

**CITY OF COLUMBUS, OHIO**

**SUPPLEMENT 1051  
RESISTANCE OF COMPACTED HOT MIX ASPHALT  
TO MOISTURE-INDUCED DAMAGE**

**October 31, 2011**

**1051.1 Scope**

This supplement covers the procedure for measuring the resistance of compacted asphalt concrete samples to moisture induced damage.

**1051.2 Procedure**

The requirements of AASHTO T 283 apply, except as follows:

1. Make the mixture for making the test specimens from production (do not wash in the lab) aggregate, which has been broken down to individual sieves, except treat the material passing the 2.36 mm (No. 8) sieve on No. 57 size aggregate or larger as pan material. Recombine individual sieves using the component percentages necessary to reproduce the JMF at the 4.75 mm (No. 4) sieve. If dust is to be added to simulate actual plant production, use bag house fines.
2. For 4 inch or 6 inch Marshall compacted specimens apply the following:
  - A. After mixing the aggregate and asphalt binder, age the loose sample for 4 hours at 275°F (135 °C).
  - B. Heat the loose sample to the required compaction temperature before compaction.
  - C. After compaction, but before saturation, age specimens to be saturated at 4- 24 hours at room temperature.
3. For 6 inch gyratory compacted specimens apply the following:
  - A. After mixing the aggregate and asphalt binder, age the loose sample for 4 hours at 275°F (135 °C).
  - B. Heat the loose sample to the required compaction temperature before compaction.
  - C. After compaction, but before saturation, age specimens to be saturated 4-24 hours at room temperature.
  - D. Saturate the compacted specimens to a saturation level of 80-90 percent.