



Test Results: Inconclusive

Why we need a separate, universal standard for modified asphalt.

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The lack of uniformity in testing procedures from state to state is fueling the need to establish standardized testing procedures for modified asphalt across all 50 states.

Physical testing of asphalt determines the quality of the product and is used as the basis for buying and selling, making information that the tests provide critical to consumers like street and roads departments.

From 1988 to 1993, testing and grading criteria for unmodified asphalt were created through the \$50 million federal Strategic Highway Research Program. The result was the standard Superpave Performance Grade (PG) specification.

While the standard was supposed to work equally well for both modified and unmodified asphalt, it didn't adequately address the properties of the former. To compensate, road agencies began devising and using "Superpave Plus" tests for modified asphalt based on their own criteria. While these tests may share the same name from state to state, they're often performed differently, producing different results. The elastic recovery test, for example, is performed at least eight different ways.

Not only are each state's testing procedures different, but states also use numerous tests that aren't performance-related and only indicate the presence of an additive. Thus, when states share information about how modified asphalt is performing, they're not sharing comparable test results.

To make test results more consistent across agency jurisdictions and enable the industry to gain a much more consistent picture of how



The ability to compare consistent test results for modified asphalt, such as the way demonstrated at the 2004 World of Asphalt trade show, will eliminate the need for testing, lowering costs for both product

modified asphalt is performing, the Association of Modified Asphalt Producers (AMAP), the Asphalt Institute, and user-producer groups are pushing for each state to use the same procedures on performance tests.

consumers. Photo: National Asphalt Pa
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Efforts are under way to develop a performance-based, high-temperature test for modified asphalt: the Multiple Stress Creep Recover (MSCR) test. The test must be adopted by the American Association of State, Highway, and Transportation Officials (AASHTO) and has yet to be submitted for consideration.

Until then, the standardization of existing procedures for unmodified asphalt appears to be the best path to follow for consistency in the industry.

AMAP and the Asphalt Institute recommend using AASHTO T301 as the standard procedure for the elastic recovery. Four out of five regional user-producer groups—the Pacific Coast, Rocky Mountain, North Central, and Southeast—agreed to do so.

Approximately one-fifth of the nation's asphalt is modified in some way. Modification will continue as our population grows and puts more demand on the nation's streets, roads, and bridges. To ensure maximum use of taxpayer dollars, the industry needs to move forward as one regarding this growing market.

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