

RADONBLOCK™

INSTALLATION GUIDELINES

Please Note: Read these instructions thoroughly before installation to ensure proper use of Radon Block™.

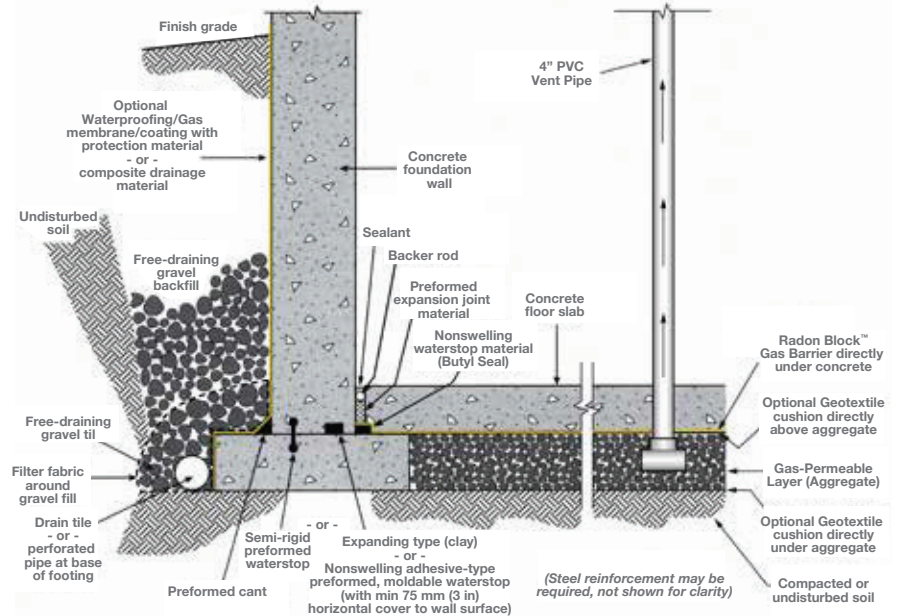
ASTM E 1465, ASTM E 2121 and ASTM E 1643 also provide valuable information regarding the installation of vapour/gas barriers. When installing this product, contractors shall conform to all applicable local, state and federal regulations and laws pertaining to residential and commercial building construction.

When Radon Block™ gas barrier is used as part of an active control system for radon or other gas, a ventilation system will be required.

If designed as a passive system, it is recommended to install a ventilation system that could be converted to an active system if needed.

MATERIALS LIST

- Radon Block™ Vapour/Gas Barrier
- VaporSeal™ 4" Seaming Tape
- VaporSeal™ 12" Seaming/Repair Tape
- Butyl Seal 2-Sided Tape



Elements of a moisture/gas-resistant floor system. General illustration only. (Note: this example shows multiple options for waterstop placement.) Original diagrams in this guide reprinted with permission by the Portland Cement Association (reference on page 4).

1

RADON BLOCK™ PLACEMENT

- 1.1** Level and tamp or roll granular base as specified. A base for a gas-reduction system may require a 4" to 6" gas permeable layer of clean coarse aggregate as specified by your architectural or structural drawings after installation of the recommended gas collection system. In this situation, a cushion layer consisting of a non-woven geotextile fabric placed directly under Radon Block™ will help protect the barrier from damage due to possible sharp coarse aggregate.
- 1.2** Unroll Radon Block™ running the longest dimension parallel with the direction of the pour and pull open all folds to full width (figure 1).
- 1.3** Lap Radon Block™ over the footings and seal with Butyl Seal tape at the footing-wall connection. Prime concrete surfaces, when necessary, and assure they are dry and clean prior to applying Butyl Seal Tape. Apply even and firm pressure with a rubber roller. Overlap joints a minimum of 6" and seal overlap with 4" VaporSeal™ Tape. When used as a gas barrier, overlap joints a minimum of 12" and seal in-between overlap with an optional 2-sided Butyl Seal Tape. Then seal with 4" VaporSeal™ Tape centered on the overlap seam (figure 2).

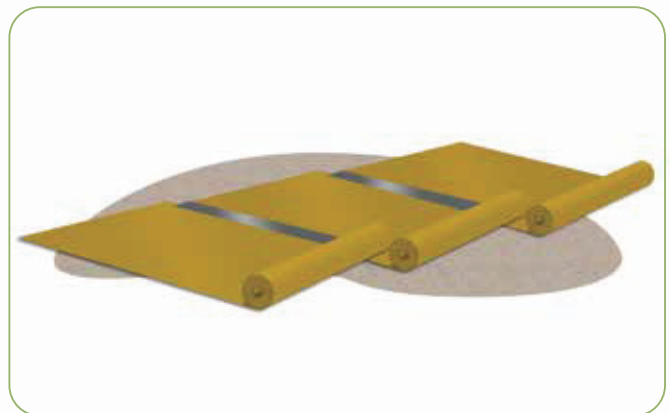


Figure 1. Radon Block™ Overlapping Roll-out Method

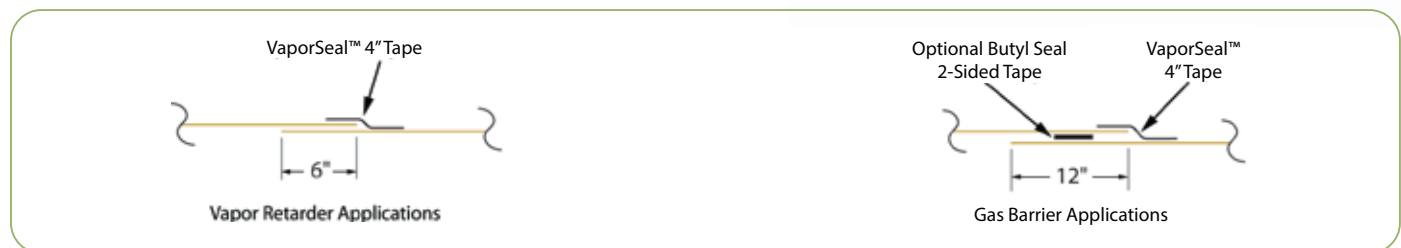


Figure 2: Radon Block™ Overlap Joint Sealing Methods

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RADON BLOCK™ REPAIR INSTRUCTIONS

- 1.7 Proper installation requires all holes and openings are repaired prior to placing concrete. When patching small holes, simply cut a 12" long piece of 12" wide VaporSeal™ tape. Remove release liner and center over the opening. Apply pressure to create a seal (figure 14-15).
- 1.8 When installing Radon Block™ around pipe penetrations, vertical columns, electrical ducts and other obstructions, you will find it necessary to cut it to the nearest outside edge. This cut can be easily sealed with 12" wide VaporSeal™ tape, by simply centering it over the cut, 6" on either side. Once the tape is placed correctly, apply pressure to assure a complete seal (figure 16).

Reminder Note: All holes or penetrations through the membrane will need to be patched with 12" VaporSeal™ Tape.

2

RADON BLOCK™ PROTECTION

- 2.1 When installing reinforcing steel and utilities, in addition to the placement of concrete, take precaution to protect Radon Block™. Carelessness during installation can damage the most puncture-resistant membrane. Sheets of plywood cushioned with geotextile fabric temporarily placed on Radon Block™ provide for additional protection in high traffic areas including concrete buggies.
- 2.2 Use only brick-type or chair-type reinforcing bar supports to protect Radon Block™ from puncture.
- 2.3 Avoid driving stakes through Radon Block™. If this cannot be avoided, each individual hole must be repaired per section 1.7.
- 2.4 To avoid penetrating Radon Block™ when installing screed supports, utilize non-penetrating support, such as the Mako® Screed Support System (figure 17). Avoid driving stakes through Radon Block™. If this cannot be avoided, each individual hole must be repaired per figures 14-15.
- 2.5 If a cushion or blotter layer is required in the design between Radon Block™ and the slab, additional care should be given if sharp crushed rock is used. Washed rock will provide less chance of damage during placement. Care must be taken to protect blotter layer from precipitation before concrete is placed.

Radon Block™ Gas & Moisture Barrier can be identified on site as gold/white in color printed in black ink with following logo and classification listing (figure 18).

* Patent Pending



Figure 18.

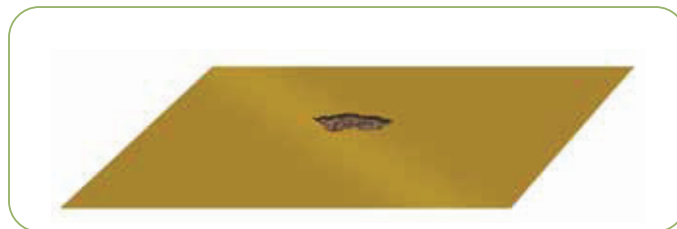


Figure 14.

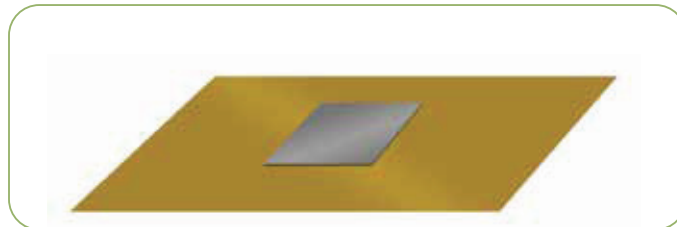


Figure 15.

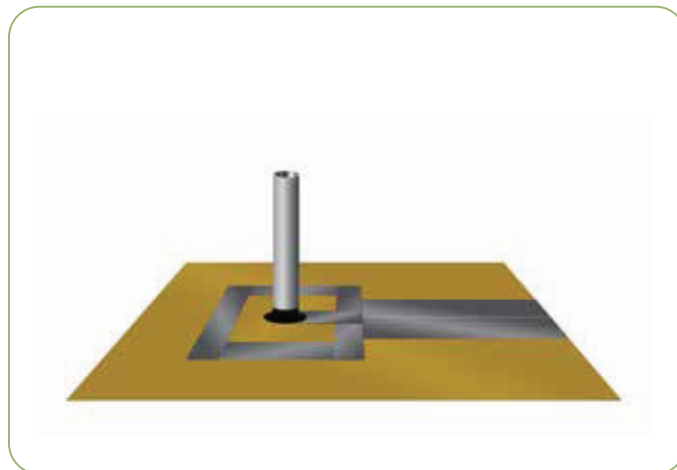


Figure 16.



Figure 17.

Original diagrams reprinted with permission by the Portland Cement Association. Reference: Kanare, Howard M., Concrete Floors and Moisture, EB119, Portland Cement Association, Skokie, Illinois, and National Ready Mixed Concrete Association, Silver Spring, Maryland, USA, 2008, 176 pages.

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odour transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RADON ENVIRONMENTAL MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.