Building Information

SCRD Building Department

SOIL GAS CONTROL (RADON) REQUIREMENTS

This bulletin is intended to provide information pertaining to radon rough-in for a subfloor depressurization system.

A soil depressurization system requires the following: (See figure 1) *Please note that only item A and B are required to comply to 9.13.4.*

A. **Gas Permeable Layer:** The space for the movement of soil gases between the ground and the air barrier system into which a radon vent pipe is inserted. This layer allows for effective depressurization of that space, and functions as the drainage layer required in Article 9.16.2.1. A typical solution is to install coarse clean granular material below the floor on the ground. This also provides compliance with 9.16.2.1.(1) through either the performance path in 9.13.4.3.(2) or the prescriptive path in 9.13.4.3.(3).

B. **Vent Pipe:** The radon vent pipe must extend to the exterior of the building and terminate in a safe location. This pipe must be a min. of 4" in diameter and comply with Article 7.1.3. of CAN/CGSB-149.11. (Prescriptive termination requirements are like the requirements for plumbing vents. See Article 2.5.6.5. of the BCPC)

C. Depressurization Equipment: After occupancy, if the presence of radon is found then the radon vent pipe will need to be mechanically assisted. This is typically achieved by means of a fan installed along the pipe, to create a negative pressure in the space between the air barrier system and the ground and exhaust soil gases outside the building. Please note that the code does not require installation of a fan for compliance with 9.13.4; although installation of a fan should be considered during construction to facilitate connection to the equipment in the future.

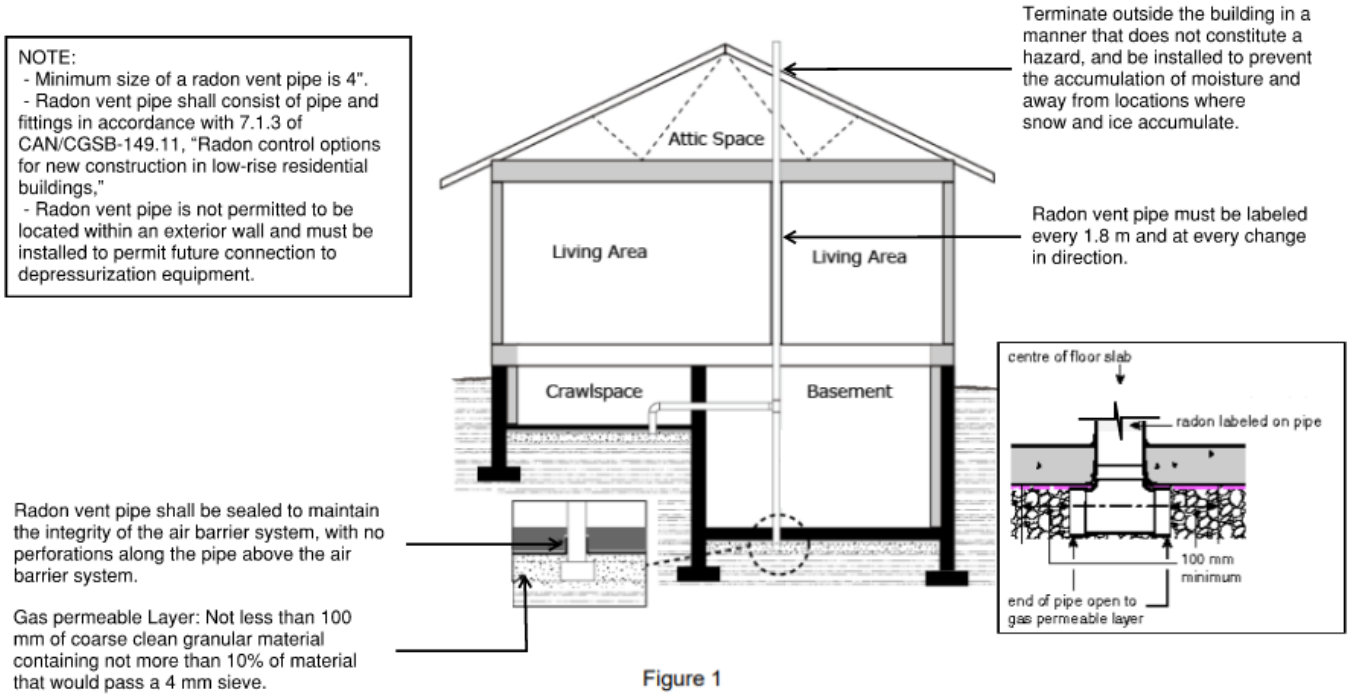

Figure 1