

Section 605

600-6 APPLICATION RATES AND TEMPERATURES

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

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

600-7 APPLICATION OF PRIME COAT

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

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

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

600-8 MAINTENANCE AND PROTECTION

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

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

600-9 MEASUREMENT AND PAYMENT

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

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

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

Payment will be made under:

Pay Item	Pay Unit
Prime Coat	Gallon

SECTION 605 ASPHALT TACK COAT

605-1 DESCRIPTION

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

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

605-2 MATERIALS

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

Emulsified Asphalt, Grade CRS-2	1020-3
Emulsified Asphalt, Grade HFMS-1	1020-3
Emulsified Asphalt, Grade RS-1H	1020-3

1 Do not dilute or mix the tack coat material with water, solvents or other materials before
2 application.

3 Unless otherwise specified in the contract, use any of the grades of tack coat material
4 specified in this article.

5 For tack coat beneath an open-graded asphalt friction course, the asphalt grade and rate of
6 application to be used on the project will be specified in accordance with Section 650-5.

7 **605-3 WEATHER LIMITATIONS**

8 Apply tack coat only when the surface to be treated is dry and when the atmospheric
9 temperature measured at the location of the paving operation away from artificial heat is 35°F
10 or above.

11 Do not apply tack coat when the weather is foggy or rainy.

12 **605-4 SURFACE PREPARATION**

13 Ensure that the existing asphalt or concrete surface is free of all dust and foreign material
14 before applying the tack coat.

15 Remove grass, dirt and other materials from the edge of the existing pavement before the
16 placement of tack coat.

17 **605-5 ACCEPTANCE OF ASPHALT MATERIALS**

18 The acceptance of asphalt materials will be in accordance with Article 1020-1.

19 **605-6 APPLICATION EQUIPMENT**

20 Provide equipment for heating and uniformly applying the asphalt material in accordance with
21 Article 600-5.

22 **605-7 APPLICATION RATES AND TEMPERATURES**

23 Apply tack coat uniformly across the existing surface at target application rates shown in
24 Table 605-1.

TABLE 605-1 APPLICATION RATES FOR TACK COAT	
Existing Surface	Target Rate (gal/sy)
	Emulsified Asphalt
New Asphalt	0.04 ± 0.01
Oxidized or Milled Asphalt	0.06 ± 0.01
Concrete	0.08 ± 0.01

25 Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not
26 be overheated during storage, transport or at application.

TABLE 605-2	
APPLICATION TEMPERATURE FOR TACK COAT	
Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 58-28 or PG 64-22	350 - 400°F
Emulsified Asphalt, Grade RS-1H	130 - 160°F
Emulsified Asphalt, Grade CRS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-1H	130 - 160°F
Emulsified Asphalt, Grade HFMS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-2	130 - 160°F

605-8 APPLICATION OF TACK COAT

Apply only as much tack coat material as can be covered with base, intermediate or surface course material during the next day's operation except where public traffic is being maintained.

If public traffic is being maintained, cover the tack coat in the same day's operation. Provide safe traffic conditions. If needed, apply suitable granular material so it bonds to the tack coat. In addition, the Engineer may limit the application of tack coat in advance of the paving operation depending on traffic conditions, project location, proximity to business or residential areas or other reasons.

Take necessary precautions to limit the tracking or accumulation of tack coat on either existing or newly constructed pavements. Excessive accumulation of tack coat requires corrective measures.

Apply tack coat with a distributor spray bar that can be adjusted to uniformly coat the entire surface at the directed rate. Use a hand hose attachment only on irregular areas and areas inaccessible to the spray bar. Cover these areas uniformly and completely.

Apply tack coat as directed by and in the presence of the Engineer. Do not place any asphalt mixture until the tack coat has sufficiently cured.

Apply tack coat to all exposed transverse and longitudinal edges of each course before mixture is placed adjacent to such surfaces. Apply tack coat to contact surfaces of headers, curbs, gutters, manholes and vertical faces of old pavements.

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

605-9 PROTECTION OF TACK COAT

After the tack coat has been applied, protect it until it has cured for a sufficient length of time to prevent it from being picked up by traffic.

605-10 MEASUREMENT AND PAYMENT

There will be no direct payment for the work covered by this section.

Payment at the contract unit prices for the various mix items covered by Sections 610, 650 and 654 will be full compensation for all work covered by this section.

SECTION 607 MILLING ASPHALT PAVEMENT

607-1 DESCRIPTION

Perform the work covered by this section including, but not limited to, milling and re-milling the pavement at locations, depths, widths and typical sections indicated in the contract; cleaning the milled surface; loading, hauling and stockpiling the milled material for use in recycled asphalt mixtures; and disposal of any excess milled material.