Geo-Seal® is a sub-slab vapor intrusion barrier system designed to eliminate vapor intrusion for brownfields or any type of environmentally-impaired site. Geo-Seal is a chemically-resistant material placed between the foundation of the building and the soil pad to eliminate vapor intrusion pathways and stop contaminant vapors from permeating through the slab. By deploying Geo-Seal, developers can ensure a healthy indoor environment while reducing the cost of site remediation and expediting site construction.

- Geo-Seal is a composite system that creates the ideal blend between constructability and chemical resistance by using both high density polyethylene (HDPE) and spray applied asphalt latex.
- Geo-Seal has been tested and proven to be highly effective against VOCs like chlorinated solvents and petroleum contaminants, and, methane.
- Geo-Seal is the 1st patented vapor intrusion barrier system in the US
- Geo-Seal has gained wide approval among various regulatory agencies across the country.
Geo-Seal BASE
The BASE layer is rolled out geotextile facing down, which allows Geo-Seal CORE to be applied directly to the high density polyethylene. The BASE layer provides the ultimate substrate and enables the spray layer to be free of shadowing and pinholes.

Geo-Seal CORE
The CORE is applied at 60 mils, is sprayed to the base layer, seals around penetrations and seals the seams of the BASE layer.

Geo-Seal BOND
A proprietary protection layer is placed over the CORE layer to enhance the curing of the membrane and increase puncture resistance.

Vapor-Vent
• Eliminates the need for trenching
• Cost-effective compared to pipe and gravel systems
• Eliminates long-term costs when configured as a passive system
• Allows for rapid installation
• When used with Geo-Seal provides maximum protection against contaminated vapor
Geo-Seal Triple-Layer System
(2 Chemical Resistant Layers + 1 Spray Applied Core Layer)

Dual Chemical Resistant Layers
The BASE layer (bottom) and the BOND layer (top) are composed of a high-density polyethylene material bonded to a geo-textile on the out-facing side. High density polyethylene is known for chemical resistance, high tensile strength, excellent stress-crack resistance and for highly reliable subsurface containment. The geo-textile which is physically bonded to the chemical resistant layer accomplishes two goals; it allows the BOND layer to adhere to the slab, and provides a friction course between the BASE layer and the soil.

Spray Applied CORE Layer
The CORE layer is composed of a unique, elastic co-polymer modified asphaltic membrane which also provides additional protection against vapor transmission. This layer creates a highly-effective seal around slab penetrations and eliminates the need for mechanical fastening at termination points.

Chemical Resistance
The dual chemical resistant layers combined with the spray CORE form a barrier resistant to the most concentrated chemical pollutant vapors.

Enhanced Curing
Geo-Seal is “construction friendly” as the reduced curing time of the Geo-Seal CORE layer and the ability to apply it in cooler temperatures ensures quick installation and minimizes the impact on construction schedules.
Puncture Resistance
Geo-Seal forms a highly puncture resistant barrier that greatly reduces the chance of damage occurring after installation and prior to the placement of concrete.

Removing Contained Vapors
Vapor-Vent can be used in conjunction with Geo-Seal to alleviate the buildup of vapors beneath structures as a result of vapor barrier implementation. Vapor-Vent can be utilized as an active or passive ventilation system depending on the requirements of the design engineer.

Certified Applicator Network
The application of Geo-Seal and Vapor-Vent can be performed by any one of many certified applicators throughout the country.

Service and Support
Geo-Seal representatives are available to provide job and site specific assistance. A local representative can ensure Geo-Seal and Vapor-Vent is installed as per the specification.
World Class Clients

Environmental consultants, engineers, and real estate professionals trust Land Science to produce results knowing our expertise and industry knowledge has been proven time and again at the job site. Our world class clients include leaders in the food, banking, government, and housing industries.

Get Started Today

To receive a custom vapor intrusion solution, please call 949.481.8118 or email info@landsciencetech.com

One of our Technical Solutions Managers will review your project details and provide you with a customized vapor intrusion solution designed to achieve your goals.
EXPERTS IN VAPOR INTRUSION MITIGATION

Land Science® develops vapor intrusion mitigation solutions that protect people and invigorate renewal of contaminated properties.

We leverage our industry expertise to assist clients in developing site specific solutions that are technically sound and cost-effective.