



CITY OF TOPEKA

Public Works Department

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Development Services Division

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Dear Contractor:

On June 13, 2006 the Topeka City Council adopted an amended Appendix F of the 2003 International Residential Code for one and two family dwellings. Appendix F requires the installation of radon control components in all new one and two family dwellings. Permits for single-family residences or duplexes issued beginning August 15, 2006 will be required to install these components. All radon specific inspections will be scheduled on the building permit and will be the responsibility of the permit holder. Any reinspection fees for radon specific inspections will be charged to the building permit holder.

There are four main components in the ordinance that will be inspected for dwellings with basements and slab on grade.

1. A uniform layer of sand, or native fill, a minimum of 4 inches (102mm) thick, with a minimum 2 inch (51mm) diameter interior perimeter drain tile loop laid approximately 12 inches inside the internal perimeter of the foundation footing. The plumbing inspector will inspect this at the time of groundwork. A reinspection fee will be charged if the drain tile loop is not in place at the time of the groundwork inspection. Other code compliant systems will be accepted in lieu of the drain tile.
2. A minimum 3-inch-diameter (76mm), ABS, PVC or equivalent gas-tight pipe shall be embedded vertically into a "T" fitting (2 inch minimum diameter), or an equivalent method to be used to ensure that the pipe opening remains within the sub- slab permeable material. Alternatively, the 3-inch (76mm) pipe shall be inserted directly into an interior perimeter drain tile loop or through a sealed sump cover where the sump is exposed to the sub-slab aggregate or connected to it through a drainage system. The pipe shall be extended up through the building floors, terminated at least 12 inches (305mm) above the surface of the roof. It will be located at least 10 feet (3048mm) away from any window or other opening into the conditioned spaces of the building that is less than 2 feet (610mm) below the exhaust point, and 10 feet (3048mm) from any window or other opening in adjoining or adjacent buildings. **The vent may not be in an exterior wall and must be clearly marked.** The building inspector will inspect this at the time of rough-in.
3. To provide for future installation of an active sub-membrane or sub-slab depressurization system, an electrical circuit terminated in an approved box shall be installed during construction in the attic or other anticipated locations of vent pipe fans. The box must be in a location that will be unobstructed and visible after insulation is installed and within 6 feet of the vent. The electrical inspector will inspect this at the time of rough-in and must be meet the requirements of the 2005 National Electrical Code.
4. Sump pits open to soil or serving as the termination point for sub-slab or exterior drain tile loops shall be covered with a gasketed or otherwise sealed lid. Sumps used as the suction point in a sub-slab depressurization system shall have a lid designed to accommodate the vent pipe. Sumps used as a floor drain shall have a lid equipped with a trapped inlet. The building inspector will inspect this at the time of the final.

Additional requirements for crawlspaces:

- Crawl spaces shall be provided with vents to the exterior of the building. The minimum net area of ventilation openings shall comply with Section R408.1 of the 2003 International Residential Code.
- Ductwork passing through a crawl space or beneath a slab shall be of seamless material, unless the air-handling system is designed to maintain continuous positive pressure within such ducting. Joints in such ductwork shall be sealed to prevent air leakage.
- The soil in crawl spaces shall be covered with a continuous layer of minimum 6-mil (0.15mm) polyethylene soil-gas-retardant. The ground cover shall be lapped a minimum of 12 inches (305mm) at joints and shall extend to all information walls enclosing the crawl space area. It is recommended that acoustic sealant, butyl rubber, or butyl acrylic caulks be used to provide adhesion to the polyethylene sheeting. Polyurethane caulk will also provide some adhesion to the polyethylene sheeting. Seams between adjoining strips of sheeting are usually sealed by applying a continuous bead of sealant between the sheeting in the 12-inch strip where the sheets overlap. Plastic should be secured to the wall at 6 to 12 inches above the crawlspace floor with a ½ inch wide bead of acoustic sealant or butyl caulk along the wall. For a more durable connection, mechanical fasteners, such as strapping, should be considered to hold the plastic to the wall.

This letter is not all inclusive of the requirements of the City of Topeka amended Appendix F of the 2003 IRC. A copy of Appendix F is available at www.topeka.org and at the Permit Office 620 SE Madison 3rd Floor. **If you have any questions contact the Development Services Division 785-368-3905 OPT. 3.**