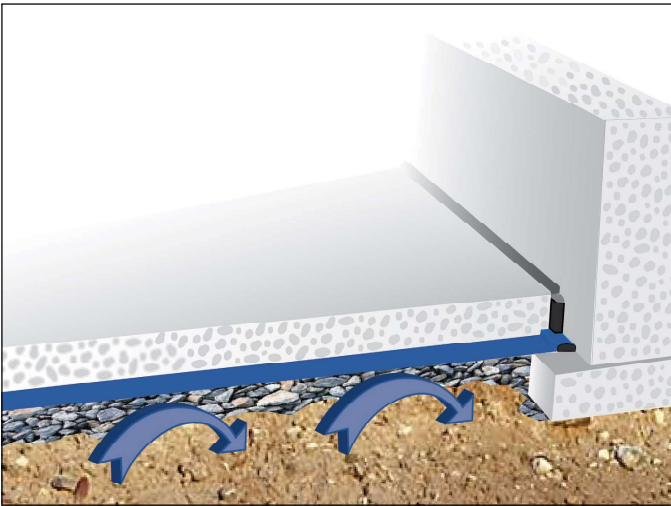


# SureBuilt

Concrete Forms & Accessories



## VaporStop™ Moisture Barrier

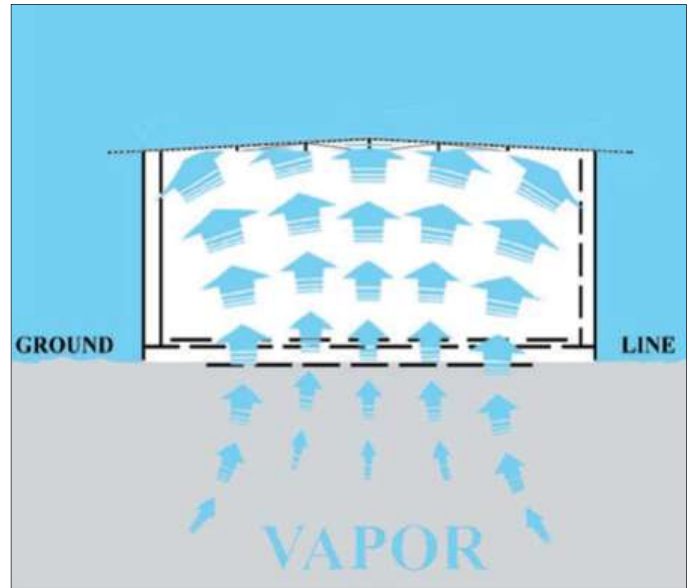


## VaporStop™ System

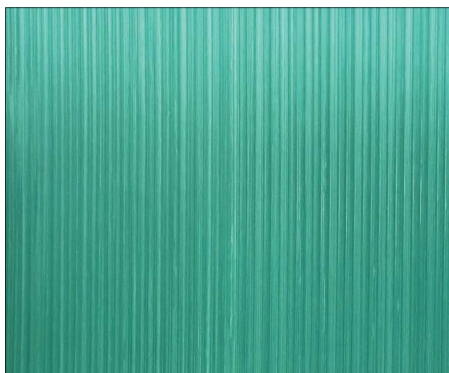
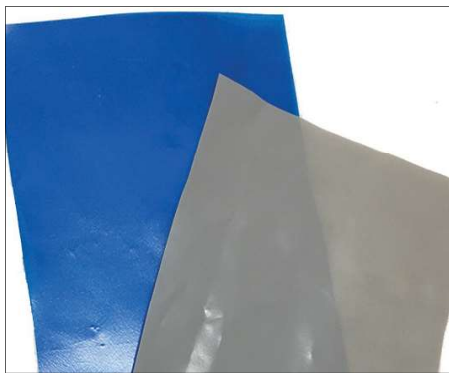
The VaporStop membrane system is a high-performance, polyethylene barrier designed to resist moisture migration through concrete slab-on-grade. The membrane is a field-tested and cost-effective method of controlling moisture transmission in enclosed structures.

The VaporStop membrane, available in 4 thicknesses, protect the flooring, finishes and furnishings in completed structures from moisture infiltration damage. A membrane also reduces condensation, mildew and mold, while improving indoor air quality.

The VaporStop membrane meets or exceeds the “Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs” (ASTM E-1745). The VaporStop membrane is designed to meet or exceed the Class A, B and C performance.



*In a structure without membrane protection, research has found that 80% of the moisture within the building originates from site ground water. (HUD Research)*



The VaporStop membrane, when properly installed (refer to back page), will provide an effective and economical method for limiting water vapor transmission through a concrete slab-on-grade.

The VaporStop Tape is a polyethylene film with pressure-sensitive adhesive, specifically designed to bond and seal the VaporStop membrane system.

VaporStop Tape is meets or exceeds the “Standard Practice for Installation of Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs” (ASTM E-1643).

The VaporStop Anti-Slip membrane has a ribbed surface to reduce risk of workers slipping and falling during damp or wet working conditions.



VaporStop™ System	
Part Number	Description
SBVS10	VaporStop Barrier 10mil 14'x210' (Gray)
SBVS15	VaporStop Barrier 15mil 14'x140' (Blue)
SBVSAS11	VaporStop Anti-Slip 11 mil 12.7'x200' (Green)
SBVSAS16	VaporStop Anti-Slip 16 mil 12.7'x150' (Green)
SBVSTAPE	VaporStop Tape 4"x180' (White or Red)

## Description

VaporStop™ is a high-performance membrane barrier used in residential and commercial projects. It is designed for use under concrete slabs, in crawl spaces and foundation walls. It controls moisture transmission within the building interior by preventing water vapor from permeating the concrete. It greatly reduces condensation and mold formation, protecting flooring, finishes and furnishings.

## Features

- Anti-Slip has 3X higher coefficient of friction to reduce risk of slip injuries in wet conditions
- Reduces damaging moisture migration
- Extremely low moisture vapor permeability
- Outstanding tear resistance
- Exceptional impact strength
- Resists attack by organisms in contacting soil

## Material

VaporStop is a single-ply membrane made from high impact polyolefin. Standard nominal 10 mil in gray and 15 mil in blue.

VaporStop Anti-Slip is a multi-layer, co-extruded, cross laminated system made from polyolefin. Standard nominal 11 mil and 16 mil in green.

VaporStop™ Physical Properties		
Nominal Thickness	10 mil	15 mil
Size	14' x 210' (2,940 SF)	14' x 140' (1,960 SF)
Weight	49 lbs/MSF	73 lbs/MSF
Tensile Strength (ASTM E154)	52 lb/in	88 lb/in
Coefficient of Friction COF (ASTM D-1894)	0.2	0.2
Puncture Resistance (ASTM D1709)	2600 g	4000 g
Water Vapor Permeability new (ASTM E154)	0.0146 Perms (grains/(ft <sup>2</sup> •hr•in•Hg))	0.009 Perms (grains/(ft <sup>2</sup> •hr•in•Hg))
Max./Min. Use Temp.	180° / -70° F	180° / -70° F
Rolls / Pallet	20	20
Rolls / Truckload	260	260

VaporStop™ Anti-Slip Physical Properties		
Nominal Thickness	11 mil	16 mil
Size	12.75' x 200' (2,550 SF)	12.75' x 150' (1,912.5 SF)
Weight	51 lbs/MSF	71 lbs/MSF
Tensile Strength (ASTM E154)	50lb/in	83.75lb/in
Coefficient of Friction COF (ASTM D-1894)	0.6	0.6
Puncture Resistance (ASTM D709)	2400 g	3960 g
Water Vapor Permeability new (ASTM E154)	0.012 Perms (grains/(ft <sup>2</sup> •hr•in•Hg))	0.007 Perms (grains/(ft <sup>2</sup> •hr•in•Hg))
Methane Permeance ASTM D1434	143.41 cm <sup>3</sup> /(m <sup>2</sup> .Atm.Day)	90.59 cm <sup>3</sup> /(m <sup>2</sup> .Atm.Day)
Radon Diffusion Coefficient K124/02/95	2.5 <sup>-11</sup> m <sup>2</sup> /S	2.4 <sup>-11</sup> m <sup>2</sup> /S
Rolls / Pallet	20	20
Rolls / Truckload	280	280

## VaporStop™ Installation

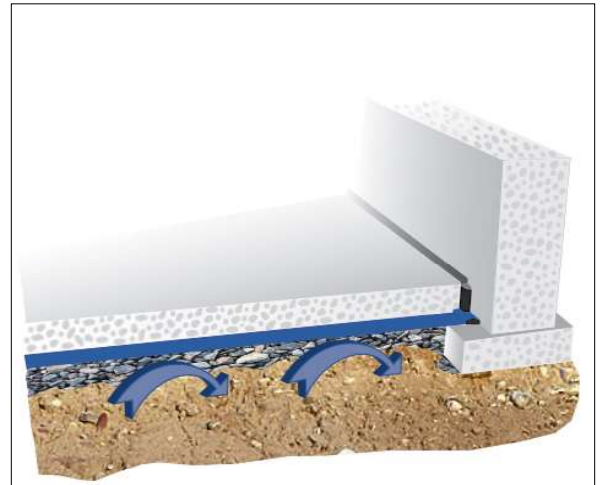
1. Consult local building codes and any specific instructions on the project drawings before installation. Do not proceed until site conditions are acceptable and approved. Installation must comply with all applicable local, state and federal code jurisdictions. Any unacceptable conditions must be corrected before installation.
2. Level and tamp/roll the granular base as specified by the project drawings. If sharp, crushed rock is used, then a layer of 1/2" fine grade compactible fill is required between the base and the VaporStop membrane to prevent tears and punctures.
3. Unroll the VaporStop membrane with the longest dimension parallel to the direction of the planned concrete placement. For a typical floor slab, lay the VaporStop membrane over the granular base and footing, stopping at the wall and sealing the end with VaporStop Tape.
4. The VaporStop membrane should completely cover the granular base in the planned concrete placement area. All joints/seams should have a 6" overlap secured with VaporStop Tape. Keep joints/seams free from dust, dirt and moisture for maximum adhesion of the pressure-sensitive VaporStop Tape.
5. Repair any tears or punctures with a VaporStop membrane patch that has a 6" overlap in all directions and securely tape the entire patch perimeter. Keep patch area free from dust, dirt and moisture for maximum adhesion of the pressure-sensitive VaporStop Tape.
6. Use only brick-type or plate-type bar supports to protect the VaporStop membrane from puncture. Do not drive forming stakes through the VaporStop membrane.
7. All pipes, ducts or other penetrations through the VaporStop membrane must be properly sealed. Boots can be fabricated from the VaporStop material and sealed with VaporStop Tape. Cut the size and shape necessary to form a tight-fitting seal around each penetration and seal all the edges with VaporStop Tape.
8. When placing concrete on the VaporStop membrane in hot weather, use a wet curing blanket to prevent the concrete from shrinking, curling or cracking as a result of rapid surface drying.
9. Contact your SureBuilt representative for technical assistance and recommendations for usual applications or conditions.

### Storage

Store products in original, unopened, undamaged containers with identification labels intact. Protect material from exposure to ultraviolet light, excessive moisture and excessive heat.

### Standards

- American Concrete Institute ACI 302.1 R-04 Guide for Concrete Floor and Slab Construction
- ASTM E-154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover
- ASTM D-1709 Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method
- ASTM E-1745 Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs
- ASTM D-1000 Standard Test Method for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications



*A properly installed VaporStop membrane prevents moisture from migrating through the concrete slab.*