02/25/2025

## Section 702. — ASPHALT MATERIAL AND ADDITIVES

Include if project has paving (Sections 401, 402 or 403).

**702.01 Asphalt Binder.** Delete this Subsection and substitute the following:

Conform to AASHTO M 320, Table 1.

In AASHTO M 320, Table 1 replace footnote *f* with the following:

*f* If the creep stiffness is below 300 MPa, the direct tension test is not required. If the creep stiffness is between 301 and 600 MPa, use the creep stiffness value. The *m*-value requirement must be satisfied in both cases.

Include if using an Open-Graded Friction Course (Section 405) in **Nevada.** Anywhere other than Nevada check with Materials for the correct table.

**702.01 Asphalt Binder.** Add the following:

Provide asphalt binder Grade PG 76-22NV conforming to Table 702-3 for the asphalt concrete pavement and open-graded asphalt friction course. Blend the PG 76-22NV at the source of supply and deliver as a completed mixture to the job site. Do not transport PG 76-22NV by railroad car.

**Table 702-3  
Asphalt Binder Grade PG 76-22NV for Open-Graded Friction Course**

|  |  |  |
| --- | --- | --- |
| **Test** | **Test Method** | **Requirement** |
| **Tests on Original Binder** | | |
| Viscosity @ 135°C, Pa⋅s | AASHTO T 316 | 3.00 maximum |
| Dynamic Shear, G\*/sin δ, Test Temp 76°C @  10 rad/s, kPa | AASHTO T 315 | 1.30 minimum |
| Ductility @ 4°C, 5 cm/min, cm | AASHTO T 51 | 20 minimum |
| Polymer Content, % by mass | (1) | 3.0 minimum |
| **Tests on Residue from R.T.F.O., AASHTO T 240** | | |
| Mass Loss, % | AASHTO T 240 | 0.50 maximum |
| Dynamic Shear, G\*/sin δ, Test Temp 76°C @  10 rad/s, kPa | AASHTO T 315 | 2.20 minimum |
| Multiple Stress Creep Recovery, Test Temp 76°C  @ 3200 Pa, % | AASHTO TP 70 | 25 minimum |
| Ductility @ 4°C, 5 cm/min, cm | AASHTO T 51 | 10 minimum |
| **Tests on Residue from Pressure Aging Vessel, AASHTO R28 @ 110°C** | | |
| Dynamic Shear, G\*sin δ , Test Temp 31°C @  10 rad/s, kPa | AASHTO T 315 | 5000 maximum |
| Creep Stiffness, S, Test Temp −12°C @  60 sec, MPa | AASHTO T 313(2) | 300 maximum |
| Creep Stiffness, m-value, Test Temp −12°C @  60 sec | AASHTO T 313(2) | 0.300 minimum |
| Direct Tension, Failure Strain, Test Temp −12°C  @ 1.0 mm/min, % | AASHTO T 314(2) | 1.00 minimum |

(1) Provide certificates of compliance for the material certifying that the minimum polymer content is present.

(2) If the creep stiffness is below 300 MPa, the direct tension test is not required. If the creep stiffness is between 300 and 600 MPa, the direct tension failure strain can be used in lieu of the creep stiffness requirement. The m-value requirement must be satisfied in both cases.