



The All-in-One Pavement Interlayer Solution

The GlasGrid® TF Pavement Reinforcement System Eliminates the Need and the Challenges of a Conventional Tack Coat

TACK COATS STUCK WITH INSTALLATION PROBLEMS

Bituminous tack coats offer proven value in pavement rehabilitation projects. Applied to an existing pavement surface, tack coats help bond an asphalt concrete overlay to an existing road surface. Now mandated by most transportation authorities, the bond between new asphalt layers and existing pavement surfaces are even more critical as hot mix asphalt overlays have become leaner, stiffer and more rut-resistant.

Indeed, tack coats help prevent debonding between courses, slippage of installed interlayers and even surface cracking to strengthen pavements and extend their performance life. But conventional tack coats present their own set of challenges as well:

- ▶ Uniform coverage is difficult to achieve given present-day application methods
- ▶ Curing time is sensitive to ambient weather conditions which affects construction schedules
- ▶ Tack materials can be easily tracked onto clean pavement surfaces

GLASGRID TF OFFERS UNIFORMITY, CONSISTENCY AND PERFORMANCE

The GlasGrid® TF (Tack Film) System provides all the benefits of GlasGrid without the challenges of applying a conventional tack coat. With its pre-installed film layer made of elastomeric polymer, GlasGrid TF performs like the original GlasGrid System, protecting against reflective cracking while it effectively bonds to asphalt overlays.

But convenient installation is just one of its many benefits. With its uniform application, GlasGrid TF retards reflective cracking better for longer road life. With no tack coat emulsion to prepare and apply, owners and installers save on labor, time and material



costs, increasing productivity. The tack film, which requires no curing, inhibits grid movement during the paving operation and allows same-day installation of hot mix overlays.

GlasGrid TF is durable not only after installation; since construction traffic can drive over the film surface, it's tougher and more resistant to construction demands and potential installation damage. And like all GlasGrid products, GlasGrid TF is easy to handle and unroll; installation is simplified thanks to its pressure-activated adhesive backing.

Stabilized against UV degradation and corrosion-resistant, GlasGrid TF is environmentally friendly as well. Since no tack coat mixtures are prepared or sprayed on-site, fewer emissions are released during installation. Like all GlasGrid products, GlasGrid TF is also fully recyclable for milling and re-use.

GlasGrid® TF Takes Pavement Reinforcement to the Limit!

Testing Indicates Pavements Last Up to 5 Times Longer than Unreinforced Structures

So how well does GlasGrid® TF perform? To find out, engineers at Saint-Gobain ADFORS Research and Development Center conducted a series of AASHTO-recognized cyclic loading tests to quantify the fatigue life and crack retardation properties of unreinforced tack-coated, GlasGrid-reinforced tack-coated and GlasGrid TF-reinforced asphalt composite beams. Beams measuring 2.5 in. x 2 in. x 15 in. were observed to their failure points and photographed to document crack propagation (see right column). Crack retardation of the reinforced beams was monitored up to the interface of the grid. Three samples of each type of beam were tested.

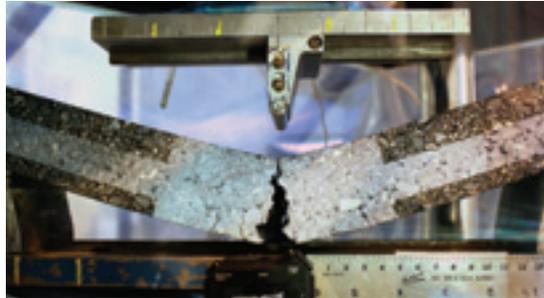
Results show that the samples reinforced with GlasGrid TF outperformed not only the unreinforced beams but also the beams reinforced with the original GlasGrid product. These tests demonstrated that GlasGrid TF offers a significantly longer fatigue life, improving resistance to fracture of the overlay system by effectively withstanding cracks at the grid interface. Fatigue life was enhanced by the GlasGrid TF tack film's elastomeric property and the quality of the bond to the overlay.

Specifically, the measured fatigue life ratio was:

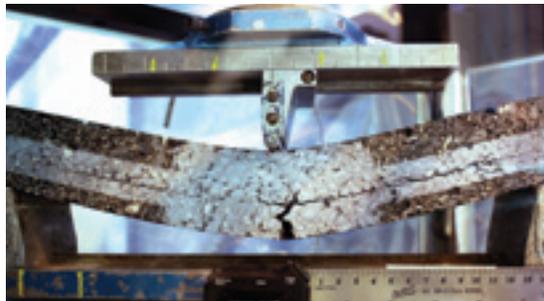
Unreinforced beam:	1.0
GlasGrid-reinforced beam:	3.3
GlasGrid TF-reinforced beam:	5.1

THE EASIER ROUTE TO A PAVEMENT'S LONGER PERFORMANCE LIFE

GlasGrid TF extends the performance life of a structural overlay for most paved surfaces, including airport runways and aprons; flexible or rigid high-volume roads; low-volume roads; parking areas and more. And thanks to the new tack film technology, GlasGrid TF offers owners, engineers and contractors a way to get their road projects moving even faster.



An unreinforced asphalt pavement beam predictably cracks under stress in a short period of time.



The original GlasGrid System with a conventional tack coat successfully redirects cracking to extend pavement life.



GlasGrid TF provides a superior bond in the pavement cross-section to minimize cracking and maximize performance.

For more information on how GlasGrid TF can enhance your next pavement project, contact Tensar International Corporation (Tensar) by calling **800-TENSAR-1** or by e-mail at web@tensarcorp.com.

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