

<b>State:</b> North Dakota	<b>Materials:</b> Re: Section 818.02 - Asphalt Cement
<b>Date Last Reviewed:</b> 2/24/2025	<b>Web Address:</b> www.dot.nd.gov
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Asphalt Binder		
Section 818.02	Highlights	ND DOT - a member of the Combined States Binder Group (CSBG) - implemented the use of % Rec3.2 to replace current % recovery testing for all binders in 2018. This requirement varies depending on the binder grade and the specified test temperature (see table below).
	PMA Notes	Some PMB's may utilize Plan Notes to specify select MSCR Requirements.
	Exclusions and Limits	None stated.

North Dakota		Table 1: Requirements for Performance-Graded Asphalt Binders								
Property		Test Method:	Requirements by Performance Grade							
			58S-28	58H-28	58V-28	58E-28	58S-34	58H-34	58V-34	58E-34
<b>ORIGINAL</b>										
Flash Point, ° C		T48	230 min.							
Rotational Viscosity, Pa·s	135° C	T316	3.0 max.							
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At Grade Temp.	T315	1.00 min.							
<b>RTFO RESIDUE</b>		T240								
Mass Change, %		T240	1.00 max.							
MSCR, J <sub>nr</sub> @3.2kPa, max.	58° C	T350	4.5	2.0	1.0	0.5	4.5	2.0	1.0	0.5
MSCR, % Recovery @ 3.2kPa, min.			-	30	55	75	-	30	55	75
MSCR, J <sub>nr</sub> % Difference, Max.			75							
<b>PAV RESIDUE</b>		R28	100° C, 20 hrs, 300 psi							
Dynamic Shear, kPa (G* · sin δ, 10 rad./sec.)	At Test Temp.	T315	19° C				16° C			
			5000 max.	6000 max.		5000 max.	6000 max.			
Creep Stiffness, MPa	At Test Temp.	T313	-18° C				-24° C			
			300 max.							
M-Value			0.300 min.							
<b>NOTES</b>		None.								

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