Our products stand the test of time, and BaseLok™ GeoCell is no exception.

Geocells were invented in the early 80’s and patented by the United States Army Corps of Engineers. The early use of the technology was for the construction of roads over soft soils for military use. Today, the BaseLok™ GeoCell is not only used for base stabilization, but also for erosion control of slopes and channels as well as in construction of retaining walls.

The BaseLok™ GeoCell is made from high density polyethylene (HDPE) and manufactured in the USA. HDPE has been used for the most demanding industrial products since 1955. The three-dimensional cells impede lateral movement of the infill material, increasing structural strength and locking in materials for erosion protection. The cell walls are perforated to allow water flow through the system, creating improved root zone between cells for vegetated applications. On concrete filled GeoCells, the HDPE matrix becomes the form for the concrete. There is no need for wood forms or rebar. The panels are expanded and the concrete poured directly into the BaseLok™ GeoCell.

The BaseLok™ GeoCell is the perfect system to protect impervious and fragile geomembrane liners. It can be installed directly over the liner without the use of stakes and filled with concrete for impact and puncture protection or filled with soil and APPLICATIONS vegetated to create a natural landscape such as:

APPLICATIONS
- Geomembrane Lined
- Channel Protection
- Storm Water Channels
- Ditch Protection
- Spillways
- Shoreline Protection
- Concrete Channels

KEYPOINTS
- Design assistance.
- On site installation assistance.
- Value engineering review.
- Complete anchoring systems provided.
- Permeable system.
- Reduces formation of reels by confining top layer of the material and protection from sheet flow.
- When filled with top soil, creates a layer for vegetation and healthy root zone.
- BaseLok™ GeoCell can be filled with angular rock, vegetated soil or concrete.
- On channel applications multiple infill materials can be used on the same panel based on flows. For example, the bottom can be filled with concrete to withstand high flows (+20 ft/s (6 m/s)) and transition to vegetated soil on the walls to provide a natural appearance.
- Angular rock is used for velocities up to 10 ft/s (3 m/s), vegetated soil up 20 ft/s (6 m/s), and concrete for velocities greater than 20 ft/s (6 m/s).
- On applications with a geomembrane liner, the BaseLok™ GeoCell will protect the fragile liner, increasing factors of safety and longevity of the system.
- On applications with a geomembrane liner, it allows for a soil and vegetated top layer, creating a natural perimeter to a synthetically lined channel.
- Channel protection with stacked layers replacing gabion baskets. GeoCell panels can be filled with aggregate or concrete for high flows and transition to vegetated soil.
- Allows for the use of a smaller confined aggregate vs large and costly rip rap.
- On a concrete infill, eliminates the use of wood forms and rebar.
- On a concrete application, the individual blocks become a flexible system that can conform to subgrade settlement.

TEAM SUPPORT
- 39 years as a leader in the Geosynthetic Industry
- 25 years of experience with geocells
- Design assistance
- Complete project evaluation
- Project specific value engineered designs reviewed by professional geotechnical engineers
- On site installation and site assessment assistance

BENEFITS
- 100% manufactured in the USA
- Complete installation accessories
- Meets or exceeds industry standards
CUSTOMIZATION

- BaseLok™ GeoCell panels can be manufactured to cover the length of the slope or width of the channel to be protected. Evaluation of the soil conditions and geometry of the slope or channel will determine appropriate cell depth for the application as well as anchoring requirements. BaseLok™ GeoCell can be manufactured with depths of 3”, 4”, 6”, or 8” to meet specific project needs.

> The GeoCells can be installed on slopes as steep as 60 degrees and on channels with flow velocities greater than 25 ft/s (7.6 m/s) depending on infill material.

EXPERT TECHNICAL SUPPORT

- The superior effectiveness of GeoCell is made even better thanks to our BaseLok™ team’s proficiency and technical support. We believe a solution is more than just a product we manufacture or sell; you deserve an attentive and knowledgeable team of professionals working alongside you every step of the way. Our experienced engineers and sales team are fully equipped to cater to your every need, no matter the project.