

**OKLAHOMA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
FOR
PLANT MIX BITUMINOUS BASES AND SURFACES**

These Special Provisions amend and where in conflict, supersede applicable sections of the 1999 Standard Specifications for Highway Construction, English and Metric. Units of measurement are provided in the subsections in both English and Metric equivalents. The units for this project will be those specified in the project plans.

708.03. ASPHALT MATERIALS. *(add the following:)*

**TABLE 3D
REQUIREMENTS FOR POLYMER MODIFIED ASPHALT RUBBER**
(Produced by modifying asphalt cements with styrene block copolymers and ground tire rubber.)

GRADE TEST	AC20-5TR	
	MIN	MAX
Tests on Original Binder		
Polymer Content, SBS, % (solids based)	3.0	-
Tire Rubber, %	5.0	-
Dynamic Shear Rheometer (DSR), G*/sinδ, kPa, 147.2°F (64°C), T 315	1.00	2.5
Rotational Viscosity, 275°F (135°C), Pa·s, T 316	-	3.0
Flash Point, COC, °F (°C), T 48	500 (260)	-
Elastic recovery, T 301, %	55	-
Softening Point, °F (°C), T 53	120 (49)	-
Separation, ASTM D5976 Difference in DSR value between top and bottom samples, G*/sinδ, kPa, %, T315	-	10
Solubility in Trichloroethylene, %	98	-
Tests on Residue from Rolling Thin Film Oven		
Dynamic Shear Rheometer (DSR), G*/sinδ, kPa, 147.2°F (64°C), T 315	2.2	5.5
Mass Loss, %	-	1.00
Tests on Residue from Rolling Thin Film Oven and Pressure Aging Vessel		
Creep Stiffness, -18°C, S, Mpa, T 313	-	300
Creep Stiffness, -18°C, m	0.300	-

Typical use is hot applied sealing applications in hot climates.

TABLE 4
TEMPERATURE RANGES FOR USE

	MIN	MAX
Storage Temp, °F (°C)	300 (150)	375 (190)
Application Temp, °F (°C)	320 (160)	365 (185)
