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.

**TenCate Geosynthetics**

As a leader in geosynthetic solutions, TenCate Geosynthetics began the research and design process of looking for the “perfect” geotextile that could move more water while concurrently retaining more soil within a roadway system.

This product would also need to hold more force with less overall system movement in order to improve the base strength and support heavier loads; thus, resulting in longer life, less maintenance and costs, and better performance.

**Introducing the TenCate RSi-Series**

TenCate’s Mirafi RSi-Series of high strength woven geotextiles are often used for separation and stabilization in the construction of roads. The 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.

Mirafi RSi-Series geosynthetics’ unique double layer construction provides a wide range of
pore sizes for an excellent separation factor, superior filtration and flow characteristics of a fine to coarse sand layer. This series offer excellent soil and base course confinement resulting in greater load distribution.

These geotextiles are available in varying tensile strengths and hydraulic properties to suit particular project demands.

**Design Software**

Upon request, Nilex engages the manufacturer to provide designs using their MiraSpec Design Solutions Software to enhance the solution by incorporating a geosynthetic.

**Advantages of Geotextiles**

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, improve performance and economy of roadways, and provide moisture barriers to increase pavement life.

Nilex offers a complete range of geotextiles: woven, nonwoven, monofilaments, composites, and high strength materials to fit each project.

Nilex is committed to unearthing better results. Whether it’s for a civil, resource or environmental project, we offer the latest engineered and technically superior materials and techniques to save our customers time and money, and minimize the need to move or remove earth, and reduce the need for granular materials.