

| | |
|---------------------------------------|---|
| State: NORTH DAKOTA | Materials: Re: Section 818.02 - Asphalt Cement |
| Date Last Reviewed: 5-10-2011 | Web Address: www.dot.nd.gov |
| Bituminous Engineer: Joe Davis | Contact Info: jdavis@nd.gov |

ASPHALT BINDER:

| | | |
|----------------|---------------------|---|
| Section 818.02 | Description: | Performance-Graded (PG) AC will meet requirements outlined by Combined States Test Group. |
| | PMA's: | None stated. |
| | Exclusions: | None stated. |

| PROPERTY | Test Method AASHTO or Other | Requirements by Performance Grade, PG (Common Grade) | | | |
|--|-----------------------------------|---|------------------------|-------|-------|
| | | 58-34 | 58-28 | 64-28 | 70-28 |
| ORIGINAL: | | | | | |
| Flash Point, °C | T 48 | 230 min. | | | |
| Rotational Viscosity, Pa Xs | 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. | | | |
| | | 16°C | 19°C | 22°C | 25°C |
| Creep Stiffness | At test temperature T 313 | Stiffness 300 max. MPa & m Value 0.300 min. | | | |
| | | -24°C | -18°C | | |
| Direct Tension, (1mm/min.), % Strain | T 314 | No Requirement | | | |
| PG PLUS REQUIREMENTS: None | | | | | |
| NOTES: None. | | | | | |

