

AASHTO T 283 with freeze cycles and a TSR of 80 are required per SP-2. Testing of mix and storage of antistriper shall be per Supplements 1051 and 1053. The cost of this additional testing and the addition of any antistriper additive shall be included in the contract price for the bituminous aggregate base or asphalt concrete. Requirements for treatment if needed are as follows:

Liquid Antistriper Material - the mix shall include liquid antistriper material at a rate of 0.50 to 1.25 percent by weight of the binder.

Hydrated Lime - the mix shall include hydrated lime in dry form at a rate of 1.0 percent by dry aggregate weight for asphalt concrete. The hydrated lime shall meet the requirements of AASHTO M303, Type 1. The following information shall be provided to the DET for each shipment of hydrated lime: 1. letter of certification, 2. production date, 3. shipment date, 4. shipment destination, 5. batch or lot number, 6. net weight

The JMF shall include:

1. All TSR data (before and after the addition of the antistriper additive).
2. Rate of addition of the liquid antistriper material, if used.
3. Product information, recent supplier State project information using the liquid antistriper material, and letter of certification (only for liquid antistriper material, if used).

The Laboratory may perform additional tests in accordance with Supplements 1051, 1052, and 1004. These tests may be performed on material conforming to a proposed JMF or on material obtained during production of an approved JMF. If a change in the aggregate production is suspected, the District/ Laboratory may require the Contractor to perform washed gradations on components and calculate adherent fines to determine the need for additional TSR review. The Laboratory may obtain samples of the hydrated lime at any time to verify quality. If the quality of the hydrated lime is in question, the Laboratory may require independent laboratory testing verifying AASHTO M 303 is met.

At the end of the project or at the end of each construction year on a multiple year project, the Contractor shall provide delivery tickets to the Engineer verifying the number of pounds of antistriper additive used. The Engineer shall verify the quantity of antistriper additive is within 10 percent of the calculated amount of antistriper additive required for the total pounds of bitumen, based on the JMF, used in the bituminous aggregate base or asphalt concrete.

858.03 Mix Design for Asphalt Concrete Mix Type B. The mix design as in 858.02 above shall apply for Asphalt Concrete Type B except as follows:

Gyrator Level and Material Requirements

Lane ADTT	N _{ini}	N _{des}	N _{max}	Coarse Agg. Angularity	Fine Agg. Angularity	Flat and Elong. Particles	Sand Equiv.
<4000	7	86	134	65	44	10	45
>4000	8	109	174	75/70	44	10	50

If fine aggregate is from crushed carbonate stone or air cooled blast furnace slag, the FAA test is not required. At least 50 percent by weight of virgin fine aggregate shall be aggregate meeting FAA or be crushed carbonate stone or air cooled blast furnace slag. Aggregate to be used must be submitted to the Laboratory for approval three weeks prior to a JMF submittal for approval.

Control points to be per SP-2 except as follows (gradations shall not end before the first control point sieve to allow 100 percent passing):

Sieve	12.5mm mix	19mm mix
2.36mm (No. 8)	28-38%	25-40%
9.5mm (3/8 inch)	88% max	
12.5mm (1/2 inch)	95-100%	
19mm (3/4 inch)		85-100%
37.5mm (1 1/2 inch)		100%

A F/T value of +2 shall apply per 441.02 and 441.10.

858.04 Binder. Binder shall be used as follows:

12.5mm Surface course	Supplement 1055
9.5mm Intermediate course	PG 64-28
19mm Intermediate course	PG 64-28

The minimum total binder content for a 12.5 mm surface course shall be:

- 5.5 percent for N_{des} = 86
- 5.3 percent for N_{des} = 109

858.05 Quality Control. 441.10 shall be followed with the following exceptions. A Contractor's representative holding a Level 2 qualification is required to be at the asphalt plant until a full production day is achieved with results satisfactory to the DET. Plant operation and quality control testing shall conform to the contractor's Plant Operation Quality Control Program.

A gyratory compactor meeting the requirements of Superpave and verified by FHWA or a representative is required. If the gyratory compactor was moved to the plant prior to production, it must be calibrated and have results presented to the DET. Samples for air voids shall be