

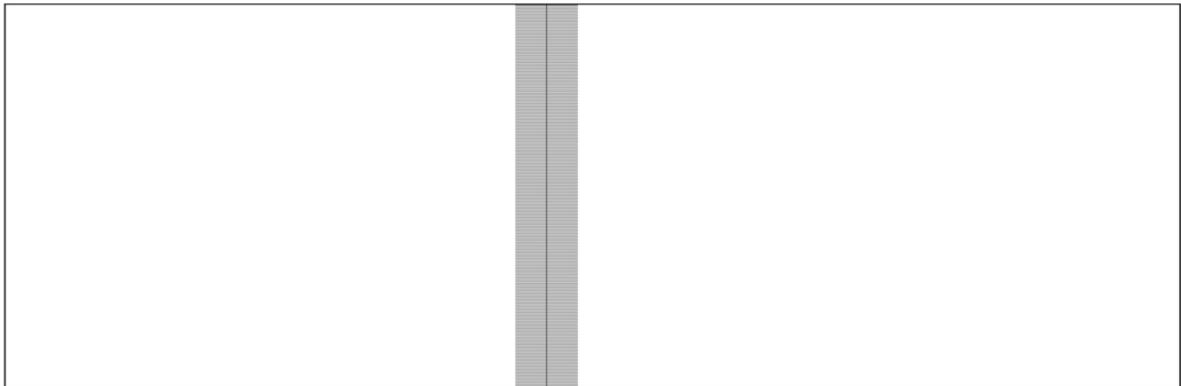
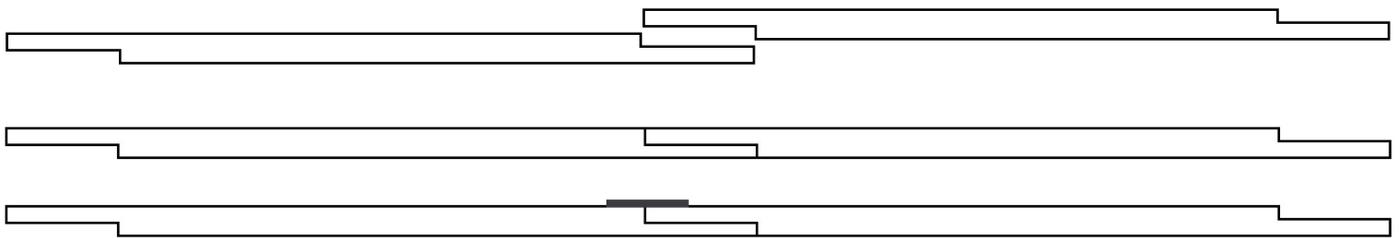
Low-E Slab Shield

USE & INSTALLATION GUIDELINES

Low-E SlabShield® is a combination vapor barrier, radon barrier and concrete slab insulation all-in-one. It is light weight and easy to install. It is designed to be rolled out directly over any aggregate base and any thickness concrete slab can be poured directly over it.

This durable and flexible product is a unique combination of polyethylene foam laminated to both sides of a 99.4% pure aluminum sheet. It also features a built in shiplap joint system that helps make seaming and sealing a breeze.

Below is a simple drawing and a few pictures that illustrates the process of joining two rolls of Low-E SlabShield® via the shiplap edge:



Standard Insulation / Vapor Barrier & Hydronic Heating Applications:

Low-E SlabShield® can be used in applications both with or without in-floor radiant heating systems. When being used as an under slab insulation, the installer should check codes

pertaining to residential and/or commercial building construction. Specifically those related to perimeter R-Value requirements.

Surface Preparation:

Prepare aggregate base of proper depth by leveling and tamping as required by code for the system being installed.

Roll Out Installation:

Always unroll Low-E SlabShield® in the same direction so the built in flanges overlap in shiplap style running the longest dimension parallel with the direction of the pour.

NOTE: It is not necessary to overlap the product more than the flanges provided.

Penetrations:

Where a complete vapor barrier is required seal around any and all plumbing, conduit, drains, metal or concrete support columns and any other penetrations that come through the Low-E SlabShield®. Most smaller penetrations can be sealed with a combination of pipe boots and Low-E seam tape or butyl tape.

Re-bar and Hydronic Tubing Supports:

Use only brick-type or chair-type reinforcing bar supports to protect Low-E SlabShield® from puncture. Avoid driving stakes through Low-E SlabShield®. If this cannot be avoided, each individual hole must be repaired with Low-E seam tape or butyl tape.

Radon Barrier Application:

When Low-E SlabShield® is being installed as part of a radon mitigation or other gas mitigation system (active or passive) the installer should be familiar with code requirements pertaining to residential and commercial building construction and proper radon barrier installation methods. In either case it is recommended to install a ventilation system that could be converted to an active system if needed. Good reference on that subject can be found by consulting ASTM E1465, ASTM E2121 and ASTM E1643.

Typical Materials Needed For Proper Installation:

1. Low-E SlabShield®
2. Gas barrier 4” or 6” and 12” butyl seam / repair tape
3. Miscellaneous protrusion covers, boots, concrete reinforcing bar supports, etc. that will be needed to support concrete strengthening systems and avoid penetrating the Low-E SlabShield®

Roll Out Installation:

Always unroll Low-E SlabShield® in the same direction so the built in flanges overlap in shiplap style running the longest dimension parallel with the direction of the pour.

NOTE: It is not necessary to overlap the product more than the flanges provided.

Radon Seal:

Sealing seams and edges is very important when the installation is to prevent Radon gas from entering the structure. Low-E SlabShield® should be sealed to the foundation walls with butyl tape. Note: It may be necessary to clean, prime and allow to dry concrete surfaces to assure proper adhesion of butyl tape. When used as a gas barrier, end of roll joints must be straight and sealed with a 4” or 6” butyl tape centered on the seam. Any cuts or slits in material must also be sealed with 6” or 12” butyl tape. Apply pressure to create a seal.

Penetrations:

Seal around any and all plumbing, conduit, drains, metal or concrete support columns or any other penetrations that come through the Low-E SlabShield®. Most smaller penetrations can be sealed with a combination of pipe boots and butyl tape.

For larger openings, patches that are at least 21” larger than the opening in all directions can be fabricated from Low-E SlabShield® excess material and sealed against the protrusions and the underlying Low-E SlabShield® with 6” or 12” butyl tape.

Use only brick-type or chair-type reinforcing bar supports to protect Low-E SlabShield® from puncture. Avoid driving stakes through Low-E SlabShield®. If this cannot be avoided, each individual hole must be repaired

Low-E SlabShield® Repair Instructions

Proper installation requires all holes and openings be repaired prior to placing concrete. When patching small holes, simply cover hole with Low-E tape. With Radon barrier applications, all holes or penetrations through the Low-E SlabShield® will need to be patched with 6” or 12” butyl tape. Apply pressure to create a seal.

Prevent Damage

Although Low-E SlabShield® is relatively strong, it is important throughout the installation process to be careful not to damage or penetrate the material as maintaining the vapor and/or radon barrier seal is the primary point of the material. In high traffic areas where concrete is being moved or other work is being performed for prolonged time periods, sheets of plywood temporarily placed on Low-E SlabShield® can provide additional protection from punctures and cuts.