

Frequently Asked Questions

How can such a small dose of FORTA-FI[®] do so much to strengthen my asphalt mix?

FORTA-FI is a blend of different fibers that each play an important role in the reinforcement of asphalt. The high temperature fibers are among the strongest fibers made, and are only 1/10th the diameter of a human hair. Some fibers are designed to melt into the asphalt mixture aiding in the dispersion of the high temperature fibers while enhancing the performance of the asphalt pavement in both hot and cold temperatures. The combination of these fibers in the recommended dosage creates significant improvement in tensile strength with over 18 million fibers per ton of asphalt mix.

Will doubling or tripling the dose of FORTA-FI make my asphalt mix 2 or 3 times as strong as a single dose?

Research and our many projects around the world have shown that the recommended dosage of one (1) pound of FORTA-FI per one (1) ton of asphalt is optimal in most circumstances. While there may be cases where different dosages may prove to be beneficial, those projects will need to be consulted and verified for each individual application.

How did you calculate the asphalt thickness savings and longevity increases?

Both the asphalt savings and increased longevity were calculated utilizing performance-testing results conducted by Arizona State University and the Mechanistic Empirical Pavement Design Guide (MEPDG). In addition, FORTA has numerous real-world asphalt pavement projects around the world, including a section at the NCAT test track in Alabama.

Is this new technology?

FORTA Corporation's asphalt reinforcement technology has been patented since the 1980's. Since then, the fiber has been successfully used in numerous asphalt pavement projects around the world.

Can FORTA-FI be mixed in either batch or drum plants?

Yes, the packaging assures that FORTA-FI will distribute uniformly in both batch and drum plants.

How long does it take FORTA-FI to mix, and will it mix at high production speeds?

Provided the proper production temperatures are maintained, FORTA-FI will distribute uniformly in seconds at all production speeds.

How can you add the fiber to the asphalt mix?

There are several options to feed FORTA-FI into an asphalt mix. FORTA offers an automated fiber feeder that continually measures the feed rate of loose fibers, called the Voyager. The FORTA Big Shot[®] feeds whole bags into the mix and has an optional counter to record the amount of fiber that is fed. Manual feeding can be accomplished by using the FORTA Little Shot or by placing the bags on the RAP belt for smaller projects. To learn more about FORTA's fiber feeders, visit www.fiberfeeders.com.

Is FORTA-FI only for HMA, or can I use FORTA-FI for WMA and Patch mixes as well?

FORTA-FI has been designed for use in these three types of mixes.

How can FORTA-FI save money on the initial project cost?

Immediate cost savings are made possible by reduction in asphalt thicknesses up to 35%. Additional savings are realized through shorter construction schedules, fewer trucks, fewer lifts, etc.

How can FORTA-FI save money over the life of a project?

FORTA*fi*[®] asphalt that is the same thickness as your conventional asphalt will last up to 50% longer. Longer life results in less maintenance and resurfacing over the design life of the asphalt.

Does the Asphalt producer need to pre-measure the FORTA-FI?

No, FORTA-FI is typically packaged in a one (1) pound bag per one (1) ton of asphalt dosage (bag and all). While different bagged dosages are available for batch mixing if necessary, the process still requires no measuring.

Are there any projects or case studies demonstrating the success of FORTA-FI?

FORTA-FI has been rigorously tested in various real-world and controlled environments since its creation. For example, FORTA-FI has been tested by The Arizona State University and the reports can be provided as requested by contacting us at www.forta-fi.com/contact/. In addition, FORTA-FI has numerous real-world asphalt pavement projects around the world with extremely successful results. To read more about these, please visit www.forta-fi.com/projects-examples.

What is the difference between reinforcing with FORTA-FI and woven mats?

FORTA-FI mixes three-dimensionally within the asphalt pavement. Woven mats are located underneath the base of the asphalt pavement. Because cracks can happen anywhere within the asphalt, FORTA-FI fiber reinforcement aids in strengthening throughout the asphalt and reducing cracking wherever it may occur. Another advantage of FORTA-FI is it's much easier to use. No additional construction steps equals labor savings!

Can asphalt with FORTA-FI be recycled?

Yes.

Can using FORTA-FI be considered “green” and environmentally friendly?

Yes, less FORTA*fi* asphalt is required per job reducing the thickness and/or better performance and longer pavement life reducing lifecycle costs. And it can be recycled—RAP.

When is FORTA-FI added to the asphalt mix and will it create problems for the asphalt producer?

No, FORTA-FI is designed to be easily and seamlessly added to any type of asphalt mix. FORTA-FI can be packaged in easy-to-use one-pound (1 lb.) bags and added directly into a batch plant, pug mill, or at the drum plant through the RAP collar. The dosage rate for the fiber is 1 pound per 1 ton of asphalt mix, (with no change to the job mix formula) which makes calculating the amount of FORTA-FI being added simple and easy to track over the course of production. While no two asphalt plants are exactly the same, most producers can deliver fiber-reinforced asphalt to the job site with just a few tweaks to their operation.

Will FORTA-FI create any placement or compaction problems?

No, FORTA*fi* asphalt is placed and compacted exactly as conventional asphalt pavement.

Will FORTA Corporation provide technical assistance if needed?

Fiber experts are available to provide as much information as needed. Our expertise lies in developing and producing reinforcing fibers for designed asphalt mixtures or projects. FORTA Corporation strives to develop and produce the best reinforcing fibers available.

Contact your FORTA[®] Representative for more information