

DIVISION 6 ASPHALT PAVEMENTS

SECTION 600 PRIME COAT

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600-1 DESCRIPTION

Perform the work covered by this section including, but not limited to, treating an existing non-asphalt base course with asphalt material by furnishing and applying the prime, furnishing and placing granular material to protect the prime and maintaining the prime coat in accordance with these Specifications.

Treat all non-asphalt bases beneath an asphalt surface treatment with a prime coat.

600-2 MATERIALS

Refer to Division 10.

Item	Section
Prime Coat Materials	1020-5

Use materials for prime coat application that are on the APL for prime coats available on the Department's website.

Where the grade of prime coat material is not established by the contract, the Contractor may select the grade to be used from the APL. All prime coat materials shall be delivered to the project ready for use.

600-3 WEATHER LIMITATIONS

Apply prime coat only when the surface to be treated is free of standing water, at proper moisture content and the atmospheric temperature measured at the location of the operation away from artificial heat is 40°F or above for plant mix and 50°F or above for asphalt surface treatment.

Do not apply prime coat on a frozen surface or when the weather is foggy or rainy.

600-4 BASE PREPARATION

Clean the base of objectionable debris, excessive dust and any other deleterious matter before placing the prime coat.

When directed, dampen the surface of the base before application of the prime coat.

600-5 APPLICATION EQUIPMENT

Provide, maintain and operate a pressure distributor that is designed and equipped such that the asphalt material remains at a constant temperature and is applied uniformly on variable widths of surface at predetermined and controlled rates. Use a distributor equipped with a tachometer or synchronizer, pressure gauges, accurate volume measuring devices or a calibrated tank and a mounted thermometer for measuring temperature.

Use a distributor equipped with a power driven pump of sufficient capacity to distribute the required quantity of asphalt material at constant flow and uniform pressure. Provide a full circulation spray bar adjustable laterally and vertically and adjustable in length to conform to the required width of application without overlapping. Provide and maintain nozzles designed to provide equal and uniform application at all times. Provide a hand spray hose and nozzle to cover areas inaccessible to the spray bars. Equip the distributor with a positive shut-off control for the spray bar and hand hose.

Section 605

1 **600-6 APPLICATION RATES AND TEMPERATURES**

2 Apply the prime coat at a rate from 0.20 to 0.50 gal/sy. The exact rate for each application
3 will be established by the Engineer before application.

4 The required rate of application of asphalt materials will be based on the volume of material
5 measured at the application temperature. Apply the prime coat material at a temperature that
6 is in accordance with the manufacturer's recommendations or as approved.

7 **600-7 APPLICATION OF PRIME COAT**

8 Apply the prime coat only when the base to be treated has been approved.

9 Cover bridge floors, curbs and handrails of structures and all other appurtenances to protect
10 them from tracking or splattering of prime coat.

11 After the prime coat has penetrated sufficiently and when directed, roll the primed surface
12 until all loose base material is thoroughly bonded.

13 **600-8 MAINTENANCE AND PROTECTION**

14 When directed, apply blotting sand in accordance with Section 818.

15 Maintain the prime coat in an acceptable condition until such time as the pavement is placed.
16 Replace any damaged prime coat.

17 **600-9 MEASUREMENT AND PAYMENT**

18 Ensure the volume of the distributor tank is calibrated by a commercial laboratory or the
19 manufacturer before use. Provide a calibration chart with an accurately calibrated measuring
20 stick graduated in increments of not more than 25 gal on the distributor at all times for use by
21 the Engineer.

22 *Prime Coat* will be paid at the contract unit price per gallon of prime coat material
23 satisfactorily placed on the roadway. Each distributor load of prime coat material delivered
24 and used on the project will be measured. Repair damaged prime coat at no cost to the
25 Department.

26 *Blotting Sand* will be paid in accordance with Article 818-4.

27 Payment will be made under:

Pay Item	Pay Unit
Prime Coat	Gallon

28 **SECTION 605**
29 **ASPHALT TACK COAT**

30 **605-1 DESCRIPTION**

31 Apply tack coat material to existing asphalt or concrete surfaces in accordance with these
32 Specifications.

33 Apply tack coat beneath each layer of asphalt plant mix to be placed. Where a prime coat or a
34 newly placed asphalt surface treatment mat coat has been applied, apply tack coat as directed.

35 **605-2 MATERIALS**

36 Refer to Division 10.

Item	Section
Asphalt Binder, Grade PG 58-28	1020-2
Asphalt Binder, Grade PG 64-22	1020-2
Emulsified Asphalt, Grade CRS-1	1020-3
Emulsified Asphalt, Grade CRS-1H	1020-3