



Repairing a Footing in a Detention Pond

A general contractor working with a homeowners association reached out to a specialty contractor about a detention pond wall that was leaking along the footer in several places. A detention pond is designed to collect rainwater and then let it drain slowly in a controlled manner. But in this case, water was washing out quickly in an uncontrolled manner in multiple spots under the footing.

Powerful Polymers

To rapidly address the problem the contractor chose AP Fill 720. This single component, closed cell, hydrophobic, water-reactive, solvent and phthalate-free, low viscosity polyurethane foam has a high expansion rate, and is ideal for filling voids. In this case, AP Fill 720 was the perfect choice for filling the soil voids underneath the footer created by water erosion.



Physical Properties - Uncured

AP FILL 720		
Viscosity at 77°F (25°C)	(ASTM D4878-98)	± 215 cP (± 215 mPa.s)
Density	(ASTM D3505-96 [2000])	± 65.9 lbs/ft ³ (± 1.12 kg/dm ³)

Expansion Up to 50x expansion (free foam)

Properties will vary depending on application conditions.

Painless Procedure

First, the crew injected AP Fill 720 along 150 feet of the wall, installing approximately one gallon underneath the footing every two feet. Next, they installed another 75 gallons spot treating larger voids.

Rapid Result

The job was completed in only 2 days. The detention pond wall was ready for use immediately upon completion of the work. The general contractor and the homeowners association manager were very happy with the results.

About Alchatek

Alchatek is an international leader in the manufacture and supply of chemical grouts and construction products for Geotechnical, Leak Seal, and Seawall Repair applications. Providing solutions from its headquarters in Tucker, Georgia and its manufacturing facility in Reno, Nevada, Alchatek specializes in advanced construction technologies for sealing leaks, stabilizing soils, lifting concrete, and protecting infrastructure and seawall structures. To best serve its customers, Alchatek is organized into three divisions:

The Leak Seal Division combines a full system offering of polymer chemical grouts and equipment with perhaps the most experienced technical team in the industry. It specializes in preventing water ingress through concrete infrastructure including parking garages, culverts, basements and foundations, and sewer manholes.

The Geotechnical Division offers a complete line of single component products for soil stabilization as well as two component polyurethane foams for concrete lifting, void filling, and stabilization of infrastructure. This includes lifting sunken structures such as warehouse floors, back into place.

Seawall Repair Network® is the only national network of certified contractors in the repair, preservation, and protection of Seawalls waterfront barriers. Its proprietary methods and materials are environmentally friendly and safe for use in all marine environments and provide a non-destructive solution for seawall repair at 80% less than the cost of replacement.

Tech Support:
404-618-0438
www.Alchatek.com

This information is provided in good faith, but without guarantee. The application, use and processing of the products are beyond our control and therefore your entire responsibility. Should Alchatek nevertheless be held liable for any damage, such liability will be limited to the value of the goods delivered by us. We are committed to providing high-quality goods at all times. This version supersedes all previous versions. Revision Date: April 26, 2023 4:48 PM