



# CROSS49 SUPPLIES & RENTALS GEOTEXTILES

CIVIL CONSTRUCTION • ENVIRONMENTAL • GEOTECHNICAL

Geotextiles, composed of synthetic fibers crafted into flexible and permeable engineered fabrics, play a pivotal role in construction quality control and cost-effectiveness. Typically manufactured from polypropylene or polyester fibers through processes like weaving or needle-punching bonded fibers, geotextiles exhibit exceptional properties that enhance the performance of natural construction materials and contribute to soil stabilization.

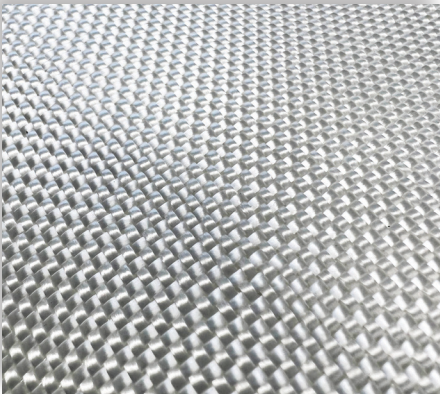
- Geotextiles have diverse applications in transportation, geotechnical engineering, environmental projects, hydraulics, and private development.
- They are commonly used to reinforce soft soils, ensuring stability in settling or erosion-prone areas.
- Geotextiles effectively separate dissimilar materials, maintaining construction layer integrity.
- Their barrier properties enhance infiltration and drainage, promoting efficient filtration and preventing soil erosion.
- Composed of polypropylene or polyester, geotextiles resist deterioration, ensuring longevity and surpassing conventional materials.
- The robust nature of polymeric fabrics reduces susceptibility to failures, enhancing overall construction project performance.
- Geotextile durability and effectiveness lead to cost benefits over time, minimizing maintenance and ensuring long-term project success.



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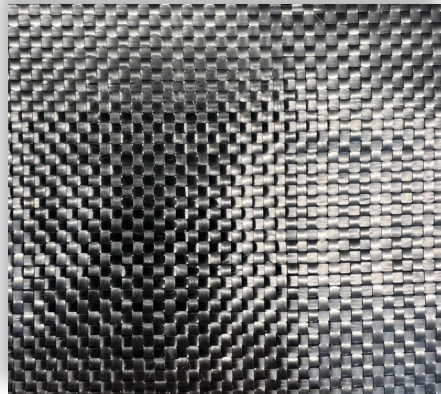






### **HIGH STRENGTH GEOTEXTILES**

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.