



What is Geocell used for?

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Geocell is rapidly gaining popularity in the construction industry for the purpose of controlling erosion, and stabilization of soil and steep slopes for earth retention. It is a highly flexible geogrid geotechnical product that conforms to the ground surface while providing strength and stability to the site during construction.

The geocells are made from high-density polyethylene strips linked together by metal connectors in a grid pattern. Once installed, geocells are filled with sand, soil or rock to create stability on an area of disturbed ground.

Geocell products are three-dimensional, expandable panels made from high-density polyethylene (HDPE), polyester or another polymer material. When expanded during

installation, the interconnected strips form the walls of a flexible, three-dimensional cellular structure into which specified infill materials are placed and compacted. This creates a free-draining system that holds infill materials in place and prevents mass movements by providing confinement through tensile reinforcement. Cellular confinement systems improve the structural and functional behaviour of soils and aggregate infill materials.

Geocell Protects and Stabilizes Slope Surfaces

People living in highly exposed areas are especially worried about the effects of flooding. For people who live along the coast, erosion is a constant problem. Geocells can help control erosion on steep slopes as well as flat surfaces such as parking lots and roads. They create textured surfaces that help prevent the loss of material due to wind and water erosion. The Geocell is used to protect slopes from erosion and help stabilize the surface. This is an important operation as it helps the prevention of landslides while keeping the slope stable at the same time. Geocell stabilization systems are cost-effective, simple to install and have a long lifespan. The material used in geocells is environment-friendly and naturally resists corrosion, which also makes them durable.

Geocell Serves as Protective Linings of Channels and Hydraulic Structures

Geocells serve the purpose of protective linings for channels and other hydraulic structures. They resist erosion, minimize scour, and provide a clean sheet of protection from the surrounding environment. An individual geocell is made up of multiple interconnected cells which expand or contract depending on the amount of water in them, creating a cushioning effect to prevent abrasion and erosion.

When a channel lining is made of geocells there is little or no chance of clogging. The prevention of clogging is important as it can lead to flooding. Geocells have non-perforated walls that keep the floating debris from gathering on the surface. The geocells with perforated walls let the water pass up, taking away the floating debris already built up on the surface. For this reason, geocells have been the preferred choice in the channels stretching for 100 kilometres in Europe.

Geocell Supports Static and Dynamic Load on Weak Subgrade Soil

Both static and dynamic loads function well on weak subgrade soil when supported by geocells. The cells form a grid which has three dimensions. The dimensions have the capacity to circulate the load across an area of any size. This process assists in avoiding soil failure. The perforations in the strips are also important as they enable the flow of water. This process is ideal to leave the soil in its natural moist status while keeping it from becoming compacted. This overall process is quite significant in enhancing the solidity of the soil as well as reducing any chance of failure.

Therefore, geocells can be considered an important mechanism to function under heavy loads on feeble soil. This is also cost-efficient, as you do not have to worry about impending repairs likely to be expensive. The quick and easy installation possibility also places geocells in a favourable position when it comes to operating static and dynamic load support on weak subgrade soils.

Let's build a better project together

Wall Tag is your one-stop solution for the supply of geocells confinement systems. We can provide you with a variety of choices on our products and services that meet your specific needs. Explore our [website](#).