

**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION  
FOR  
MULTIPLE STRESS CREEP RECOVERY (MSCR) TESTING**

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

**708.03 ASPHALT MATERIALS** (Replace Table 708:2 with the following:)

<b>Table 708:2 Additional Requirements to AASHTO M 320 for Asphalt Cement</b>			
<b>Test</b>	<b>PG 64-22 OK</b>	<b>PG 70-28 OK</b>	<b>PG 76-28 OK</b>
MSCR Recovery <sup>a</sup> , 147.2°F [64°C], %	—	≥ 50	≥ 80
Separation <sup>b</sup> , %	—	≤ 10	≤ 10
Original DSR G*/sin(δ), kPa	≤ 2.50	≤ 2.50	≤ 2.50
RTFO DSR G*/sin(δ), kPa	≤ 5.50	≤ 5.50	≤ 5.50
PAV DSR Change in testing temperature, °F [°C]	—	77 [25]	77 [25]
Spot test <sup>c</sup>	Negative	—	—
Flash point, °F [°C]	≥ 500 [260]	≥ 500 [260]	≥ 500 [260]
Solubility in trichloroethylene, %	≥ 99	≥ 99	≥ 99
Note: Asphalt binder suppliers will provide handling requirements and recommended field mixing and compaction temperatures for their product to the hot-mix producer. <sup>a</sup> AASHTO TP 70 average percent recovery at 3.2 kPa, R <sub>3.2</sub> . <sup>b</sup> Separation test samples are prepared in accordance with ASTM D 5976, but are reported as the difference in G* between the top and bottom samples. <sup>c</sup> Spot test using solvent blend of 65 percent heptane and 35 percent xylene by volume.			

**708.06 SAMPLING AND TESTING**

(Revise Table 708:13 to add the following row to the Asphalt Materials section):

<b>Table 708:13 Sampling and Testing of Aggregates, Bituminous Mixtures, and Asphalt Materials</b>	
<b>Materials</b>	<b>Testing Method</b>
Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	AASHTO TP 70

(Revise Table 708:13 to remove the following row, and its associated footnote:)

Elastic recovery test by means of ductilometer <sup>c</sup>	ASTM D 6084
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