CASE STUDY: Geo-Seal® Eliminates the Need for Costly Time Consuming Multi-Membrane Installation

Kent County Courthouse – Dover, DE

The new Kent County Courthouse was in need of gas vapor mitigation resulting from a subsurface contaminant plume. Originally, a spray-applied asphalt/latex membrane for gas vapor protection was specified in addition to a bentonite product for waterproofing protection. The end result would have required the installation of two membrane systems, one for gas vapor and one for waterproofing. As the project progressed, the construction start was scheduled to take place in the winter. The low temperatures posed a problem for the installation of the specified gas vapor barrier due to the costly need for tenting and artificial heating (per the manufacturer's requirements). Alternatively, Geo-Seal® Vapor Intrusion Barrier was recommended to eliminate the need for two products to satisfy vapor mitigation and waterproof protection. The use of Geo-Seal also avoided costly and more complicated installation (tenting and heating). Geo-Seal was subjected to a rigorous review process and was ultimately approved by Ten Bears Environmental, the State of Delaware and Moeckel Carbonell Associates because of the ability of one product to provide both chemical and water protection.

On-site Geo-Seal spray-applied CORE layer installation

Project Highlights:

- Approximately 55,000 ft^2 installed
- Geo-Seal eliminated the need for more costly and time consuming multiple membrane applications
- Applied in colder temperatures below 45°F without artificial heat saving the client time and money

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

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