

State: MASSACHUSETTS	Materials: Re: Section M3 - Bituminous Materials
Date Last Reviewed: 04-08-2010	Web Address: www.state.ma.us.mhd/home
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ASPHALT BINDER:

Section M3	Description:	Common Binder grades used in Massachusetts are 64-28 for less than 25% RAP and 52-34 for 25% to 40% RAP. SBR used as modifier prescription and no PG+ requirements in use. Follow AASHTO M 320.
1009.05 (b)	PMA's:	SBR used as modifier.
	Exclusions:	Currently exclusions of all additions unless approved by Department.

PROPERTY		Test Method AASHTO or Other	Requirements by Performance Grades, PG (Common Grades)	
			52-34	64-28
ORIGINAL:				
Flash Point, °C		T 48	230 min.	
Rotational Viscosity, Pa *s	135°C	T 316	3.0 max.	
Dynamic Shear, kPa (G* /sin δ, 10 rad./sec.)	At grade temperature	T 315	1.0 min.	
RTFOT RESIDUE:				
Mass Change, %		T 240	1.0 max.	
Dynamic Shear, kPa (G* /sin δ, 10 rad./sec.)	At grade temperature	T 315	2.2 min.	
PAV RESIDUE: 20 hrs; 2.1 MPa		R 28	90°C	100°C
Dynamic Shear, kPa (G* *sin δ, 10 rad./sec.)	At test temperature	T 315	5,000 max.	
			13°C	22°C
Creep Stiffness	At test temperature	T 313	Stiffness 300 max. MPa & m Value 0.300 min.	
			-24°C	-18°C
Direct Tension, (1mm/min.), % Strain		T 314	No Requirement	
PG PLUS REQUIREMENTS: YES				
Polymer	Type	--	SBR if modified	
NOTES: None.				

