

SC DEPARTMENT of ENVIRONMENTAL SERVICES

## Radon Mitigation Checking Your Contractor's Work

Below is a list of some basic installation requirements and recommendations that your contractor should meet when installing a radon reduction system in your home.

- Contractor should be certified for radon mitigation (radon proficiency programs include National Radon Safety Board or American Association of Radon Scientists and Technologists' National Radon Proficiency Program). Note: it is the individual who is certified, not the company.
- Contractor should conduct diagnostic tests depending on specifics of the house such as the foundation design and material under the house.
- If combustion appliances are present, contractor should conduct back-drafting testing. If spillage is found, active mitigation cannot be installed until corrected.
- Radon reduction system must be clearly labeled.
  This will avoid accidental changes to the system.
- □ The sealing and/or caulking around the vent pipe in the basement or slab floor must be intact.
- Vent pipe and utility penetrations in slab, walls, or soil gas retarder must be permanently sealed (air tight).
- Wall-floor joint must be sealed; contractor should seal other accessible slab openings, cracks, or joints.
- □ If reducing radon in a crawlspace, the vapor barrier (soil-gas-retarder, e.g., polyethylene) must extend to the foundation walls, and the seams must be overlapped by at least 12". Contractor should seal around interior piers and to perimeter walls.
- If the crawlspace depressurization method is used, openings to conditioned space must be closed and sealed.
- Pipe must be adequately secured to the structure, not to existing pipe, ducts, or mechanical equipment.
- Horizontal pipe must be supported every 6 feet, and vertical pipe every 8 feet.
- □ Pipe, fittings and connections must be air tight and properly joined and sealed.

- □ The exhaust pipe(s) must vent above the roof eave and 10 feet or more above ground. It must also vent at least 10 feet away from windows, doors, or other openings into house or adjacent building, or at least 2 feet above any such openings.
- □ Electrical connections must be installed according to federal, state and local codes.
- □ Radon vent fan must be located above living areas or outside of the home. An unoccupied attic is an acceptable location; a basement is not.
- □ If the fan is mounted outdoors, a fan rated for outdoor use or enclosed watertight housing must be used.
- □ The fan must be installed with removable or flexible couplings.
- □ A plugged cord in an attic must not be longer than 6 feet.
- Outdoor fan, if used, must be hard-wired; do not use plug-in connections. Electrical disconnect switch or breaker must be installed for fan maintenance and labeled "Radon System."
- Warning device must be installed to alert you if an active system stops working. Examples include:
  U-Tube manometer (a liquid gauge), a sound alarm or light indicator. The warning device must be placed where it can be seen or heard easily.
- Contractor completely explains your radon reduction system, demonstrates how it operates and explains how to maintain it.
- □ A post mitigation radon test must be performed. The test should be done within 30 days of system installation, but no sooner than 24 hours after the system is in operation.
- An additional post mitigation test performed by someone other than the contractor is recommended. SCDES can provide a test kit upon request.

## Radon Mitigation Home Diagram



Note: This diagram is a general view of a subslab depressurization system. Not all homes will have gravel or a soil gas retainer beneath the slab. The pipe may also be installed on the outside of the home.

Illustration provided by the EPA



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