

State: Connecticut	Materials: Re: Form 819 - Section M.04 Bituminous Concrete Materials
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Asphalt Binder		
Section M.04	Highlights	CTDOT fully implemented AASHTO M332 (MSCR) for all grades in 2015. MSCR recovery is specified using the curve in AASHTO R92. Asphalt binder sources must become qualified by participation in AASHTO Product Evaluation and Audit Solutions (formerly NTPEP), Asphalt Binder Suppliers (ABS) program and by review of the sources' Quality System Manual and on-site audit report from AASHTO Product Evaluation and Audit Solutions by the Department.
	PMA Notes	Neat asphalt with SBS polymer modifier.
	Exclusions and Limits	Neat PG binders shall be free from modification with: fillers, extenders, reinforcing agents, adhesion promoters, thermoplastic polymers, acid modification and other additives such as re-refined motor oil, and shall indicate such information on each bill of lading and Certified Test Report.

Connecticut		Table 1: Requirements for Performance-Graded Asphalt Binders			
Property	Test Method: AASHTO/ASTM	Requirements by Performance Grade			
		58S-28	64S-28	64S-22	64E-22
ORIGINAL					
Flash Point, °C	T 48	230 min.			
Specific Gravity	15.6°C T 228	Report			
Rotational Viscosity, Pa·s	135°C T 316	3.0 max.			
	163°C	Report			
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At Grade Temp. T 315	1.00 min.			
Maximum Difference, Dynamic Shear, kPa (G*/sin δ, 10 rad./sec), %	At Grade Temp. D 7173				10
RTFO RESIDUE					
Mass Change, %	T 240	1.00 max.			
MSCR Test temp., °C		58	64		
MSCR' Jnr _{3.2} , max., kPa ⁻¹	T 350	4.5			0.5
MSCR, Jnr _{diff} , max., %		75 max. (Note 1)			
MSCR, % recovery @ 3.2kPa, min.					(Note 2)
PAV RESIDUE					
DSR Test Temperature, °C	R 28	100° C, 20 hrs, 300 psi			
DSR Test Temperature, °C	T 315	19	22	25	
Dynamic Shear, kPa (G*· sin δ, 10 rad./sec.)		6000 max. δ min. 42° (Note 3)			6000 max.
BBR Test Temperature, °C	T 313	-18	-12		
Creep Stiffness, MPa		300 max.			
M-Value		0.300 min.			
NOTES		1. Not applicable for binders with Jnr _{3.2} < 0.5 kPa ⁻¹ . 2. >29.371*(Jnr _{3.2} ^{-0.263}) - binder grade E must meet the requirements of AASHTO R 92. 3. If G* sin δ is below 5000 the phase angle minimum limit is not required .			

To ensure the most accurate and current information, the specific agency should be contacted.

