A. Gas Permeable Layer

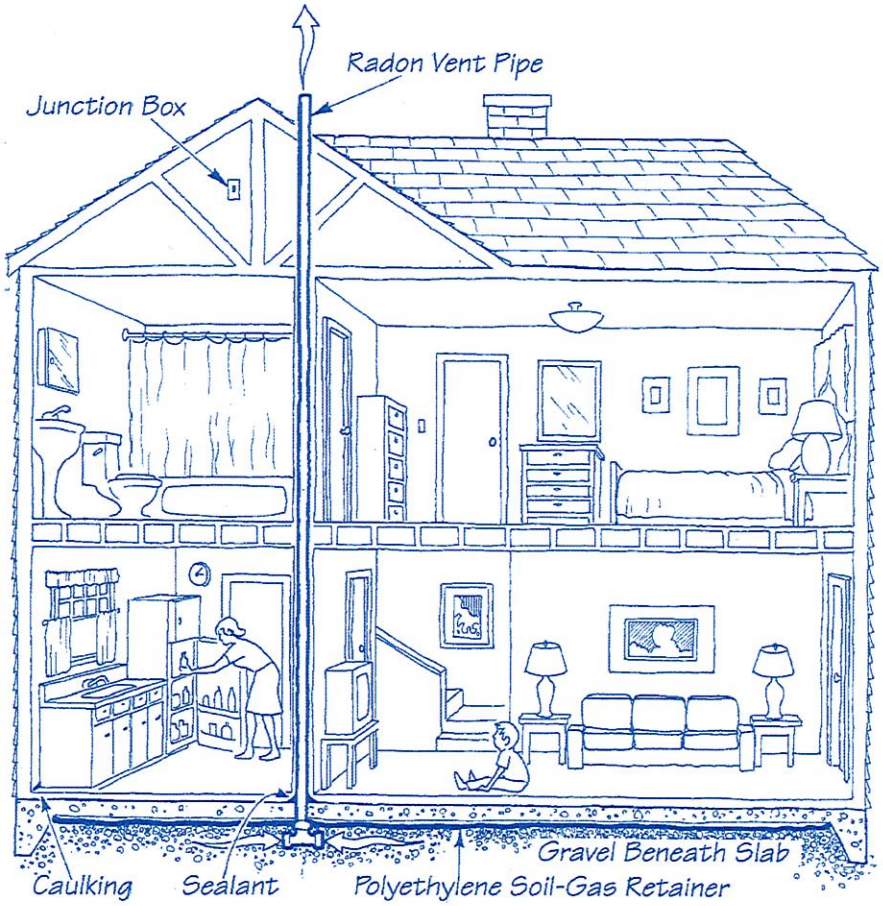
Usually a 4-inch layer of clean, coarse gravel is used beneath the slab to allow the soil gas to move freely underneath the house. Other options are to install a loop of perforated pipe or soil gas collection mat (also known as drainage mat or soil gas matting).

B. Plastic Sheeting

Polyethylene sheeting is placed on top of the gas permeable layer to help prevent the soil gas from entering the home. The sheeting also keeps concrete from clogging the gas permeable layer when the slab is poured.

C. Vent Pipe

A 3- or 4-inch (recommended) PVC or other gas-tight pipe (commonly used for plumbing) runs from the gas permeable layer through the house and roof to safely vent radon and other soil gases above the house. Although some builders have used 3-inch pipe, field results have indicated that passive systems tend to function better with 4-inch pipe.



D. Junction Box

An electrical junction box is wired in case an electric venting fan is needed later to activate the system.

E. Sealing and Caulking

All openings in the concrete foundation floor are sealed to prevent soil gas from entering the home. Also, sealing and caulking the rest of the building envelope reduces stack effect in the home.