

RADON VENTING SYSTEM GUIDE

One of the additional advantages of PROFORM HD is that while it provides superior foundation drainage, it also functions as a part of a radon venting system. This guide provides a recommended solution for sub-slab perimeter radon venting. Alternate venting configurations may be utilized provided they meet all applicable codes and environmental agency requirements.

Passive Venting Systems

1. A passive venting system, which is installed without a fan, must have the vertical stack vent pipe installed on the interior of the structure. This is to ensure that there is sufficient temperature differential within the stack to promote an adequate draft.
2. With the PROFORM HD draining to an interior Prinsco Sump Basin, no additional outlets will be needed. The vertical stack vent pipe will be connected to the sump basin with the use of a gasketed Radon Safety Locking Lid. Other outlet vent configurations can be utilized as well.
3. Fill the sub-slab space with a minimum of 4" of a gas-permeable material, such as a clean gravel.
4. Place a continuous layer of polyethylene sheeting or an air-gap membrane under the entire slab, overlapping at the seams to serve as a soil-gas retarder.
5. After the basement floor is completed, seal and caulk around the perimeter of the basement floor and around any openings in the floor such as floor drains, utility entries, or cracks to retard any soil-gas entry.
6. Install a 4" vertical stack directly over the sump pit location. Do not use 90° elbows in the vertical stack vent run. Properly seal and flash the vent outlet at the roof line.
7. All exposed and visible interior radon vent pipes should be identified with at least one label on each floor level which reads: "Radon Venting System."
8. Provide for rough-in wiring in the attic area near the vertical stack for the installation of a fan and system failure warning device. If subsequent tests indicate radon levels in excess of 4 pCi/L or the maximum level defined by local code or practices, the passive system shall be converted to an active system.

Active Venting Systems

A ventilation fan is incorporated into the vertical stack pipe to convert from a passive system to an active system. For active systems with a fan, the vertical stack pipe may be located on the exterior of the house. The ventilation fan should be installed in the attic or on the exterior of the house, never in the basement.

A system warning device must also be installed in an easily accessible location to monitor the system.

PROFORM HD and related system components should be installed in accordance with all applicable codes and in conformance with EPA "Model Standards and Techniques for Control of Radon in New Residential Buildings." Contact the United States Environmental Protection Agency and/or state and local environmental agencies for more specific information on radon control.

