

Section 882—Lime

882.1 General Description

This Section includes the requirements for agricultural lime; lime for soil stabilization; and lime for asphaltic concrete.

882.1.01 Related References

A. Standard Specifications

General Provisions 101 through 150.

B. Referenced Documents

AASHTO M 303

ASTM C 25

ASTM C 110

ASTM C 977

“Official Methods of Analysis,” Association of Official Agricultural Chemists

QPL 41

882.2 Materials

882.2.01 Agricultural Lime

A. Requirements

Use agricultural lime made of ground dolomitic limestone with the following properties:

Requirements	Percent by Weight
Total carbonates, min.	85
Elemental magnesium derived from magnesium carbonate, min.	6
Passing No. 10 (2.00 mm) sieve, min	90
Passing No. 100 (150 µm) sieve, min	25

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

Test agricultural lime according to the “Official Methods of Analysis” of the Association of Official Agricultural Chemists.

D. Materials Warranty

General Provisions 101 through 150.

882.2.02 Lime for Soil Stabilization

A. Requirements

Use either a commercial dry hydrated lime or a commercial granular or pelletized quicklime for soil stabilization.

1. Hydrated Lime: Use hydrated lime that meets the requirements of ASTM C 977, except that at least 85 percent by weight of the lime shall pass the No. 200 (75 µm) sieve.
2. Quicklime: Use quicklime that meets the requirements of ASTM C 977, except that the lime shall contain at least 94 percent total calcium oxide and magnesium oxide (CaO + MgO), and at least 90 percent total available calcium oxide (CaO).

- a. Ensure the quicklime meets one of the following grade requirements (by weight):

Grade A	Grade B
100% passes the 3/8 in (9.5 mm) sieve	100% passes the No. 10 (2.00 mm) sieve
0% passes the 1/4 in (6.3 mm) sieve	

- b. Furnish certified test reports with each shipment of lime attesting that the lime meets the requirements of the Specification. However, the Engineer may inspect, test, and reject the material at any time.
- c. You may use lime from more than one source or more than one type on the same Project, but do not mix the limes.
- d. Protect the lime from exposure until used. Ensure that the lime is dry enough to flow freely when handled.

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

Test the hydrated and quicklime used for soil stabilization according to ASTM C 977.

D. Materials Warranty

General Provisions 101 through 150.

882.2.03 Lime for Asphaltic Concrete

A. Requirements

Use hydrated lime that meets the chemical and physical properties of AASHTO M 303, Type I.

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

1. Run the chemical analysis of hydrated lime used in asphaltic concrete according to ASTM C 25.
2. Test the physical properties of the hydrated lime according to the residue test in ASTM C 110.

NOTE: QPL 41 for lime is used in asphaltic concrete only.

3. See QPL 41 for acceptable hydrated lime that meets the requirements of this Specification.

D. Materials Warranty

General Provisions 101 through 150.

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