NCAT PAVEMENT TEST TRACK
OPELKA, ALABAMA

Application: Asphalt pavement reinforcement for National Center for Asphalt Technology (NCAT) test track.

The Challenge: The Alabama Department of Transportation requested that GlasGrid® 8501 be installed on the NCAT test track so that any construction difficulties or performance issues would be documented. In June 2000, GlasGrid 8501 was installed by Industrial Fabrics between a pair of two inch layers of stone matrix asphalt (SMA) on section W1 of the inaugural NCAT Pavement Test Track.

Testing Conditions: The entire track is supported by 20 inches of hot mix asphalt (HMA) base to isolate distresses to the top four inches. The first 100 feet of section W1 contained no reinforcement and acted as a control section for testing. The Marshall SMA test mix consisted of a 3/4 inch nominal maximum aggregate size, crushed granite and flyash mineral filler. A 6.2 percent SBR-modified PF76-22 liquid binder was specified. An emulsion tack coat of type CSS-1h was applied at a rate of 0.03 gallons per square yard before the placement of each lift of asphalt; the GlasGrid was placed after the application of the tack coat on the binder course. Since section W1 was installed in 2000, a fleet of heavy triple axle trucks have applied over 20 million ESALs (Equivalent Single Axle Loads). Typically, it would take over 20 years for an interstate pavement to experience this level of load induced damage. In 2006, the section was excavated and tested.

Results: Following trafficking, longitudinal cracking was observed in the control test section. No longitudinal cracking was observed in the last 100 feet where GlasGrid was used to reinforce the.
For more information on the GlasGrid System or other Tensar Systems, call 800-TENSAR-1, e-mail info@tensarcorp.com or visit www.tensar-international.com.

Authorized Representative: