RADON/SOIL GAS PIPE LABELING

PURPOSE
This bulletin was developed to identify the requirements within the Alberta Building Code 2014 (ABC 2014) for labeling of radon/soil gas pipes.

DISCUSSION
Current practice in the field is that plumbers are often installing the rough-in piping for soil gas piping systems. As radon requirements are contained in the ABC 2014, this bulletin is to assist plumbers and other installers with the appropriate code references.

Radon piping systems are part of an exhaust or active soil depressurization (ASD) system.

Part 3 buildings have requirements for labeling of radon/soil gas piping systems. Part 6 of ABC 2014 is applicable to Part 3 buildings or designed systems. Part 6 references EPA 625/R-92/016, “Radon Prevention in the Design and Construction of Schools and Other Large Buildings.”

Part 9 buildings have prescriptive requirements for labeling of radon/soil gas piping systems in ABC 2014 Subclause 9.13.4.3.(3)(b)(iii).

CODE REFERENCES
Clause 6.2.1.1.(1)(i) states:

6.2.1.1. Good Engineering Practice
(See Appendix A.)

1) Heating, ventilating and air-conditioning systems, including mechanical refrigeration equipment, shall be designed, constructed and installed in conformance with good engineering practice such as that described in, but not limited to,

i) EPA 625/R-92/016, “Radon Prevention in the Design and Construction of Schools and Other Large Buildings.”

EPA 625/R-92/016, “Radon Prevention in the Design and Construction of Schools and Other Large Buildings.”- 2.1.1.4 Radon Vent Pipe states:

Labeling of System Components
Label the exposed radon vent pipe to identify the pipe as a component of a radon vent system that may contain hazardous levels of radon. Labels should be placed at regular intervals (at least every 10 ft) along the entire pipe run. Clearly mark all components of radon reduction systems as radon reduction devices to ensure that future owners of the building do not remove or defeat the system. At the roof exit, attach a permanent label to the vent with a warning such as “Soil gas vent stack may contain high levels of radon; do not place air intake within 25 ft.”
Article 9.13.4.1. states:

9.13.4.1. Application and Scope
1) This Subsection applies to
   a) wall, roof and floor assemblies separating conditioned space from the ground, and
   b) the rough-in to allow the future protection of conditioned space that is separated from
      the ground by a wall, roof or floor assembly.
2) This Subsection addresses the leakage of soil gas from the ground into the building.

ABC Subclause 9.13.4.3.(3)(b)(iii) states:

3) The rough-in referred to in Clause (1)(b) shall include
   b) a pipe not less than 100 mm in diameter installed through the floor, such that
      iii) the pipe is clearly labelled near the cap and, if applicable, every 1.8 m and at every
         change in direction to indicate that it is intended only for the removal of radon from
         below the floor-ground.

FOR ADDITIONAL INFORMATION: Use the following link to the Canadian – National Radon Proficiency Program (C-NRPP) and to obtain Pipe Labels

www.c-nrpp.ca