

Best Practices for Quality Assurance/Quality Control for Passive Barrier Installations at New and Existing Buildings

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Background/Objectives. We intend to provide attendees with an overview of barriers QA/QC, installation expectations and specification guidelines to ensure a successful passive barrier installation.

Approach/Activities. Land Science will review the recommended quality assurance and quality control practices for membrane installation at both new and existing buildings. This presentation will focus on quality control steps to measure spray-applied barrier thickness, verify seam integrity and physical properties of composite barriers during field installation. Attendees will also be shown the typical spray equipment's, useful tools and techniques used by Certified Applicators/Inspectors to meet manufacturers' QA/QC requirements. This training will cover best practices and procedures for installing, inspecting, and evaluating passive barrier effectiveness in mitigating vapor intrusions.

Attendees will review concrete slab testing procedures necessary to ensure the appropriate application of passive barrier at existing buildings. Attendees will be shown how to evaluate concrete conditions, including physical defects (cracks, expansion joints, bug holes, etc.), and test for moisture drive and relative humidity of concrete per ASTM testing procedures.

Results/Lessons Learned. There are general misconceptions that all passive barriers will have leaks and damages either from poor workmanship or by other construction contractors. The presentation will offer clear understanding QA/QC steps and procedures to minimize imperfections in passive barrier system installations.