an electrical junction box in case an electric venting fan is needed later to activate the system.
5. **Sealing & Caulking** - All openings in the concrete foundation floor are sealed to prevent soil gas from entering the home.

Potential Cost Savings

These techniques could save you money. Installing the radon resistant features discussed in this fact sheet costs an average of \$750-\$1,000. Fixing an existing home without these features could cost as much as \$1,500-\$2,000, on average.