

404 SLURRY SEAL

404.01 DESCRIPTION

Slurry Seal consist of mixing and placing a bituminous mixture on clean roadway surfaces in conformance with these specifications, where shown on the plans and/or where directed by the Chief Engineer.

404.02 COMPOSITION

Slurry Seal shall consist of emulsified asphalt, mineral aggregate and water; and when required, may also consist of portland cement and/or an additive. Slurry Seal shall contain 2.5 to 3.0 gallons of asphalt emulsion for every 100 pounds of mineral aggregate, and the amount of water shall be regulated for proper consistency.

404.03 MATERIALS

- (A) **ASPHALT EMULSION.** Asphalt emulsion shall conform to the requirements of 802.05.
 - (1) Emulsified Asphalt – AASHTO M 140, Grade SS-1 or 1h.
 - (2) Cationic Emulsified Asphalt – AASHTO M 208, Grade CSS-1 or 1h.
- (B) **MINERAL AGGREGATE.** Mineral aggregate shall consist of clean aggregate and mineral filler, combined to meet the gradation of [803.08](#). For the portion passing the No. 200 sieve, portland cement may be used in an amount up to 2 percent by weight total aggregate mix to increase mixing time.
- (C) **WATER.** Water shall be free from foreign matter.
- (D) **ADDITIVE.** An additive may be mixed with the water to extend the mixing time as temperatures increase.

404.04 CONSTRUCTION REQUIREMENTS

- (A) **SURFACE PREPARATION.** Roadway surfaces shall be prepared and properly cleaned by power broom, compressed air or other suitable means prior to Slurry Seal application. Prior to application of slurry seal, pavement surface and all crack faces shall be sprayed with water.
- (B) **WEATHER AND TEMPERATURE.** Slurry seal shall be placed only when ambient air temperature is 60° F or above. Slurry seal shall not be placed if rain is pending before the mix can properly set.
- (C) **CONSTRUCTION METHODS.** A continuous feed-mix-flow spread slurry machine shall be used to produce and place creamy textured slurry that, when spread, will flow in a wave approximately 2 feet ahead of the strike- off squeegee to a minimum thickness of 1/4 inch, as well as flow into and fill pavement cracks, before the strike-off passes over. Where cracks exceed 1 inch in depth and 1/2 inch in width, they shall be first filled with the slurry mix prior to placing Slurry Seal over the entire surface.

The surface shall be damp, but no free water shall remain when slurry mix is applied. Slurry seal shall be applied sufficiently in advance of overlay so that the slurry mat may set. The time interval between application of the slurry seal and placement of the asphalt mix will be regulated by the Chief Engineer.

Traffic shall be kept off the slurry seal until it has set sufficiently to prevent pick-up of the mix. Hand work with squeegees will be required as needed.

A pneumatic tired roller with smooth treads shall be used as directed by the Chief Engineer.

404.05 MEASURE AND PAYMENT

The measure for Slurry Seal will be the square yard in place.

Payment will be made at the contract unit price per square yard complete in place, which payment will include proper cleaning of roadway, furnishing and applying the slurry mix, curing, and all labor, tools, materials, equipment and incidentals needed to complete specified work.