

Section 2308. Bituminous Fog Seal (Shoulders)

2308.01 DESCRIPTION.

Apply diluted asphalt emulsion to the shoulder surface using a bituminous distributor.

2308.02 MATERIALS.

Use asphalt emulsion grade CSS-1 or SS-1 meeting the requirements of [Section 4140](#), unless directed otherwise by the Engineer.

2308.03 CONSTRUCTION.

A. Equipment.

Meet the requirements of [Section 2001](#).

B. Cleaning.

Immediately prior to placing the emulsion fog seal, clean the shoulder surface of foreign material.

C. Dilution.

Dilute the asphalt emulsion with water prior to application to the shoulders. The dilution rate is one part of asphalt emulsion to two parts of water. The Engineer will require documentation that the dilution is done properly.

D. Application.

1. Uniformly apply the diluted asphalt emulsion at the rate of 0.20 gallon per square yard (0.9 L/m²) of shoulder surface. The application rate may be reduced as directed by the Engineer.
2. Use safety and convenience to the public without soiling their vehicles as a controlling factor.
3. Apply diluted asphalt emulsion so the entire shoulder surface is covered in one application.
4. Do not apply asphalt emulsion to bridge decks, PCC gore areas, or adjacent paved surfaces and painted edge lines. Replace edge lines obliterated by this operation at no additional cost to the Contracting Authority.

E. Limitations.

1. Do not apply asphalt emulsion on damp or wet surfaces without the Engineer's approval. Work will not be allowed on Sundays or holidays, according to [Article 1108.03](#).
2. Apply asphalt emulsion during weather conditions which allow satisfactory application. Do not apply asphalt emulsion when either the pavement temperature or air temperature is below 60°F (16°C). Do not apply asphalt emulsion after August 31 without the Engineer's permission.
3. A sand dam or other approved means may be necessary to prevent emulsion from running on the pavement in areas of superelevated curves.

F. General.

The asphalt emulsion as applied shall have an appearance satisfactory to the Engineer. Dilution rate and application rate may need to be adjusted to accomplish desired results.

G. Traffic Control.

Place traffic control according to [Article 1107.09](#) and the appropriate traffic control detail.

2308.04 METHOD OF MEASUREMENT.

Measurement for the items involved in construction of Bituminous Fog Seal (Shoulders) will be as follows:

A. Asphalt Emulsion for Fog Seal (Shoulders).

As provided in [Article 2307.04, B](#), for undiluted Asphalt Emulsion for Fog Seal (Shoulders).

B. Sand.

Not be measured for payment.

C. Traffic Control.

Lump sum for the contract.

2308.05 BASIS OF PAYMENT.

Payment will be for the contract unit price as follows for the quantity of items involved in construction of Bituminous Fog Seal (Shoulders):

A. Asphalt Emulsion for Fog Seal.

1. Per gallon (liter) for undiluted Asphalt Emulsion for Fog Seal (Shoulders) that is mixed and used on the project. Diluted asphalt emulsion that is delivered to the job site, but not applied to the roadway surface will not be considered for payment.
2. Payment is full compensation for:
 - a. Cleaning the shoulder surface.
 - b. Furnishing and applying the diluted asphalt emulsion.
 - c. Mixing water.
 - d. Furnishing and applying sand cover.
 - e. Protecting the adjacent pavement and edge lines, including special protection and dams in areas of superelevated curves.

B. Traffic Control.

1. Lump sum.
2. Payment is full compensation for furnishing signs, barricades, flaggers, and other traffic control devices required for this work.