FiberMat®
Crack-inhibiting membrane
Meshing strength with flexibility for longer pavement life
FiberMat®

A truly innovative solution that delivers superior crack prevention

Cracking is a distress that will ultimately plague nearly every road or pavement surface. Cracks develop for a variety of reasons; among the most common are thermal stresses, fatigue, or reflective cracking from underlying pavement conditions. Whatever the cause, cracking continues to be one of the major problems affecting our pavements today. FiberMat®, one of the latest innovations from Colas Solutions™ and the family of Colas Companies, provides an economical, cost effective technique for treating and preventing the recurrence of pavement cracking.

FiberMat® is a specially formulated, polymer modified, crack resistant membrane that produces superior strength and flexibility. It forms a high tensile matrix upon application with a highly modified asphalt emulsion residue that is reinforced with engineered fiberglass strands. The FiberMat® system is installed by a specially developed machine that uniformly applies the fiberglass strands in a continuous application. The strands are sandwiched between two layers of modified emulsion prior to application of an aggregate cover. The final product is then rolled to seat the aggregate into the surface. This combination of highly modified asphalt residue and a fiberglass reinforcement matrix creates a powerful resistant membrane interlayer that absorbs stresses in the pavement structure and delays the onset of cracking. Unlike conventional geotextile reinforced interlayers, FiberMat® is easily recycled without any issues, is easily constructed, and saves time and labor on application for the user without the usual wrinkles, rips and tears associated with fabrics.

A superior fiber reinforced crack inhibiting system provided in two unique formats

FiberMat® can be utilized to address two distinct distress application needs: Type A is applied as an ultimate wearing surface for stand alone surface treatment applications. Type B is a Stress Absorbing Membrane Interlayer (SAMI) for interlayer applications used to reduce cracking in pavement system overlays.

- When used as a surface treatment, FiberMat® Type A performs as an enhanced crack-resistant high performance resurfacing treatment.
- When used as a SAMI, FiberMat® Type B can be overlaid with a variety of surfacing treatments, including micro-surfacing, slurry seals, Warm Mix Asphalts, Hot Mix Asphalts, and Ultrathin bonded wearing courses such as DuraThin®, NovaChip® etc.

Whichever application is more suited for your problem area, you can be sure that FiberMat® will provide a strong, waterproof membrane that absorbs pavement stress and resists cracking, reflected or generated in the pavement. Its superior tensile properties provide enhanced resistance against the recurrence of reflective cracking, a superior improvement over conventional SAMI treatments.

Today’s road professionals face many challenges

Today’s roads are faced with higher traffic counts, heavier loads, and a more demanding public while buyers and user agencies are faced with dwindling budgets and the need to do more with less. Design engineers realize the need to extend the service life of pavement systems is more important than ever. FiberMat® can be one of the most cost effective tools agency engineers have available today to help improve pavement performance.

FiberMat® answers these challenges

Pavement Preservation and Asset Management have become the rule rather than the exception these days and FiberMat® is one of the best Pavement Preservation tools available for every road professional’s toolbox. The following are just some of FiberMat® advantages:

- Extends pavement life
- Reduces and delays recurrence of reflective cracking
- Waterproofs and seals aged pavement surfaces
- Fast, continuous application process saves time and money
- Increases tensile strength & flexibility
- Can be used on all traffic volumes
- Economical in terms of whole life cycle costs
- Bonds well to aged pavement surfaces
- Opens to traffic in minutes
- Easily reusable unlike conventional geotextiles
- More eco-friendly than many similar treatments
- Less energy required than many similar treatments

FiberMat® effectiveness has been proven in the field and its performance well documented in independent university studies.

FiberMat® inhibits cracks from below the surface

Actual side by side pavement comparison shows FiberMat® outlasts conventional chip seal. After four years, the chip seal surface (right half of roadway) shows significant cracking and water absorption while the FiberMat® surface (left half of roadway) exhibits little wear and almost no cracking.

Durable and designed to last

Good years Poor years
Quality Adherence

The Colas quality system provides the tools by which we measure our performance, acting as a catalyst in promoting continuous improvement. It plays an integral part in all our day to day activities. Colas Solutions™ is committed to the provision of products and services that meet or exceed Colas and industry requirements. Through a structured program of quality improvement projects, specific initiatives, measurement of performance and encouragement of ideas, we aim to exceed our target of continuous improvement in the quality of every thing we do.

A world of innovation with a local presence

Colas Solutions™ brings a world of innovations to you through the hands of our highly trained and experienced local contractors and representatives. We work with you to survey conditions and choose the right solution. Many times we already know the neighborhood, infrastructure and preservation needs because we also live there.

With Colas Solutions™, we don’t just sell products and services. We believe in education and strive to help you understand how to choose the right systems, materials, and construction resources. We work with your staff to provide the technical assistance and construction services they may need to effectively design, build, maintain, and preserve your pavement and infrastructure investment network. We work with each of our customers with a high level of integrity and business ethics, cognizant of the fact that trust must be earned before it can be given. And when you choose Colas Solutions™, you’ll know you’re addressing it with products and services that respect and protect the environment as well as the safety of the communities we live in.