

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:

Pay Item	Pay Unit
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.

1 **605-2 MATERIALS**

2 Refer to Division 10.

Item	Section
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

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

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

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

9 **605-3 WEATHER LIMITATIONS**

10 Apply tack coat only when the surface to be treated is dry and when the atmospheric
11 temperature in the shade away from artificial heat is 35°F or above.

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

13 **605-4 SURFACE PREPARATION**

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

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

18 **605-5 ACCEPTANCE OF ASPHALT MATERIALS**

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

20 **605-6 APPLICATION EQUIPMENT**

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

23 **605-7 APPLICATION RATES AND TEMPERATURES**

24 Apply tack coat uniformly at a rate from 0.04 to 0.08 gal/sy. The exact rate for each
25 application will be established by the Engineer. A different rate of application for different
26 layers or surfaces may be established.

27 The established rates of application will be based on the volume of material at the actual
28 application temperature. Apply tack coat at a temperature within the ranges shown in
29 Table 605-1.

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TABLE 605-1 APPLICATION TEMPERATURE FOR TACK COAT	
Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 64-22	350 - 400°F
Emulsified Asphalt, Grade RS-1H	90 - 150°F
Emulsified Asphalt, Grade CRS-1	90 - 150°F
Emulsified Asphalt, Grade CRS-1H	90 - 150°F
Emulsified Asphalt, Grade HFMS-1	90 - 160°F
Emulsified Asphalt, Grade CRS-2	125 - 185°F

1 **605-8 APPLICATION OF TACK COAT**

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

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

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

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

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

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

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

23 **605-9 PROTECTION OF TACK COAT**

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

26 **605-10 MEASUREMENT AND PAYMENT**

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

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

30 **SECTION 607**
31 **MILLING ASPHALT PAVEMENT**

32 **607-1 DESCRIPTION**

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