AKWASEAL® POND LINER
ONE LINER SYSTEM: TWO LINING TECHNOLOGIES

With more than 60 years of experience, CETCO is an industry leader in lining technologies and solutions.

To speak to a technical expert about our innovative pond liner systems and how they can be custom tailored to your specific project, call 847.851.1800 or 800.527.9948.
WHAT IS AKWASEAL®?

Akwaseal is a pond liner consisting of two water barriers, bentonite clay and a flexible plastic membrane. The bentonite clay is encapsulated between two geotextiles which are needlepunched together and the flexible plastic membrane is laminated to the outer geotextile surface. The result is a self-healing, self-sealing liner system ideal for many types of water containment projects.

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FEATURES & BENEFITS

Bentonite Clay
Bentonite clay is used in the Akwaseal liner systems to provide consistent performance and will not shrink, crack, float, or balloon. When using compacted clay liners, they tend to be difficult to install, vary widely in quality and consistency, and are not always available on-site. In addition, compacted clay liners can crack due to temperature variations and settlement.

Plastic Membranes
Plastic membranes are readily available at affordable prices and are virtually impermeable. However, the exposed liner can puncture and degrade. In addition, small holes often occur during construction that can cause excessive leakage and liner failure. Since many plastics are less dense than water the liner may also float or balloon.

The Akwaseal Liner System
The Akwaseal liner system is made from bentonite clay in conjunction with a plastic membrane liner. With this dual system, the bentonite acts as a sealant, repairing holes in the plastic membrane that may have occurred during installation or from a poorly prepared subgrade. The outer geotextiles of Akwaseal also provide cushioning and durability against puncture. The bentonite clay provides consistent performance, and is not subject to hydraulic conductivity decreases resulting from varying moisture content, density, or clay content.

Two Liner Systems In One
The Akwaseal liner system combines the benefits of granular bentonite with the benefits of plastic membranes. When put together the benefits can be experienced without the drawbacks.
Project Applications
It has been said that the most beautiful places on earth are those where land and water meet. Perhaps this is why we endeavor to create such places where none had previously existed. Whatever the reason, synthetic liners are often required to contain the water in places where existing soils cannot. Akwaseal is used in the critical role of water containment in artificial ponds and related structures.

RESERVOIR
In McAllen, Texas approximately 70,000 square feet of Akwaseal was used to line a 64-million gallon raw water storage reservoir. A 4-inch thick layer of concrete was poured directly onto the Akwaseal liner, forming a mechanical bond with the liner. The concrete limited potential for cover sliding and protected against damage due to wave action, animal contact, fluctuating water levels, and equipment loadings.

WATER CONSERVATION POND & WETLAND
In Ponca, Nebraska, approximately 180,000 square feet of Akwaseal was self-installed by the Nebraska State Parks Commission to line a water conservation pond and a wetland in a state park. The pond was decorative in nature and stocked with fish. The material was installed membrane side down due to the high water table. This also provided a better friction angle between the geotextile and cover soil.

CORPORATE POND
In Greenville, South Carolina, approximately 320,000 square feet of Akwaseal was installed to line two campus ponds. Due to the high hydrostatic head conditions, mild slopes, and type of application, Akwaseal was chosen as the composite laminate system, featuring a low-permeability, plastic membrane and self-sealing bentonite clay. Due to the mild slope, the liner was placed membrane side up to further protect the bentonite from exposure to the elements.
Headquartered in Hoffman Estates, IL, AMCOL operates over 68 facilities in Africa, Asia, Australia, Europe, North America and South America. The company employs approximately 1,750+ employees in 26 countries. The Company, established in 1927, currently trades on the New York Stock Exchange under the symbol “ACO”. AMCOL International produces and markets a wide range of specialty mineral products used for industrial, environmental and consumer-related applications. With more than 68 world-wide locations, AMCOL manages a global supply chain to deliver world-class quality. Our full range of products and services allow us to bring value to our customers, but ultimately, we believe our commitment to understanding customers’ needs is what sets us apart in our industry.