

CASE STUDY: KY DEP States Geo-Seal® is an “Excellent Vapor Intrusion Barrier System” for the Protection of Student Housing

Student Housing – Louisville, KY

Student housing was to be constructed in Louisville, KY over 42 acres of vacant Brownfield property. Chlorinated solvents were discovered in the subsurface soil and groundwater beneath the proposed construction area and caused concern over potential indoor air vapor within the housing complex. Terracon Consultants, Inc. specified Geo-Seal® Vapor Intrusion Barrier and Vapor-Vent Trenchless Venting System in their risk management plan. The Kentucky Division of Waste Management under the Kentucky Department of Environmental Protection evaluated the Geo-Seal vapor barrier along with other membranes and determined Geo-Seal to be an “excellent vapor intrusion barrier system” based on its ability to resist contaminant permeation and breakthrough. 142,000 square feet of Geo-Seal was successfully installed.



Installing the Geo-Seal BOND Layer

Geo-Seal Gas Vapor Barrier

- Approved by KY DEP – Division of Waste Management
- Triple layer protection from chlorinated solvent vapors
- Approximately 142,000 ft² installed



Seaming the Geo-Seal BASE

About the Geo-Seal® Gas Vapor Barrier

Geo-Seal is the ideal blend of chemically resistant HDPE sheet and spray applied membrane technologies, resulting, in the most appropriate gas vapor barrier technology used to eliminate vapor intrusion on Brownfields or environmentally impaired sites. Geo-Seal is a chemically resistant material placed between the subgrade and building foundation to seal off exposure pathways and stop vapor intrusion into buildings. By selecting Geo-Seal, developers can ensure a healthy indoor environment while reducing the cost of site remediation and expediting site construction.



1700 penetrations overall