

Construction Moves Forward on New Bank Location Once Geo-Seal® is Installed to Mitigate Vapor Intrusion Risk

Project Highlights

- Geo-Seal®'s triple-layer composite protection and high puncture resistance provided ease-of-mind to the client looking to mitigate vapor intrusion
- Vapor-Vent™ Trenchless Vent System installed to collect and remove buildup of vapors beneath the structure
- Installation of 4,000 ft²

Project Summary

The construction of a new Compass Bank location was scheduled to be built over a site with chlorinated solvents residing in the subsurface. A vapor intrusion membrane was sought to prevent vapor intrusion entering the building from the contamination below. Initially, a simple spray-applied asphalt/latex material was specified. However, TGE Resources requested Geo-Seal be approved by the design engineer because of its superior chemical resistance and ability to prevent chlorinated solvent vapors from migrating into the new building's construction.

Geo-Seal was approved by Brownfield Subslab and favored as a superior alternative to the specified barrier because of its ability to resist contaminant permeation breakthrough for periods 18 times longer than a simple asphalt/latex membrane. Geo-Seal proved to be a cost-effective choice for the owner and was successfully installed along with Vapor-Vent™ trenchless venting system. Overseeing the installation was Brownfield Subslab, a certified Geo-Seal inspector.

Technology Description

Geo-Seal is a gas vapor management technology designed to eliminate vapor intrusion on 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.

Vapor-Vent is a low profile vent system that can be used in lieu of slotted PVC pipe. The speed of installation and the proximity of the vent to the barrier provide cost savings and performance benefits compared to other technologies.

Vapor-Vent can be installed to passively or actively vent vapors from under the building. The movement for energy efficient buildings and the cost to maintain active venting systems make passive systems an attractive alternative. In addition, a passive system can be designed to become active if needed.



Site Details

Site Type: Bank

Contaminant of Concern: Chlorinated solvents

Vapor Intrusion Solution: Vapor intrusion barrier

Treatment Area: 4,000 ft²

Technology Used:



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