

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, EDITION 2007**

SECTION 608

ASPHALT SEALING

Change the title to ASPHALT SEALING (LOW ADT).

Add the following additions to Table 601-1:

TABLE 601-1: ASPHALT APPLICATION TEMPERATURES				
TYPE AND GRADE	TEMPERATURE RANGE (°F)			
	Spraying		Plant Mixing	
	Min.	Max.	Min.	Max.
Asphalt Cement (AC-20-5TR)	325	350	n/a	n/a
Asphalt Cement (AC-20-XP)	325	350	n/a	n/a
Asphalt Cement (AC-10-2TR)	300	350	n/a	n/a
Asphalt Cement (AC-10-XP)	300	350	n/a	n/a

Add TABLE 608-A to subsection 608.2.

TABLE 608-A: SPECIFICATIONS FOR ASPHALT CEMENT FOR ASPHALT SEALING								
	AC-20-5TR		AC-20-XP		AC-10-2TR		AC-10-XP	
	Min.	Max.	Min.	Min.	Max.	Max.	Min.	Max.
Polymer	TR & SBS ⁽¹⁾		SBS		TR & SBS ⁽²⁾		SBS	
Polymer Content	5	-----	3	-----	3	-----	1	-----
Dynamic shear, G*/sin δ, 64°C, 10 rad/s, kPa	1.0	-----	1.0	-----	1.1	-----	1.0	-----
Viscosity, 275°F, cPoise	-----	2,000	-----	2,000	-----	1,000	-----	1,000
Penetration, 77°F, 100g, 5sec	75	115	75	115	95	130	95	130
Elastic Recovery, ASTM D6084 50°F, % Recovery, 1 hour	55	-----	55	-----	30	-----	30	-----
Softening Point, °F	120	-----	120	-----	110	-----	110	-----
Test of Residues from RTFO Aging and PAV Bending Beam Rheometer at - 18°C, MPa								
Creep Stiffness m-value	-----	300	-----	300	-----	300	-----	300
	0.300	-----	0.300	-----	0.300	-----	0.300	-----

(1) Produce the AC-20-5TR with a minimum of 5% scrap, group, whole tire rubber.

(2) Produce the AC-10-2TR will a minimum of 3% polymers to include a combination of tire rubber and SBS.

Add the following to the end of subsection 1201.2:

i. Asphalt Cement (AC).

(1) Definition of testing levels.

Complete AASHTO Specification Compliance (SC) test for AC:

Viscosity, 140°F

Viscosity, 275°F
Penetration, 77°F
Flash Point, COC
Solubility

Tests on Residue from TFOT

Loss on heating
Viscosity, 140°F
Ductility, 77°F

Quality Control (QC) Tests for AC:

Viscosity @ 140°F
Penetration @ 77°F

- (2) When shipping from Refineries and Blending Facilities, use the following guidelines:
- (a) For a tank which is filled before beginning shipping, and then emptied before more material is added, perform 1 complete AASHTO SC test per tank when filled, and weekly QC tests.
 - (b) For a tank being continually filled while continuous shipping is made from the tank, perform 1 complete AASHTO SC test per week, and daily QC tests
 - (c) When blending directly into a tanker, sample every third truck for QC tests, and perform 1 complete AASHTO SC test per week.
 - (d) Under any of the operations described above, if the results of any of the QC tests indicate the product may be out of specification, stop shipment from that source immediately. Perform a complete AASHTO SC test to ascertain the product status and re-certify the source.
- (3) When shipping from Terminals, use the following guidelines:
- (a) For operations where a tank is filled before beginning shipping, and then emptied before more material is added, perform a complete AASHTO SC test at the refinery on the material being shipped. When the shipment arrives at the terminal, run the QC tests to verify the material as it is being unloaded. After that, perform the QC tests weekly until the tank is emptied.
 - (b) For operations where a tank is being continually filled while continuous shipping is being made from the tank, perform a complete AASHTO SC test at the refinery on the material being shipped. When the shipment arrives at the terminal, run the QC tests to verify the material as it is being unloaded. Perform the QC tests on the contents in the tank weekly. Perform a complete AASHTO SC test on the contents in the tank once per month.
 - (c) Under any of the operations described above, if the results of any of the QC tests indicate the product may be out of specification, stop shipment from that source immediately. Perform a complete AASHTO SC test to ascertain the product status and re-certify the source.
- (4) Asphalt cement containing particulate modifiers may be susceptible to separation of the modifier. Provide appropriate circulation or agitation in storage if separation of the modifier is expected, suspected or if the modified asphalt will be stored at elevated temperature for more than one day before use.