

CIVIL CONSTRUCTION • ENVIRONMENTAL • GEOTECHNICAL

Geotextiles consist of synthetic fibers that are made into flexible and porous engineered fabrics that contribute to construction quality control and cost effectiveness. They are typically made from polypropylene or polyester fibers that are manufactured by weaving or by needle punching bonded fibers. Geotextiles have excellent properties that enhance the behavior of natural construction materials and stabilize soils.

There are hundreds of applications and are commonly used in transportation, geotechnical, environmental, hydraulics and private development sector to reinforce soft soils, separate dissimilar materials and provide a barrier in soil filtration and drainage. Polymeric fabrics are not susceptible to deterioration like conventional materials and solutions leading to better performance, less failures, cost benefits and ultimately project longevity.





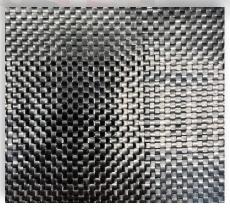






HIGH STRENGTH GEOTEXTILES

Manufactured using high tenacity polypropylene yarns that are woven to form a dimensionally stable network, which allows the yarns to maintain their relative position. Resistant to ultraviolet deterioration, rotting, and biological degradation and is inert to commonly encountered soil chemicals.



WOVEN GEOTEXTILES

Weaving is a process of interlacing yarns to make a fabric. Woven geotextiles are made from weaving monofilament, multifilament, or slit film yarns. There are two steps in this process of making a woven geotextile: first, manufacture of the filaments or slitting the film to create yarns; and second, weaving the yarns to form the geotextile.



NONWOVEN GEOTEXTILES

Manufactured from either staple fibers (staple fibers are short, usually 1 to 4 inches in length) or continuous filaments randomly distributed in layers onto a moving belt to form a felt-like "web". The web then passes through a needle loom and/or other bonding machine interlocking the fibers/ filaments. Highly desirable for subsurface drainage and erosion control applications as well as for road stabilization over wet moisture sensitive soils.

