

Strict quality assurance procedures ensure reliable vapor intrusion protection

Vapor intrusion has become a significant environmental issue for regulators, industry leaders, and concerned residents nationwide. The use of a spray-applied vapor barrier to protect against the threat of vapor intrusion has become a widely recognized application by numerous local and state regulatory and guidance groups. These groups also recommend that a gas venting system be used in conjunction with the vapor barrier for optimum mitigation of gas vapors.



PROJECT DETAILS

Toronto Fire Services

Design Engineer: Golder Associates

Certified Installer: Terrafix Environmental

LOCATION

Toronto, Ontario, Canada

PRODUCTS USED

LIQUID BOOT® Spray-Applied Vapor Barrier

Approved LIQUID BOOT® installer, Terrafix Environmental, ensures a proper installation and a vapor-tight seal around all penetration and footings, critical vapor intrusion pathway areas that present the most potential risk for compromised indoor air quality within the structure. LIQUID BOOT® can only be installed by those trained and approved by CETCO, helping to ensure a quality and reliable gas vapor membrane system for your project.

CHALLENGE:

To install a seamless and gas-tight gas vapor barrier for a project with a tight construction timeline. Scheduling and coordination of material and labor to the jobsite was critical to the success of the project and a system that could be installed rapidly was critical for meeting the strict time constraints of the project.

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SOLUTION:

The engineer, with the assistance from approved LIQUID BOOT® vapor barrier installer was able to develop a comprehensive gas vapor mitigation strategy for the site to prevent vapor intrusion into the structure. As part of the remedial strategy, Terrafix Environmental performed two smoke tests on the site, one of which took place after the initial installation of the LIQUID BOOT® vapor barrier. A second smoke test was conducted after installation of the rebar, which had been done so by another sub-contractor, which consequently revealed damage to the membrane had been caused by the rebar contractor.

Unlike HDPE, gas vapor barriers that prove more difficult and labor-intensive to repair, the spray-application benefit of LIQUID BOOT® vapor barrier allows it to be easily repaired by simply re-spraying the compromised area or pinhole.

RESULT:

CETCO approved installers efficiently installed the LIQUID BOOT® vapor barrier on schedule and execution of two smoke tests helped to ensure the integrity of the vapor tight membrane, thus preventing vapor intrusion from entering the building.