Section 883—Mineral Filler

883.1 General Description

This section covers mineral filler added as a separate ingredient for use in bituminous paving mixtures. Use mineral filler that consists of finely divided mineral matter such as rock dust, slag dust, hydrated lime, hydraulic cement, fly ash, or other suitable mineral filler. Ensure that at the time of use it is sufficiently dry, flows freely, and is free from lumps.

883.1.01 Related References

A. Standard Specifications

General Provisions 101 through 150.

B. Referenced Documents

AASHTO PP 1

AASHTO T 90

AASHTO T 240

AASHTO TP 1

AASHTO TP 5

GDT 4

883.2 Materials

883.2.01 Mineral Filler

A. Requirements

Mineral filler shall be graded within the following limits:

Sieve Size	Percent Passing
No. 30 (600 μm)	100
No. 50 (300 μm)	95-100
No. 200 (75 μm)	55-100

Ensure that the mineral filler is free from organic impurities and has a plasticity index not greater than 4. Plasticity index limits are not appropriate for hydrated lime and hydraulic cement.

Thoroughly blend mineral filler to be used in Stone Matrix Asphalt mixtures with asphalt cement and fiber stabilizing additives into a homogenous mixture. The total fine mortar shall then meet the following requirements:

Test	Specification
Unaged DSR, G*/sinδ(kPa)	5 minimum
RTFO Aged DSR, G*/sinδ(kPa)	11 minimum
PAV Aged BBR, Stiffness (MPa)	1500 maximum

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

Test as follows:

Sieve Analysis of Mineral Filler	GDT 22*
Plasticity Index	AASHTO T 90
* A laser diffraction particle size distribution analyzer may be used in lieu of this test.	

Mortar Properties to be based on NCAT procedure for Laboratory Preparation and Testing of HMA Mortars using AASHTO T240, AASHTO PP1, AASHTO TP1, and AASHTO TP5.

D. Materials Warranty

General Provisions 101 through 150.