Positive Foundation Drainage

Do you have a leaky basement?
Do you have cracks in your foundation walls?
Do you smell mold in your basement?

Ninety percent of the above problems can be solved by maintaining positive foundation drainage.

Background

The soil removed for footings and foundation walls is seldom properly compacted during construction. This fill soil over time settles and compacts and creates a condition where rainwater runs back towards the exterior walls. The soil next to the foundation walls become saturated and exerts a tremendous pressure that increases at the lowest levels. This begins to deform walls leading to cracks, thus causing leaks. Unchecked, this condition can cause walls to move sometimes to the point of failure and, at the least, expensive repairs will be needed to stabilize the condition.

Solutions

To solve most water problems:
1. Maintain positive foundation drainage/slope for the first six feet away from the exterior walls. The slope should be one inch per foot for six feet. Carefully add compacted fill material to obtain this slope. Plant grass or place a permanent waterproof membrane covered with rock or landscape mulch.
2. Downspouts and splash blocks should maintain positive drainage and extend six feet beyond the exterior walls.
3. Window wells should be covered to deflect water from building up in this vulnerable location.

If your facility contains cracked walls, walls that are no longer vertical when checked with a level or appear unstable, contact a structural engineer to verify the nature of the condition and suggest a method to reinforce/stabilize the walls.

Contact LCEF to find an Architectural Advisory Committee member near you for additional information.