
Special Provision to Item 342

Permeable Friction Course



For this project, Item 342, "Permeable Friction Course," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Section 2.4. Tack Coat." The first paragraph is voided and replaced by the following.

Furnish CSS-1H, SS-1H, or a PG binder with a minimum high-temperature grade of PG 58 for tack coat binder in accordance with Item 300, "Asphalts, Oils, and Emulsions." Specialized tack coat materials listed on the Department's MPL are allowed or required when shown on the plans. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

Section 4.5.2., "Mixing and Discharge of Materials." The first paragraph is voided and replaced by the following.

Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F (or 275°F for WMA). The Department will not pay for or allow placement of any mixture produced above 350°F.

Section 4.7.3.1.3., Thermal Camera," is voided and replaced by the following.

Take immediate corrective action to eliminate recurring moderate thermal segregation when a hand-held thermal camera is used. Provide the Engineer with the thermal profile of every subplot within one working day of the completion of each lot. When requested by the Engineer, provide the electronic files generated using the thermal camera. Report the results of each thermal profile in accordance with Section 342.4.2., "Reporting and Responsibilities." The Engineer will use a hand-held thermal camera to obtain a thermal profile at least once per project. Suspend operations and take immediate corrective action to eliminate severe thermal segregation unless otherwise directed. Resume operations when the Engineer determines that subsequent production will meet the requirements of this Section.

Table 4, "Master Gradation Limits (% Passing by Weight or Volume) and Laboratory Mixture Design Properties," is voided and replaced by the following.

Table 4
Master Gradation Limits (% Passing by Weight or Volume) and Laboratory Mixture Design Properties

Sieve Size	PG 76 Mixtures		A-R Mixtures		Test Procedure
	Fine (PFC-F)	Coarse (PFC-C)	Fine (PFCR-F)	Coarse (PFCR-C)	
3/4"	–	100.0 ¹	100.0 ¹	100.0 ¹	Tex-200-F
1/2"	100.0 ¹	80.0–100.0	95.0–100.0	80.0–100.0	
3/8"	95.0–100.0	35.0–60.0	50.0–80.0	35.0–60.0	
#4	20.0–55.0	1.0–20.0	0.0–8.0	0.0–20.0	
#8	1.0–10.0	1.0–10.0	0.0–4.0	0.0–10.0	
#200	1.0–4.0	1.0–4.0	0.0–4.0	0.0–4.0	
Mixture Properties					
Asphalt binder content, %	6.0–7.0	6.0–7.0	8.0–10.0	7.0–9.0	–
Design gyrations (Ndesign)	50	50	50	50	Tex-241-F
Lab-molded density, %	78.0 Max	82.0 Max	82.0 Max	82.0 Max	Tex-207-F
Hamburg Wheel test, ² passes at 12.5 mm rut depth	10,000 Min ³	Note 2	Note 2	Note 2	Tex-242-F
Overlay tester, ² number of cycles	200 Min	Note 2	Note 2	Note 2	Tex-248-F
Drain-down, %	0.10 Max	0.10 Max	0.10 Max	0.10 Max	Tex-235-F
Fiber content, % by wt. of total PG 76 mixture	0.20 ⁴ –0.50	0.20 ⁴ –0.50	–	–	Calculated
Lime content, % by wt. of total aggregate	1.0 ⁵	1.0 ⁵	■	■	Calculated
CRM content, % by wt. of A-R binder	–	–	15.0 Min	15.0 Min	Calculated
Boil test ⁶	–	–	–	–	Tex-530-C
Cantabro loss, %	20.0 Max	20.0 Max	20.0 Max	20.0 Max	Tex-245-F

1. Defined as maximum sieve size. No tolerance allowed.
2. Mold test specimens to Ndesign at the optimum asphalt binder content (JMF1). Perform the test for informational purposes only when no minimum number is specified.
3. May be decreased when approved.
4. The Contractor may reduce the amount of fibers to no less than 0.10%, provided the mixture meets the drain-down requirement, when at least 3% RAS is used in the mixture.
5. Unless otherwise shown on the plans or waived by the Engineer based on Hamburg Wheel results.
6. Used to establish baseline for comparison to production results. May be waived when approved.