

State: NEW HAMPSHIRE	Materials: Re: Section 401 - Bituminous Materials
Date Last Reviewed: 3-25-10	Web Address: www.state.nh.us/dot
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ASPHALT BINDER:

Section 401	Description:	Bituminous materials used for asphalt cement binder shall meet the properties specified in AASHTO M 320. The grade of asphalt cement binder to be used will be specified in a Special Provision contained in the Proposal.
	PMA's:	See notes below.
	Exclusions:	None stated.

PROPERTY	Test Method AASHTO or Other	Requirements by Performance Grade, PG (Common Grade)			
		64-28	64-22	70-22	76-28
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 Loss, %	T 240	1.0 max.			
Dynamic Shear, kPa (G* / sin δ, 10 rad./sec.)	At grade temperature T 315	2.2 min.			
PAV RESIDUE:		R 28	100°C; 20 hrs; 300 psi		
Dynamic Shear, kPa (G* • sin δ, 10 rad./sec.)	At test temperature T 315	5,000 max.			
		22°C	25°C	28°C	
Creep Stiffness	At test temperature T 313	Stiffness 300 max. MPa & m Value 0.300 min.			
		-18°C	-12°C		-18°C
Direct Tension, (1mm/min.), % Strain	T 314	No Requirement			

PG PLUS REQUIREMENTS: NO

NOTES:

SUPPLIMENTAL SPECIFICATION AMENDMENT TO SECTION 401- PLANT PAVEMENTS-GENERAL

Specifies allowed HMA binder and mix modifiers for high-strength pavements

401.2.11.1 When high-strength pavement is specified, modifiers will be added to the asphalt binder, the hotmixed asphalt or both. Asphalt binder modification shall utilize either a styrene-butadiene or styrene-butadiene-styrene polymer to achieve the specified performance grade of asphalt meeting the requirement of AASHTO M 320, Table 1. The modified binder shall be pre-blended, storage-stable and homogeneous.

Hot mixed asphalt modification will be accomplished by adding a modifier to the mix during the batching process. All hot mixed asphalt modifiers shall be shown on the Qualified Products List. The percentage of mix modifier will be a percentage by weight of the asphalt binder or of the total batch as designated on the Qualified Products List.

