



**SPECIAL PROVISIONS
FOR
HIGH BINDER REPLACEMENT FOR FLEXIBLE PAVING MIXTURE**

**Jefferson County
HDP-C051(89)--6B-51**

**Effective Date
January 21, 2026**

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS AND APPLICABLE DEVELOPMENTAL SPECIFICATIONS.

235009.01 DESCRIPTION.

These specifications describe requirements for flexible paving mixtures designed for over 30% binder replacement (25.0% for mixtures containing recycled asphalt shingles). Apply Section 2303 of the standard specifications unless otherwise directed in these specifications.

235009.02 MATERIALS.

A. Recycled Asphalt Materials.

For surface mixtures, 60% of the total asphalt binder shall be virgin.

B. Other Materials.

Use an additive that meets ASTM D 4552. When combined with the virgin asphalt binder, recycled asphalt materials, and virgin aggregates, ensure a $\Delta T_c \geq -5^\circ\text{C}$ when testing the extracted and recovered binder per ASTM D 7643 at the design dosage rate. Provide binder test results as part of the mix design approval to demonstrate contract binder grade is achieved. The laboratory performing binder testing must show that test results can be obtained within precision limits established by AASHTO for each test.

C. Mix Design.

1. Meet the following Disk-Shaped Compact Tension Test (DCT) (ASTM D 7313-07a) requirements:
 - Very High Traffic (VT): 690 J/m²
 - High Traffic (HT): 500 J/m²
 - Standard Traffic (ST): 400 J/m²
2. Use the average of two specimens and a test temperature 10°C warmer than the low temperature PG grade on the contract.

3. Perform a moisture sensitivity evaluation of the proposed asphalt mixture design in accordance with Materials I.M. 319. Use the following minimum stripping inflection point (SIP) requirements for plant and lab-produced material based on traffic designation:

Table 235009.02-1: Minimum Stripping Inflection Point

Traffic Designation	SIP, Number of Passes ^{1,2}
S	10,000
H, V	14,000

Note 1: If ratio between creep slope and stripping slope as defined in Materials I.M 319 is less than 2.00, the SIP is invalid.

Note 2: Minimum SIP for mixtures placed as base widening is 5000 passes.

235009.03 CONSTRUCTION.

A. Quality Assurance/Quality Control.

1. Hamburg Testing Verification.

Use the frequency shown in Materials I.M. 204, Appendix F for moisture sensitivity testing.

2. DCT Testing Verification.

- a. Use the frequency shown in Materials I.M. 204, Appendix F for moisture sensitivity testing. Testing shall be performed by the additive supplier.
- b. If DCT fails, the additive supplier shall extract and recover the binder per ASTM D7643 performed by an AASHTO accredited laboratory to demonstrate the contract binder PG grade is satisfied. Stop production until either the DCT or extracted/recovered PG grade is satisfied. If dosage is adjusted, both SIP and DCT requirements must be met.

235009.04 METHOD OF MEASUREMENT.

Measurement shall be per Article 2303.04, A of the Standard Specifications.

235009.05 BASIS OF PAYMENT.

Payment shall be Article 2303.05, A of the Standard Specifications.