Loudon County Planning & Codes

Radon Resistant Construction



Information provided below is a suggested method and not the only method nor the only requirement of the code. For all details refer to Appendix F of the 2012 IRC.

EPA RADON RECOMENDATIONS

What are Radon-resistant construction techniques?

The techniques may vary for different foundations and site requirements, but the basic elements are:

A. Gas Permeable Layer

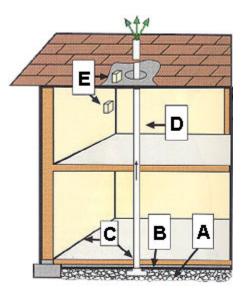
This layer is placed beneath the slab or flooring system to allow the soil gas to move freely underneath the house. In many cases, the material used is a 4-inch layer of clean gravel.

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 a point 12" above 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.