As natural construction materials become scarce and more expensive to locate, transport, and place, geotextile products offer a cost-effective engineered solution. Consequently, geotextiles have become firmly entrenched as invaluable construction materials in a variety of applications: in drainage, filtration, separation, soil reinforcement, and in many other areas of civil engineering and construction.

In many cases, geotextiles replace or reduce the need to use natural aggregate construction materials providing both economic and environmental benefits.

**Advantages**

- Improve performance and economy of roadways.
- Provide moisture barriers to increase pavement life.
- Provide cost effective solutions for retaining walls.
- Inexpensive, highly effective alternate to conventional soil filters.

Nilex offers a complete range of geotextiles: woven, nonwoven, monofilaments, composites, and high strength materials. Custom roll sizes, sewing and other geotextile fabrication services are available upon request.

**Nonwoven Geotextiles**

Nonwoven geotextiles have a wide range of applications in civil environmental engineering and construction projects. Produced from high quality polypropylene fibers, Nilex’s Nonwoven Geotextiles are needle punched to form a strong fabric that retains its dimensional stability and is resistant to damage from construction stresses. Their uses include:

- Filtration of soils in drainage applications by retaining soil particles while allowing for the free flow of water.
Nilex Geotextiles

• Separation and stabilization in road and railway construction.
• Prevention of soil movement in erosion control measures.

Woven & High Strength Woven Geotextiles

Nilex Woven and High Strength Woven Geotextiles are often used for separation and stabilization in the construction of roads. The woven geotextile’s separation action prevents the mixing of dissimilar soils allowing each soil layer in the road structure to function as intended. The high tensile strength specifically associated with the high strength geotextiles provides the aforementioned function together with enhancing the low elongation properties over the standard woven geotextiles. This is done by imparting stability through the tension membrane effect into the road section reducing rutting and extending roadway life.

Nilex Woven and High Strength Woven Geotextiles are woven from durable, high-modulus polypropylene yarns into competent, robust, dimensionally stable geotextiles. These geotextiles are available in varying tensile strengths and hydraulic properties to suit particular project demands.

Both Woven and High Strength Woven Geotextiles can also be used in filtering and reinforcement applications after due consideration. The use of these products can effectively reduce roadway structural deterioration by preventing the loss of granular materials into soft subgrades. Additional benefits are realized when a geotextile used for separation has sufficient strength to reinforce a weak subgrade.