



Report on Asphalt Binder Grades of the PCCAS

ALASKA	Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade																	
				52-28	52-40	58-22	58-28	58-34	58-34M	64-10	64-16	64-22	64-28	64-28M	70-10	70-16	70-22	70-28	76-22	76-22M	76-28
Original Binder																					
Toughness and Tenacity ¹	Toughness (In-lbs.)	25 °C	D 5801				110 min.	110 min.													
	Tenacity (In-lbs.)						75 min.	75 min.													
Softening Point ¹ (°F)			T 53				120 min.	125 min.													
RTFO Residue			T 240																		
Elastic Recovery (%)	25 °C	T 301				50 min.															
NOTES			Anchorage and Fairbanks areas, Juneau and Southwest Alaska.																		

CALIFORNIA	Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade																	
				52-28	52-40	58-22	58-28	58-34	58-34M	64-10	64-16	64-22	64-28	64-28M	70-10	70-16	70-22	70-28	76-22	76-22M	76-28
Original Binder																					
Dynamic Shear G* (Amplitude) (kPa)			T 315			2.00 max.				2.00 max.	2.00 max.		2.00 max.		2.00 max.						
RTFO Residue																					
Ductility (cm)	25 °C	T 51				75 min.				75 min.	75 min.		75 min.		75 min.						
Dynamic Shear Data (Degree)			T 315						80 max.					80 max.							80 max.
Elastic Recovery (%)	25 °C	T 301							75 min.					75 min.							65 min.
NOTES			None																		

NEVADA	Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade																		
				52-28	52-40	58-22	58-28	58-34	58-34M	64-10	64-16	64-22	64-28	64-28M	70-10	70-16	70-22	70-28	76-22	76-22M	76-28	
Original Binder																						
Ductility ¹ (cm)	4 °C	Nev. T 746													50 min.						20 min.	
Toughness and Tenacity	Toughness (In-lbs.)	25 °C	Nev. T 745												110 min.							
	Tenacity (In-lbs.)															75 min.						
Solubility (%)			T 64	99.0 min.								99.0 min.	99.0 min.			99.0 min.				99.0 min.		
Sieve Particulates Retained			Nev. T 730												0						0	
Polymer Content (%)			-																		3.0 min.	
RTFO Residue			Nev. T 728																			
Ductility ¹ (cm)	4 °C	Nev. T 746													25 min.							
MSCR	Non-Recoverable Creep Compliance, J _{nr} (kPa ⁻¹)	76 °C @ 3.2 kPa	T 350																		2.00 max.	
	Creep Recovery, R _c (%)																					30.0 min.
	Non-Recoverable Creep Compliance Difference J _{nr} (kPa ⁻¹)																					
NOTES			Use pull rate of 5cm/min. Certificates of compliance provided for material shall certify that the minimum polymer content is present. The department reserves the right to test for polymer content as per AASHTO T302. If testing indicates the minimum polymer content is not present, the material may be no longer conditionally accepted based on certificate of compliance.																			

OREGON	Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade																		
				52-28	52-40	58-22	58-28	58-34	58-34M	64-10	64-16	64-22	64-28	64-28M	70-10	70-16	70-22	70-28	76-22	76-22M	76-28	
RTFO Residue																						
Elastic Recovery (%)	25 °C	T 301																			50 min.	50 min.
NOTES			None																			

WASHINGTON	Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade																		
				52-28	52-40	58-22	58-28	58-34	58-34M	64-10	64-16	64-22	64-28	64-28M	70-10	70-16	70-22	70-28	76-22	76-22M	76-28	
RTFO Residue			T 240																			
Elastic Recovery (%)	25 °C ± 0.5 °C	T 301 ¹																			60 min.	60 min.
NOTES			Specimen conditioned in accordance with AASHTO T 240.																			

Alaska

Property			Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade				
				52-28	52-40	58-28	58-34	64-28
Original Binder								
Toughness and Tenacity ¹	Toughness (in-lbs.)	25°C	D 5801			110 min.	110 min.	110 min.
	Tenacity (in-lbs.)					75 min.	75 min.	75 min.
Softening Point ¹ (°F)			T 53			120 min.	125 min.	125 min.
RTFO Residue			T 240					
Elastic Recovery ² (%)		25°C	T 301			50 min.		60 min.
NOTES			¹ Anchorage and Fairbanks areas. ² Juneau and Southeast Alaska.					

California

Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade							
			58-22	58-34M	64-10	64-16	64-28	64-28M	70-10	76-22M
Original Binder										
Dynamic Shear G*/sin(delta) (kPa)		T 315	2.00 max.		2.00 max.	2.00 max.	2.00 max.		2.00 max.	
RTFO Residue										
Ductility (cm)	25°C	T 51	75 min.		75 min.	75 min.	75 min.		75 min.	
Dynamic Shear Delta (degree)		T 315		80 max.				80 max.		80 max.
Elastic Recovery (%)	25°C	T 301		75 min.				75. min		65 min.
NOTES		None								

Nevada

Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade				
			52-28	64-22	64-28	70-16	76-22
Original Binder							
Ductility ¹ (cm)		4°C	Nev. T 746			50 min.	20 min.
Toughness and Tenacity	Toughness (in-lbs.)	25°C	Nev. T 745			110 min.	
	Tenacity (in-lbs.)					75 min.	
Solubility (%)			T 44	99.0 min.	99.0 min.	99.0 min.	99.0 min.
Sieve Particulates Retained			Nev. T 730			0	0
Polymer Content (%)			2				3.0 min.
RTFO Residue			Nev. T 728				
Ductility ¹ (cm)		4°C	Nev. T 746			25 min.	
MSCR	Non-Recoverable Creep Compliance, $J_{nr3.2}$ (kPa ⁻¹)	76°C @ 3.2 kPa	T 350				2.00 max.
	Creep Recovery, $R_{3.2}$ (%)						30.0 min.
	Non-Recoverable Creep Compliance Difference J_{nrdiff} (%)						Report
NOTES		¹ Use pull rate of 5cm/min. ² Certificates of compliance provided for material shall certify that the minimum polymer content is present. The department reserves the right to test for polymer content as per AASHTO T302. If testing indicates the minimum polymer content is not present, the material may be no longer conditionally accepted based on certificate of compliance.					

Oregon

- Uses other grades without plus specs

Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade	
			70-22	70-28
RTFO Residue				
Elastic Recovery (%)	25°C	T 301	50 min.	50 min.
NOTES		None		

Washington

Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade					
			58-22	64-22	64-28	70-22	70-28	76-28
RTFO Residue		T 240						
Elastic Recovery (%)	25°C ± 0.5°C	T 301 ¹			60 min.	60 min.	60 min.	60 min.
NOTES		¹ Specimen conditioned in accordance with AASHTO T 240.						



Western Federal Lands

- Uses standard M 320 without plus specs.