

Performance-Graded Asphalt Binder Specification																																					
PERFORMANCE GRADE	PG 46-			PG 52-						PG 58-					PG 64-					PG 70-					PG 76-				PG 82-								
	34	40	46	10	16	22	28	34	40	46	16	22	28	34	40	10	16	22	28	34	40	10	16	22	28	34	40	10	16	22	28	34	10	16	22	28	34
Average 7-day maximum pavement design temperature, °C	<46			<52						<58					<64					<70					<76				<82								
Minimum Pvement design temperature, °C	>-34	>-40	>-46	>-10	>-16	>-22	>-28	>-34	>-40	>-46	>-16	>-22	>-28	>-34	>-40	>-10	>-16	>-22	>-28	>-34	>-40	>-10	>-16	>-22	>-28	>-34	>-40	>-10	>-16	>-22	>-28	>-34	>-10	>-16	>-22	>-28	>-34
ORIGINAL BINDER																																					
Flash point temp, T 48, minimum, °C	230																																				
Viscosity, T 316: maximum 3 Pas, test temp, °C	135																																				
Dynamic shear, T 315: G*/sin δ, minimum 1.00 kPa test temp @ 10 rad/s, °C	46			52						58					64					70					76				82								
ROLLING THIN-FILM OVEN RESIDUE (T 240)																																					
Mass Change, maximum, percent	1.00																																				
Dynamic shear, T 315: G*/sin δ, minimum 2.20 kPa test temp @ 10 rad/s, °C	46			52						58					64					70					76				82								
PRESSURE AGING VESSEL (R 28)																																					
PAV aging temperature, °C	90			90						100					100					100					100				100								
Dynamic shear, T 315: G*/sin δ, maximum 5000 kPa test temp @ 10 rad/s, °C	10	7	4	25	22	19	16	13	10	7	25	22	19	16	13	31	28	25	22	19	16	34	31	28	25	22	19	37	34	31	28	25	40	37	34	31	28
Creep stiffness, T 313: S, maximum 300 Mpa m-value, minimum 0.300 test temp @ 60s, °C	-24	-30	-36	0	-6	-12	-18	-24	-30	-36	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	0	-6	-12	-18	-24
Direct tension, T 314: Failure strain, minimum 0.300 test temp @ 60s, °C	-24	-30	-36	0	-6	-12	-18	-24	-30	-36	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	0	-6	-12	-18	-24
Critical low cracking temp, PP 42: Critical cracking temp determined by PP 42, test temp, °C	-24	-30	-36	0	-6	-12	-18	-24	-30	-36	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	-30	0	-6	-12	-18	-24	0	-6	-12	-18	-24