



VIPER[®] CS

CRAWL SPACE VAPOR BARRIERS



ENGINEERED & TESTED

FOR THE LIFETIME

OF YOUR CRAWL SPACE



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THE IMPORTANCE OF

HEALTHY CRAWL SPACES

The crawl space is typically viewed as dark and uncomfortable with the potential to encounter odd smells and hair-raising pests. For this reason, many homeowners choose the “out of sight, out of mind” approach and pay little attention to crawl space conditions or maintenance. Despite the temptation to steer clear of the area, research shows crawl space health is critical to the overall well-being of a home and its occupants inside.

According to studies, up to 50% of indoor air is filtered through the crawl space. Poorly designed or maintained crawl spaces can breed high relative humidity, mold, mildew and dust mites. If left unchecked, these problems can degrade structural components, damage insulation integrity and lower occupant comfort leading to a host of potential financial and medical issues.

Unsealed or poorly maintained crawl spaces can also create pathways for radon to enter into the home.



Radon is an odorless radioactive gas formed from the natural breakdown of uranium in soil, rock and water. According to the EPA, radon is the second leading cause of lung cancer. Properly encapsulated crawl spaces can mitigate radon problems by creating a barrier to entry for soil gases.

Building science clearly shows crawl spaces are an integral part of a building's structural and envelope system. By maintaining a healthy crawl space, homeowners can avoid costly repairs, ensure good indoor air quality and improve the energy efficiency of their homes.



Up to 50% of the air you breathe in your home is from your crawl space.

CHOOSING THE RIGHT VAPOR BARRIER



Quality encapsulation projects start with a high-performance vapor barrier.

To achieve your moisture control objectives, it is important to know what to look for in a vapor barrier.

A properly designed encapsulation system controls moisture and soil gas intrusion, facilitating a healthy crawlspace environment. Professional contractors know each home is unique and may require different strategies and components to create an optimal system. They also know quality encapsulation jobs start with a high-performance vapor barrier. To achieve moisture and soil gas control objectives, it is vital to know what to look for when choosing a vapor barrier.

ENGINEERED

While standard clear or black poly membranes are commonly used in construction applications due to their low cost, the challenging crawl space environment requires more durable and resilient options. Professionals should seek vapor barriers that can withstand foot traffic during and after install, are rated for contact with soil and will not deteriorate over time.



Viper CS is engineered using premium virgin resin without any recycled content. The resin is then converted into a multi-layer membrane using proprietary extrusion methods. The result is a liner that resists punctures and tears during install, does not emit odors and is built for long-term performance.

TESTED

When evaluating vapor barrier options, a common mistake is to assume thicker is better. This is not always the case. Since membranes can be engineered with various additives, layers and configurations — thickness should not be the primary evaluation metric. Rather, look for products tested with industry standards for key performance characteristics and compare those results.



Viper CS products are third-party tested for puncture resistance, tear strength, water vapor permeance and radon resistance. High marks on these critical performance specifications give **Viper CS** “Class A” status according to ASTM E 1745 (*Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs*).

GUARANTEED

Given the time, labor and expense of completing a crawl space encapsulation project, choosing a high-performance vapor barrier that will last is crucial. Ensuring the vapor barrier will provide long-lasting protection will not only bring peace of mind, but will save money and time in the long run.



Viper CS comes with a lifetime warranty and is guaranteed to last as long as the structure it was designed to protect. With millions of square feet installed across North America and a track record spanning decades, **Viper CS** is top-of-class for proven performance.

HIGH-PERFORMANCE VAPOR BARRIERS

Viper CS 6-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100', 4' x 200'
Weight 30 lbs/MSF
Rolls/Pallet 25



Where To Use

LIGHT-DUTY APPLICATIONS

Viper CS 6-mil is an excellent replacement for standard 6-mil poly sheeting. Providing higher strength than blown films at an economical price point, Viper CS 6-mil effectively controls moisture in the crawlspace and will not break down over time.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



Viper CS 12-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100', 4' x 200'
Weight 38 lbs/MSF
Rolls/Pallet 25



Where To Use

MODERATE-DUTY APPLICATIONS

Viper CS 12-mil is designed for applications with moderate foot traffic. Providing a nice balance between cost and performance, Viper CS 12-mil prevents punctures and tears while protecting the space from vapor intrusion.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



HIGH-PERFORMANCE VAPOR BARRIERS

Viper CS 16-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100'
Weight 55 lbs/MSF
Rolls/Pallet 25



Where To Use

HEAVY-DUTY APPLICATIONS

Viper CS 16-mil is a great choice for applications with heavier foot traffic. Offering high tear resistance and durability, Viper CS 16-mil is well-suited for demanding environments both during and after installation.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



Viper CS 20-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100'
Weight 62 lbs/MSF
Rolls/Pallet 25



Where To Use

EXTREME-DUTY APPLICATIONS

Viper CS 20-mil features our highest tensile strength and puncture resistance. Best suited for applications requiring extreme resistance to foot traffic, storage and other activity that requires robust material durability.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



HIGH-PERFORMANCE VAPOR BARRIERS

Viper CS II 8-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100'
Weight 39 lbs/MSF
Rolls/Pallet 20



Where To Use

LIGHT-DUTY APPLICATIONS

Viper CS II 8-mil is designed for light-duty, low foot traffic crawl space applications. Engineered specifically for controlling moisture effectively in the crawl space, Viper CS II 8-mil retains its durability and will not break down over time.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



Viper CS II 10-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100'
Weight 48 lbs/MSF
Rolls/Pallet 20



Where To Use

MODERATE-DUTY APPLICATIONS

Viper CS II 10-mil is designed for moderate-duty, average foot traffic applications. Specially engineered to balance cost and performance, Viper CS II 10-mil prevents punctures and tears while protecting the space from vapor intrusion.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



HIGH-PERFORMANCE VAPOR BARRIERS

Viper CS II 15-mil

WEIGHTS & MEASURES

Roll Sizes	12' x 100'
Weight	71 lbs/MSF
Rolls/Pallet	20



Where To Use

HEAVY-DUTY APPLICATIONS

Viper CS II 15-mil is designed for heavy-duty, substantial foot traffic applications. Rated highly for both puncture and tear strength, Viper CS II 15-mil is engineered to withstand demanding environments both during and after installation.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



Viper CS II 20-mil

WEIGHTS & MEASURES

Roll Sizes 12' x 100'
Weight 97 lbs/MSF
Rolls/Pallet 20



Where To Use

EXTREME-DUTY APPLICATIONS

Viper CS II 20-mil is designed for extreme-duty applications. Boasting our highest tensile and puncture resistance for a co-extruded film, Viper CS II 20-mil features strong material durability for extreme resistance to foot traffic.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



Lifetime Warranty



ENHANCED VAPOR BARRIERS



Viper CSX Crawl Space Vapor Barrier

Where To Use

SUPERIOR AESTHETIC

For applications requiring a premium look, Viper CSX provides a crisp, bright white finish. Featuring a tough cross-woven skin and a flexible closed-cell foam core, Viper CSX lays flat and minimizes wrinkles.



DOCUMENTS & DOWNLOADS

Technical Data

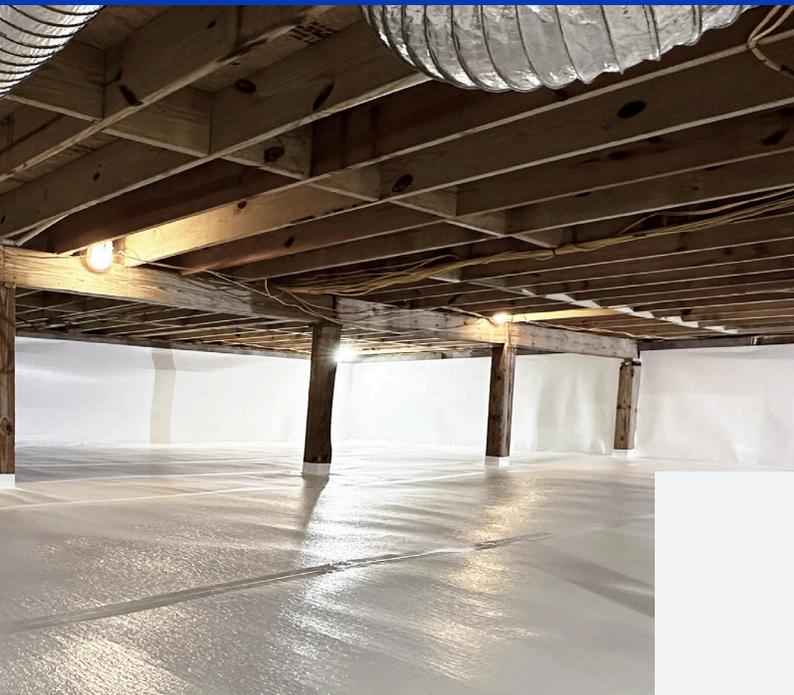
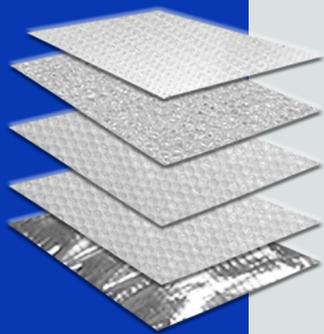


Safety Data



Insul-Barrier

Insulated
Vapor Barrier



Where To Use

INSULATION + VAPOR BARRIER

Insul-Barrier provides both a vapor barrier and insulation for crawl space walls and floors where a thermal break is needed. Easier to handle than rigid foam board and contains no itchy, harmful fibers.

DOCUMENTS & DOWNLOADS

Technical Data



Safety Data



VAPOR BARRIER ACCESSORIES

Viper Vapor Tape



Viper Vapor Tape is a white polyethylene film coated with an aggressive adhesive designed for seaming, splicing, sealing and patching vapor barrier materials.

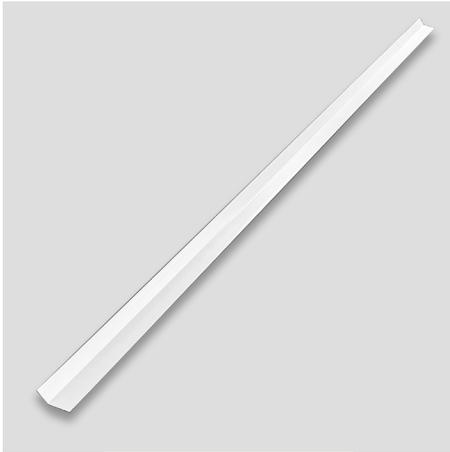
Viper Double Bond



Viper Double Bond Tape is a double-sided butyl tape used for seaming and as a gasket material between the vapor barrier membrane and foundation walls.



Viper CS Term Bar



Viper CS Term Bar can be installed horizontally to mechanically hold liner and provide a sealant “shelf” or installed vertically as furring strips to create R-value enhancing air space.

Viper CS Liner Pins



Viper CS Liner Pins are designed to fasten vapor barrier materials to masonry walls, providing strong mechanical attachment in concrete block, brick or stone.



RESOURCES



Encapsulation Training

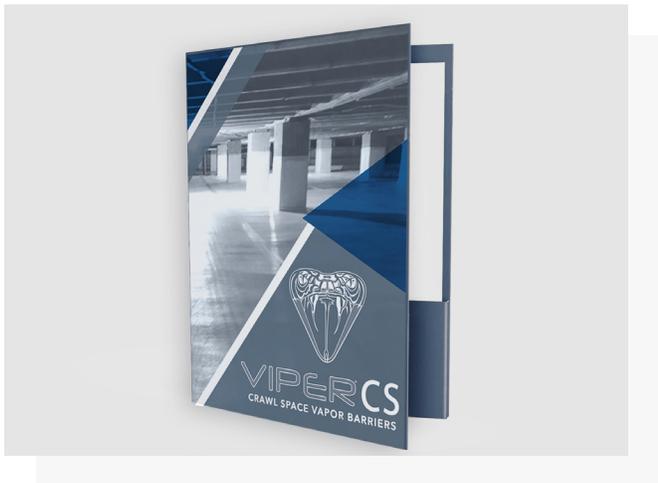


Enter your information and we will find you the best training opportunities in your area.

Layout Guide



Download the layout sheet for measurements and quantities on your next Viper CS project.



Installation Instructions



Scan to download for detailed preparation, planning and the installation of Viper CS.



To promote best practices and professional grade installs, ISI supports a nationwide distribution network and year-round training opportunities.

PROS CHOOSE QUALITY

VIPER CS CROSS-WOVEN CRAWL SPACE VAPOR BARRIERS



VIPER CS II CO-EXTRUDED CRAWL SPACE VAPOR BARRIERS



VIPER CSX CRAWL SPACE VAPOR BARRIER



INSUL-BARRIER INSULATED VAPOR BARRIER





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