New radon gas protection requirements for dwelling units

The 2010 National building code requires the installation of a rough in for a radon extraction system during construction. A four inch pipe must be installed through the concrete slab and the top of the pipe must be capped and labelled radon.

The potential for high levels of radon infiltration can be challenging to evaluate prior to construction and a radon problem may only become apparent once the building is completed and occupied.

It is the owner's responsibility to test their home for radon. Radon mitigation systems are proven to reduce the likelihood of adverse health affects from radon, such as lung cancer.

The most common and efficient radon mitigation method is soil depressurization. A soil depressurization system requires:

a. Space for movement of soil gases between the ground and the air barrier system. This is normally attained with four inches of clear granular material.

b. The radon vent pipe then extends to the exterior of the building and terminates outside the building.

c. The radon pipe has to be mechanically assisted and typically this is 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.

The installation of a vent pipe and fan are not required during construction; however, designers should consider the future installation of a fan which requires access and electrical supply somewhere along the vent pipe.

If you have any questions, please do not hesitate to contact us at 877.7855.

(This document is not an equivalent of the 2010 National building code of Canada and should not be provided as legal advice.)