Fatigue and reflective cracking in pavements is typically caused by traffic loading, age hardening, or temperature cycling. When cracking is present, the traditional remedy has been to apply thicker asphalt overlays. For each inch of applied overlay, existing reflective cracks are generally deterred from reaching the surface for a period of one year.

Tensar’s GlasGrid® Pavement Reinforcement Interlayer was developed to address the rehabilitation challenges of reflective cracking distress on highways, airport aprons, runways, and parking lots. GlasGrid products have proven, with over 10 years of use, to drastically extend pavement life.

It has been successfully used within asphalt overlays throughout the world to help combat reflective cracking initiated by one or more of the following:

- Concrete pavement longitudinal and transverse joints
- Thermal loads
- Lane widening
- Cement treated or stabilized layer shrinkage cracks
- Block cracks
- Asphalt construction joints

This interlayer system is composed of a series of fiberglass strands coated with an elastomeric polymer and formed into a grid structure. Each strand has a remarkably high tensile strength and high modulus of elasticity; this is particularly important as asphalt concrete typically cracks at low strains. This combination makes the GlasGrid system stronger than steel, pound for pound. When the GlasGrid system is “sandwiched” between the leveling and surface course asphalt in a conventional asphalt overlay, it becomes the hidden strength in the road — designed to turn vertical crack stresses horizontally and effectively dissipate them.
GlasGrid®

Easily Installed and Up to the Task
The GlasGrid system is easily installed without specialized equipment or labour. With its pressure-activated adhesive, it is considered to be the most expedient interlayer system relative to installation time. The GlasGrid system has proven to be effective in every geographical area and climate – from desert environments to near-arctic conditions.

Highly Millable
In contrast with other interlayer systems, the GlasGrid system is easily broken up by traditional milling equipment to be re-used in other road projects as a recycled asphalt product. It also has an additional benefit — its main component is silica, a natural substance that is environmentally friendly.

GlasGrid products capitalize on the tenacious strength and stiffness of fiberglass, together with its open apertures, to make it the leading reinforcement interlayer system for pavement overlay design.

The Nilex Advantage
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, minimize the need to move or remove earth, and reduce the need for granular materials.

With over 40 years’ experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

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