

Special Provision to Item 344

Superpave Mixtures



For this project, Item 344, "Superpave Mixtures," 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.

Article 344.2.1.1.1., "Blending Class A and Class B Aggregates." The first and second paragraph are voided and replaced by the following:

Class B aggregate meeting all other requirements in Table 1 may be blended with a Class A aggregate to meet requirements for Class A materials. Ensure that at least 60% by weight, or volume if required, of the material retained on the No. 4 sieve comes from the Class A aggregate source when blending Class A and B aggregates to meet a Class A requirement. Blend by volume if the bulk specific gravities of the Class A and B aggregates differ by more than 0.300. Coarse aggregate from RAP will be considered as Class B aggregate for blending purposes.

The Engineer may perform tests at any time during production, when the Contractor blends Class A and B aggregates to meet a Class A requirement, to ensure that at least 60% by weight, or volume if required, of the material retained on the No. 4 sieve comes from the Class A aggregate source. The Engineer will use the Department's mix design template, when electing to verify conformance, to calculate the percent of Class A aggregate retained on the No. 4 sieve by inputting the bin percentages shown from readouts in the control room at the time of production and stockpile gradations measured at the time of production. The Engineer may determine the gradations based on either washed or dry sieve analysis from samples obtained from individual aggregate cold feed bins or aggregate stockpiles. The Engineer may perform spot checks using the gradations supplied by the Contractor on the mixture design report as an input for the template; however, a failing spot check will require confirmation with a stockpile gradation determined by the Engineer.

Article 344.2.5., "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 in the plans. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

Table 12, "Operational Tolerances," is voided and replaced by the following:

Table 12
Operational Tolerances

Description	Test Method	Allowable Difference Between Trial Batch and JMF1 Target	Allowable Difference from Current JMF Target	Allowable Difference between Contractor and Engineer ¹
Individual % retained for #8 sieve and larger	Tex-200-F or Tex-236-F	Must be Within Master Grading Limits in Table 8	±5.0 ^{2,3}	±5.0
Individual % retained for sieves smaller than #8 and larger than #200			±3.0 ^{2,3}	±3.0
% passing the #200 sieve			±2.0 ^{2,3}	±1.6
Asphalt binder content, %	Tex-236-F	±0.5	±0.3 ³	±0.3
Dust/asphalt binder ratio ⁴	—	Note 5	Note 5	N/A
Laboratory-molded density, %	Tex-207-F	±1.0	±1.0	±0.5
In-place air voids, %		N/A	N/A	±1.0
Laboratory-molded bulk specific gravity		N/A	N/A	±0.020
VMA, % min	Tex-204-F	Note 6	Note 6	N/A

Theoretical maximum specific (Rice) gravity	Tex-227-F	N/A	N/A	±0.020
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1. Contractor may request referee testing only when values exceed these tolerances.
2. When within these tolerances, mixture production gradations may fall outside the master grading limits; however, the % passing the #200 will be considered out of tolerance when outside the master grading limits.
3. Only applies to mixture produced for Lot 1 and higher.
4. Defined as % passing #200 sieve divided by asphalt binder content.
5. Verify that Table 10 requirement is met.
6. Verify that Table 8 requirements are met.

Article 344.4.4.1., “Design Requirements” The fifth paragraph is voided and replaced by the following.

During design and production, produce an aggregate gradation that does not exceed the values in the table below. During production, the operational tolerances in Table 12 do not apply to the table below. Take immediate corrective action if the gradation exceeds the specified limits in the table below. If the corrective action does not yield satisfactory results, suspend operations immediately.

Max% Passing by Weight or Volume				
Sieve Size	SP-A	SP-B	SP-C	SP-D
#8	26	33	38	46

Article 344.4.5.2., “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.

Article 344.4.7., “Placement Operations.” Table 13 is voided and replaced by the following:

Table 13
Compacted Lift Thickness and Required Core Height

Mixture Type	Compacted Lift Thickness Guidelines		Minimum Untrimmed Core Height (in.) Eligible for Testing
	Minimum (in.)	Maximum (in.)	
SP-A	3.00	5.0	2.50
SP-B	2.25	4.0	2.00
SP-C	2.00	3.0	1.50
SP-D	1.25	2.0	1.25

Article 344.4.7.3.1.3., “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. Evaluate areas with moderate thermal segregation by performing density profiles in accordance with Section 344.4.9.3.3.2., “Segregation (Density Profile).” 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 344.4.2., “Reporting and Responsibilities.” The Engineer will use a hand-held thermal camera to obtain a thermal profile at least once per project. No production or placement payment adjustments greater than 1.000 will be paid for any subplot that contains severe thermal segregation.

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. Evaluate areas with severe thermal segregation by performing density profiles in accordance with Section 344.4.9.3.3.2.,

“Segregation (Density Profile).” Remove and replace the material in any areas that have both severe thermal segregation and a failing result for Segregation (Density Profile) unless otherwise directed. The subplot in question may receive a production and placement payment adjustment greater than 1.000, if applicable, when the defective material is successfully removed and replaced.

Article 344.4.9.2.2.2., “Informational Cantabro and Overlay Testing,” is voided and replaced by the following:

Select one random subplot from Lot 2 or higher for Cantabro and Overlay testing during the first week of production. Obtain and provide the Engineer with approximately 70 lb. (30 kg) of mixture in sealed containers, boxes, or bags labeled with Control Section Job (CSJ), mixture type, lot, and subplot number in accordance with [Tex-222-F](#). The Engineer will ship the mixture to the Materials and Tests Division for Cantabro and Overlay testing. Results from these tests will not be used for specification compliance.

Article 344.4.9.3.3.2., “Segregation (Density Profile).” The second paragraph is voided and replaced by the following:

Perform a minimum of one density profile per subplot. Perform additional density profiles when any of the following conditions occur, unless otherwise approved:

- the paver stops for more than 60 sec.;
- either the Contractor or the Engineer identifies areas as having thermal segregation; and
- any visibly segregated areas exist.

Article 344.4.9.4., “Exempt Production.” The second paragraph is voided and replaced by the following:

For exempt production, the Contractor is relieved of all production and placement QC/QA sampling and testing requirements, except for coring, and the production and placement pay factors are 1.000. All other specification requirements apply and the Engineer will perform acceptance tests for production and placement listed in Table 15 when 100 tons or more per day are produced.

Article 344.6.2.2., “Placement Sublots Subject to Removal and Replacement.” The second paragraph is voided and replaced by the following:

The bulk specific gravity of each core will be divided by the Engineer’s average maximum theoretical specific gravity for that lot to determine the new payment adjustment factor of the subplot in question. If the new payment adjustment factor is 0.700 or greater, the new payment adjustment factor will apply to that subplot. If the new payment adjustment factor is less than 0.700, no payment will be made for the subplot. Remove and replace the failing subplot, or the Engineer may allow the subplot to be left in place without payment. The Engineer may also accept the subplot in accordance with Section 5.3.1., “Acceptance of Defective or Unauthorized Work.” Replacement material meeting the requirements of this Item will be paid for in accordance with this Section.