



2018 IRC REQUIREMENTS

1. Place the 3" or 4" tee below the slab and vapor barrier in at least 4" of gravel (i.e. #57 stone).
2. Seal around the pipe where it passes through the slab and all other slab penetrations and joints. Sealant is recommended to be silicon based.
3. The 3" or 4" vent pipe needs to be routed up to the attic area vertically as much as possible. If a horizontal run must be installed it shall be sloped a minimum of 1/8" per foot towards the low point of the pipe. The horizontal run should never exceed the vertical length of pipe.
4. The pipe may terminate in the attic and be capped. Label the pipe as "RADON PIPE" at each floor level and in the attic. A 110 outlet is recommended to be roughed in if a future vent fan is required. *NOTE: A mechanical vent may be required in a crawl space if the ventilation does not meet the code requirements.*

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 (at least 6 mil) and under the slab to help prevent the soil gas from entering the home. The sheeting shall cover the entire floor area with separate sections of sheeting lapped not less than 12 inches.

In conditioned crawlspaces, the sheeting is placed over the crawlspace floor and up the stem walls 12" with all joints taped.

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 minimum 3 inch diameter ABS, PVC, or other gas tight pipe (commonly used for plumbing) is embedded vertically into the sub-slab aggregate before the concrete is poured. A tee fitting is used to ensure that the pipe remains within the aggregate. A minimum 3" pipe is attached to the tee fitting and 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. The vent termination cannot be within 10 feet of any window or other opening into the conditioned spaces of the building that is less than 2 feet below the exhaust point, and within 10 feet of any window or other opening in adjoining or adjacent buildings.

E. Junction Box

It is recommended that an electrical junction box be installed in case an electric venting fan is needed.

