MNSPECT LLC
HELPING YOU COMPLY WITH THE CODE

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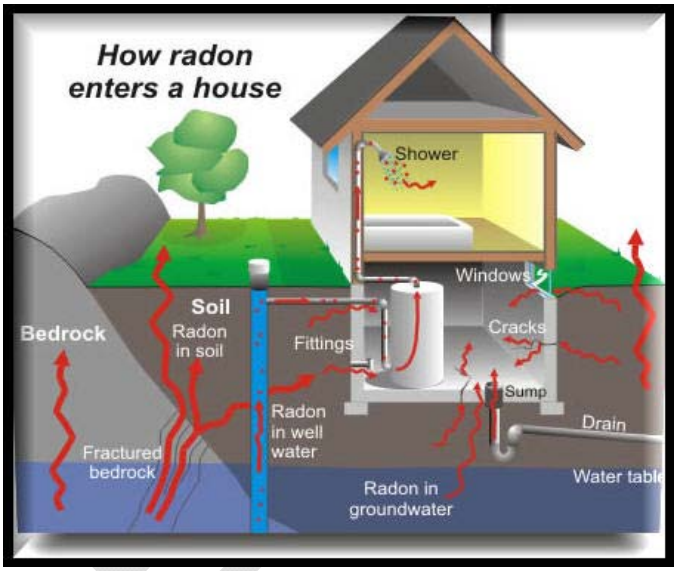
RADON INFORMATION

- This handout is intended only as a guide. It shall not be considered a complete set of requirements.
- Materials and installation must comply with the current Minnesota State Building Code and the manufacturers' installation specifications for each product.
- A building permit is required for a new or expanded radon mitigation system installed in existing homes. (Passive radon systems must be included in all new home plans.)



BUILDING Permit Submittal shall include:

- ☐ **Building Permit Application,** completed in its entirety, including signature and valuation.
- ☐ **One set of plans** (drawn to scale) showing the proposed design, and including:
  - □ Pipe location
  - □ Collection design
  - □ Fan location
- ☐ Additional information may be required by the plan reviewer.

PERMIT CARD AND APPROVED PLANS (throughout the project) shall be:

POSTED prior to start of work - **VISIBLE** from street or driveway - **ACCESSIBLE** to the inspector

INSPECTION REQUIREMENTS:

Inspections **MUST** be scheduled during office hours **AT LEAST** one business day prior to inspection. If a specific date and time is required, additional notice may be needed. Failure to cancel a scheduled inspection may result in a reinspection fee.

- **Office Hours:** Monday - Friday • 8:00 a.m. - 4:30 p.m.
- **Phone:** (952) 442-7520 or (888) 446-1801

Inspections: (Refer to your permit card regarding project-specific inspections)
A radon system installed or modified in an existing home typically requires only a final inspection.
A radon mitigation system in a new home requires an under-slab vapor retarder and soil gas membrane inspection (passive) and underground plumbing rough-in inspection (active). The radon final inspection is checked at the same time as the building final inspection.

NOTICE: Construction or work for which a permit is required shall be subject to inspection by the Building Official, and such **construction or work shall remain accessible and exposed for inspection purposes until approved.** It is the responsibility of the permit applicant to be in attendance on site and provide access to the Building Official for all required inspections. If work is concealed and/or work is not complete at time of inspection, an additional inspection is required and a **reinspection fee may apply.**

Note: The State of Minnesota requires all residential building contractors, remodelers, roofers, plumbers, and electricians to obtain a state license, unless they qualify for a specific exemption. Any person claiming an exemption must provide a copy of a Certificate of Exemption from the Department of Labor & Industry to the Municipality before a permit will be issued.
Note: To determine contractor requirements, or to check the licensing status of a contractor, please call the Minnesota Department of Labor & Industry at 651-284-5065 or toll free 1-800-342-5354.
Note: For specific code requirements, contact the Building Inspection Department at 952-442-7520 or 888-446-1801 or e-mail: info@mnspect.com.

PROJECT CHECKLIST:

The following is a guideline to assist in compliance with the requirements of the MN State Building Code, Sections 1303.2402 and 1303.2403.

Existing Homes – Active System

- ☐ Vent pipe MUST be clearly labeled on each story (including attics and crawl spaces).
- ☐ Exhaust pipe of soil suction MUST terminate at least 12" above the surface of the roof and at least 10 feet away from windows, doors, or other openings.
- ☐ All vent stack piping shall be ABS or PVC pipe not less than 3" inside diameter, and must be primed and glued at all fittings.
- ☐ If radon pipe extends through unconditioned space, it must be insulated with a minimum of R-4 insulation.
- ☐ If radon pipe penetrates a fire-rated wall assembly (i.e. garage and house common wall or garage ceiling drywall assembly), penetration is required to be sealed with appropriate fire collar around pipe.
- ☐ A radon gas vent pipe fan must be installed, providing a minimum of 50 cubic feet per minute at ½" water column.
- ☐ The fan shall not be installed in a location that could positively pressurize any portion of vent pipe located inside conditioned space.
- ☐ If installing an exhaust fan outside, the contractor MUST install a fan meeting local building codes for exterior use.
- ☐ Electrical connections of all active radon reduction systems MUST be installed according to MN electrical code.
- ☐ An audible alarm, a manometer, or other similar device shall be installed to indicate when the fan is not operating.
- ☐ A switch-controlled luminaire and the receptacle outlet near the fan shall be installed according to MN electrical code.

New Construction – Passive System

- ☐ Gas permeable material (gravel or sand w/geotextile drainage matting) shall be placed on the prepared subgrade under all floor systems.
- ☐ Soil-gas membrane shall be installed on top of gas-permeable material, consisting of 6 mil polyethylene or 3 mil cross laminated polyethylene sheeting. Sheeting MUST:
  - ✓ Cover the entire floor area with separate sections that are lapped at least 12".
  - ✓ Fit closely around any pipe, wire, or penetration.
  - ✓ Seal punctures or tears using the same material and maintaining 12" lap.
- ☐ A "T" fitting shall be installed beneath soil-gas membrane with a minimum of 10' of perforated pipe connected to any two openings of the "T" fitting or by connecting the two openings to the interior drain tile. The third opening of the "T" shall be connected to the vent pipe, a minimum of 3" inside diameter for all piping.
- ☐ All "T" fittings, sump lines and vent pipes must be of the same size.
- ☐ Floor openings shall be sealed after the installation of the concrete slab(s).
- ☐ Concrete joints, construction joints, and joints at the intersection of the foundation and slab shall be sealed.
- ☐ Sump baskets connected to interior drain tile and used for the termination point for the vent pipe shall have a sealed and secured sump cover. Sump discharge pipe shall have a backflow preventer installed.
- ☐ Vent pipe shall be 3" or 4" ABS or PVC pipe, primed and glued at all fittings. Piping must be located at least 10' away from any window or openings, terminating 12" minimum above roof. Vent pipes in unconditioned space shall be insulated with a minimum of R-4 insulation.
- ☐ Vent piping shall be provided with a space around vent pipe for future installation of a fan, minimum 24" in diameter extending a minimum distance of 3 vertical feet.
- ☐ Vent pipes shall be identified with at least 1 label on each story and in attics and crawl spaces.

New Construction – Active System

- ☐ **ALL requirements for a new construction passive system (above) must be met, AS WELL AS THE FOLLOWING REQUIREMENTS:**
- ☐ A radon gas vent pipe fan providing a minimum measurement of 50 cubic feet per minute at ½" water column.
- ☐ The fan shall not be installed in a location that could positively pressurize any portion of vent pipe located inside conditioned space.
- ☐ An audible alarm, a manometer, or other similar device shall be installed to indicate when the fan is not operating.
- ☐ A switch-controlled luminaire and the receptacle outlet near the fan shall be installed according to MN electrical code.

