

## DIVISION 6 ASPHALT PAVEMENTS

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### SECTION 600 PRIME COAT

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3 **600-1 DESCRIPTION**

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

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

9 **600-2 MATERIALS**

10 Refer to Division 10.

**Item****Section**

Prime Coat Materials

1020-5

11 Use materials for prime coat application that are on the Materials and Tests Unit's Approved  
12 Product List for prime coats available on the Department's website. Materials shall meet the  
13 manufacturer's specifications as submitted to and approved by the Department.

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

17 **600-3 WEATHER LIMITATIONS**

18 Apply prime coat only when the surface to be treated is free of standing water, at proper  
19 moisture content and the atmospheric temperature in the shade away from artificial heat is  
20 40°F or above for plant mix and 50°F or above for asphalt surface treatment.

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

22 **600-4 BASE PREPARATION**

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

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

26 **600-5 APPLICATION EQUIPMENT**

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

32 Use a distributor equipped with a power driven pump of sufficient capacity to distribute the  
33 required quantity of asphalt material at constant flow and uniform pressure. Provide a full  
34 circulation spray bar adjustable laterally and vertically and adjustable in length to conform to  
35 the required width of application without overlapping. Provide and maintain nozzles designed  
36 to provide equal and uniform application at all times. Provide a hand spray hose and nozzle  
37 to cover areas inaccessible to the spray bars. Equip the distributor with a positive shut-off  
38 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, in accordance with the limits shown in  
4 the Approved Product List referenced in Article 600-2.

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

**8 600-7 APPLICATION OF PRIME COAT**

9 When the plans require the base course to be constructed with side slopes flatter than 1:1,  
10 apply prime to the full width of the base including the side slopes.

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

12 Place a string line to provide alignment control for the distributor during prime coat  
13 application unless waived by the Engineer.

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

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

**18 600-8 MAINTENANCE AND PROTECTION**

19 Allow the prime coat to thoroughly penetrate the base. When directed, apply blotting sand in  
20 accordance with Section 818.

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

**23 600-9 MEASUREMENT AND PAYMENT**

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

28 *Prime Coat* will be paid at the contract unit price per gallons of prime coat material  
29 satisfactorily placed on the roadway. Each distributor load of prime coat material delivered  
30 and used on the project will be measured. Replaced damaged prime coat at no cost to the  
31 Department.

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

33 Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Prime Coat	Gallon

**34 SECTION 605**  
**35 ASPHALT TACK COAT**

**36 605-1 DESCRIPTION**

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

39 Apply tack coat beneath each layer of asphalt plant mix to be placed, unless otherwise  
40 approved. Where a prime coat or a newly placed asphalt surface treatment mat coat has been  
41 applied, apply tack coat as directed.