

State: Utah	Materials: Re: Section 02745 - Asphalt Materials
Date Last Reviewed: 7/02/25	Web Address: https://www.udot.utah.gov/connect/
Materials Engineer: Howard Anderson	Contact Info: handerson@utah.gov

Asphalt Binder		
Section 02745	Highlights	Supply PGAB's under the Approved Supplier Certification (AC) System. Refer to the UDOT Minimum Sampling and Testing Guide, Section 509, Asphalt Binder Management Plan. As specified in AASHTO M 320 for all PGAB's having algebraic differences less than 92 degrees between the high and low design temperatures. As specified in Tables 3 and 5 for all PGAB's having algebraic differences equal to or greater than 98 degrees between the high and low design temperatures.
	PMA Notes	None stated.
	Exclusions and Limits	None stated.

Utah		Table 1: Requirements for Performance-Graded Asphalt Binders (Note 2)					
Property	Test Method: AASHTO (T), ASTM (D)	Requirements by Performance Grade					
		58-28	58-34	64-28	64-34	70-28	76-34
ORIGINAL							
Flash Point, ° C	T48	260 min.					
Rotational Viscosity, Pa·s	135° C T316	3.0 max.					
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At Grade Temperature T315	1.00 min.	1.30 min.		1.30 min. (1)		
Phase Angle, °		-	74.0 max.		71.0 max.		70.0 max.
Specific Gravity	15.6° C D70	Report					
RTFO RESIDUE		T240					
Mass Change, %	T240	-					
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec.)	At Grade Temperature T315	2.20 min.					
Elastic Recovery, % (3)	25° C T301	-	80 min.		85 min.		90 min.
MSCR	TP70	Report	-		Report		-
PAV RESIDUE		R28					
Dynamic Shear, kPa (G* · sin δ, 10 rad./sec.)	At Test Temperature T315	100° C, 20 hrs, 300 psi					
		19° C	16° C	22° C	19° C	25° C	25° C
Creep Stiffness, MPa	At Test Temperature T313	5000 max.					
		-18° C	-24° C	-18° C	-24° C	-18° C	-24° C
M-Value		300 max.	150-300				
Delta Tc	At Test Temperature D7643	0.300 min.					
		-	-30° C	-24° C	-30° C	-24° C	-30° C
		-	-1.0° C min.				
NOTES		1. Requirement is for G* only. 2. Requirements in addition to M320 are shown in red. 3. 20cm, cut immediately.					

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