The following instructions are provided for the installation of Radon Guard® rigid board sub-slab insulation and radon gas mitigation. Radon Guard should be installed by a professional installer that has fully read and understands these instructions. The instructions herein provide general guidance only and do not cover all aspects related to the installation or use of insulation in a building.

Before starting, ensure that the installation complies with the applicable building code requirements. The building code may have requirements for thickness and R-value of the Radon Guard, vapor retarders, interior thermal barriers and finish materials, ventilation, insulation in adjacent areas, caulking and sealing, and other items.

As the installer, you are solely responsible for the proper installation of all materials, following product label instructions and for using proper safety precautions during installation to avoid injury. The Radon Guard manufacturer is not responsible for building design and accepts no responsibility for the performance of its products resulting from improper building design, construction faults, or defective installation workmanship.

Tools Needed
- Tape Measure
- Utility Knife
- Straightedge
- Cordless Drill and Circle Bit
- Saw
- Caulk Gun

Protective Gear
- Work Gloves
- Loose-fitting, long-sleeved shirt
- OSHA-approved safety glasses
- Disposable dust respirator (NIOSH or MSHA approved)
- No requirement for re-entry or re-occupancy times.

DISCLAIMER
Guidelines provided herein give basic information and illustrate examples of Radon Guard installation. The basic information provide herein is not intended to cover every potential use and application of the Radon Guard. It is the responsibility of the installer to become familiar with his specific application and determine if the Radon Guard is suitable. By commencing work, the installer accepts full responsibility for the proper and safe installation of Radon Guard at his job site. Furthermore, it is the sole responsibility of the installer to meet all federal and local regulatory requirements for job site safety for himself, his workers and any others on the job site while in the execution of all phases of the Radon Guard installation.
INSTALLATION INSTRUCTIONS - TYPICAL CONDITIONS

Prepare Sub-Slab Area

1. Prepare sub-slab area per industry standard, per code, or per engineer’s requirements.
2. Install under-slab infrastructure and utilities required below the Radon Guard (sewer, electrical, etc.).
3. Radon Guard can be laid directly on undisturbed soil (no organics), compacted fill, or a sand base.

Radon Guard Panels

1. Lay Radon Guard panels side by side with edges butting and pedestals facing down.
2. Align the Radon Guard panels butted to each other side by side in any pattern desired.
3. Cover the entire under-slab area.
4. Trim panels to fit odd sizes and penetrations.
5. Use low-expanding aerosol foam to fill large penetrations and excessive voids.
Gas Exhaust Vent

1. Select a convenient location to allow direct vertical access for the exhaust vent pipe(s).
   Note: Ensure continuity of Radon Guard panels ventilation to exhaust vent pipe. Some installation may require more than one exhaust vent pipe.
2. Cut a 4” diameter hole in the Radon Guard panel.
3. Insert gas exhaust vent collar through gas mitigation panel with flange on top side of panel, ensure collar fits tightly.
4. Insert gas vent exhaust pipe into collar, ensure pipe is 6 inches minimum longer than collar.
5. Ensure airway is open to underside of panel and not blocked.
6. Temporarily cap pipe to ensure no debris enters and mark with radon information as required by building code.

Sealant

1. Apply sealant around perimeter and interior footings to provide a means to hold and seal the soil-gas-retarder to the foundation.
Soil Gas Retarder Membrane

1. Install an approved soil gas retarder membrane over the Radon Guard.
2. Each piece of the soil-gas-retarder should overlap the prior piece.
3. Tape all soil-gas-retarder joints.
4. Tape gas exhaust vent and around all penetrations securely to the soil-gas-retarder membrane.
Concrete Slab

1. Pour a concrete slab per industry standard, per code or per engineer’s requirements.
2. Install any in-slab items required per industry standard, per code or per engineer’s requirements (e.g. steel reinforcing, radiant heating, block-outs etc.).
3. Caulk all penetrations and edges.

Exhaust Ventilation Pipe

1. Install passive gas mitigation exhaust piping vent system to outdoors.
2. The underside channels of the Radon Guard provide a ventilation cavity to vent out radon and other sub slab gases, as well as being a pathway allowing water drainage.
3. Optional - Install in-line gas exhaust fan in exhaust pipe.